City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org



Meeting Agenda - Final

Tuesday, May 2, 2023 4:00 PM

SALINAS ROTUNDA

City Council

Mayor Kimbley Craig Councilmembers: Carla Viviana González, District 1 - Tony Barrera, District 2 Steve McShane, District 3 - Orlando Osornio, District 4 Andrew Sandoval, District 5 - Anthony Rocha, District 6

> Steven S. Carrigan, City Manager Christopher A. Callihan, City Attorney City Clerk's Office: (831) 758-7381

ZOOM WEBINAR PARTICIPATION

JOIN THE ZOOM WEBINAR TO PARTICIPATE LIVE AT:

https://us02web.zoom.us/j/81207730000

To participate telephonically, call any number below:

US: +1 669 900 9128 or +1 669 444 9171 or +1 253 215 8782 or +1 346 248 7799 or +1 719 359 4580 or +1 253 205 0468 or +1 360 209 5623 or +1 386 347 5053 or +1 507 473 4847 or +1 564 217 2000 or +1 646 558 8656 or +1 646 931 3860 or +1 689 278 1000 or +1 301 715 8592 or +1 305 224 1968 or +1 309 205 3325 or +1 312 626 6799

Webinar ID: 812 0773 0000
If prompted to enter a participant ID, press #.

PLEDGE OF ALLEGIANCE

ROLL CALL

PROCLAMATIONS

National Police Week, May 15-23, 2023 National Building Safety Month, May 2023 Older Americans Month, May 2023 Asian American and Pacific Islander Day Against Bullying and Hate, May 18, 2023

CITY OF CHAMPIONS

District 4 Resident

PUBLIC COMMENT PROCEDURES

If you wish to make a general public comment or comment on a specific agenda item, you are encouraged to attend the City Council meeting in person. Public comment may also be submitted via email at PublicComment@ci.salinas.ca.us and will be entered into the record.

PUBLIC COMMENT TIME RESTRICTIONS

Public comments generally are limited to two minutes per speaker; the Mayor may further limit the time for public comments depending on the agenda schedule.

GENERAL PUBLIC COMMENTS

Receive public communications on items that are not on the agenda and that are in the City of Salinas' subject matter jurisdiction. Comments on Consent, Consideration, and Closed session items should be held until the items are reached. The public may request that the legislative body consider adding an item for consideration on a future agenda. The public may comment on scheduled agenda items, including closed

session items, as they are considered.

CONSIDERATION

ID#23-231 An Ordinance Amending Article I-C of Chapter 30 of the Salinas

Municipal Code - Special Events

Adopt an Ordinance amending Article I-C of Chapter 30 of the Salinas Municipal Code Recommendation:

related to the revision of the Special Event process.

ID#23-273 2023 California Department of Housing and Community Development

Local Housing Trust Fund Application

Approve a Resolution authorizing submittal of a Local Housing Trust Fund Program Recommendation:

> Application to the California Department of Housing and Community Development; and establishment of a Salinas Local Housing Trust Fund and a Salinas LHTF account fund with revenue and expenditure accounts to include the pre-application allocation of Housing Production Fund CIP #9021 (\$500,000), and General Funds (\$500,000), as required local match and SB2 PLHA (\$100,000); and authorizing the City Manager, or designee, to execute all applicable forms, grant-related documents, and subsequent

amendments as needed.

ID#23-256 Adoption of the Salinas Sanitary Sewer Master Plan Update

Approve a Resolution adopting the Salinas Sanitary Sewer Master Plan Update and Recommendation:

related Appendices.

ADMINISTRATIVE REPORTS

ID#23-298 American Rescue Plan Act of 2021 Update

No action required. This item provides an administrative update on the City's various Recommendation:

Council-adopted projects included in the Salinas recovery under the American Rescue

Plan Act (ARPA) of 2021.

CONSENT AGENDA

All matters listed under Consent Agenda may be enacted by one motion unless a

member of the Council or the public requests discussion or a separate vote.

ID#23-314 Minutes

Approve minutes of April 18, 2023. Recommendation:

ID#23-310 **Financial Claims**

Recommendation: Approve financial claims report.

ID#23-254 Professional Service Agreement with the Transportation Agency for

Monterey County for the Alisal Safe Routes to School Plan

Non-Infrastructure Phase

Approve a Resolution authorizing the City Manager to execute an Agreement for Recommendation:

> Professional Services between the City of Salinas and the Transportation Agency for Monterey County for a total compensation amount not to exceed \$84,998.80 to for the

Alisal Safe Routes to School Plan Non-Infrastructure Phase.

ID#23-262 2021 Chip Seal Project, CIP No. 9981 Recommendation: Approve a Resolution accepting the 2021 Chip Seal Project, CIP No. 9981 for

maintenance and responsibility.

ID#23-266 Agreement with Race Forward to Provide Race Equity Training

Recommendation: Approve a Resolution authorizing the City Manager to sign an agreement with Race

Forward to provide race equity training for City staff and elected officials for \$237,600.

ID#23-272 City of Salinas and Housing Authority of the County of Monterey

Memorandum of Understanding

Recommendation: Approve a Resolution authorizing the City Manager or designee to execute a

Memorandum of Understanding between the City of Salinas and the Housing Authority of the County of Monterey for the completion of required U.S. Department of Housing and Urban Development Environmental Review Records; and the City Manager or designee to approve any future, necessary revisions, amendments and/or

modifications.

ID#23-275 Main Street at Lamar Street Pedestrian Enhancements

Recommendation: Approve a Resolution authorizing the establishment of a new CIP account named "Main

Street at Lamar Street Pedestrian Enhancements Project" and authorize the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$247,500.00; authorize the establishment of a Measure X appropriation of up to \$27,500.00 and use of Measure X fund balance as matching funds; and authorize the Public Works Director to execute all agreements and any required documents with

Caltrans for the Grant Program.

ID#23-279 Clean California Grant Application for AMOR Salinas Education and

Outreach

<u>Recommendation:</u> Approve a Resolution authorizing staff to apply for the Clean California Local Grant

Program Cycle 2 funding for up to \$750,000 for AMOR Salinas education and outreach

and authorizing acceptance of the grant if awarded to the City.

ID#23-280 Organic Materials Direct Service Provider Agreement with Atlas Organics

Recommendation: Approve a Resolution to approve an organic materials direct service provider

agreement between the City of Salinas and Atlas Organics.

ID#23-282 San Juan Grade Road Sidewalk and Street Light Improvements Project

Recommendation: Approve a Resolution authorizing the establishment of a new CIP account named, "San

Juan Grade Road Sidewalk and Street Light Improvements Project"; and authorize the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$1,344,690.00; and authorize the establishment of a Measure X appropriation of up to

\$149,410.00 and use of fund balance as matching funds.

ID#23-301 FY 22-23 Workforce Allocation Adjustment and Reclassification

Recommendation: Approve a Resolution adjusting the workforce allocation for the Community

Development Department and Police Department to include a total of three limited term

Community Outreach Assistants and the reclassification of one Community

Development Analyst to Management Analyst.

ID#23-306 Purchase of Network Systems Equipment

Recommendation: Approve a resolution authorizing the purchase and installation of network firewalls from

Cadence Inc., in an amount not to exceed \$189,000.

COUNCILMEMBERS' REPORTS, APPOINTMENTS AND FUTURE AGENDA ITEMS

Receive communication from Councilmembers on reports, appointments and future agenda items. Councilmember comments are generally limited to three minutes.

CLOSED SESSION

Receive public communications from the audience on Closed session items. The City Council will recess to closed session pursuant to:

ID#23-313

- a. Labor Negotiations California Government Code Section 54957.6, with its designated labor representatives Steven S. Carrigan, City Manager; Jim Pia, Assistant City Manager; Christopher A. Callihan, City Attorney; Katherine Hogan, Assistant City Attorney; Mark Roberts, Finance Director; Marina Horta-Gallegos, Human Resources Director; Sylvia Enriquez, Senior Human Resources Analyst; Che Johnson, Liebert Cassidy Whitmore, regarding labor relations with Service Employees International Union (SEIU), SEIU Supervisors, Salinas Municipal Employees Association/SEIU, Association of Management Personnel, Police Officers Association, Police Management Association, International Association of Firefighters, Fire Supervisors Association, Confidential Management Employees, Confidential Non-Management Employees, and Department Directors.
- b. Labor Negotiations California Government Code Section 54957.6, with its designated labor representatives Steven S. Carrigan, City Manager; Jim Pia, Assistant City Manager; Christopher A. Callihan, City Attorney; Katherine Hogan, Assistant City Attorney; Mark Roberts, Finance Director; Marina Horta-Gallegos, Human Resources Director; Sylvia Enriquez, Senior Human Resources Analyst; and Matt Weatherly, President, Public Sector Personnel Consultants, regarding labor relations with Service Employees International Union (SEIU), SEIU Supervisors, Salinas Municipal Employees Association/SEIU, Association of Management Personnel, Police Officers Association, Police Management Association, International Association of Firefighters, Fire Supervisors Association, Confidential Non-Management Employees, Confidential Management Employees, and Department Directors.

ADJOURNMENT

Patricia M. Barajas, City Clerk

AGENDA MATERIAL / ADDENDUM

Any addendums will be posted within 72 hours of regular meetings or 24 hours of special meetings and in accordance with Californian Government Code Section 54954.2 and 54956. City Council agenda reports and other writings distributed to the legislative body may be viewed at the Salinas City Clerk's Office, 200 Lincoln Avenue, Salinas, and are posted on the City's website at www.cityofsalinas.org in accordance

with California Government Code section 54597.5. The City Council may take action that is different than the proposed action reflected on the agenda.

Disability-related modification or accommodation, including auxiliary aids or services, may be requested by any person with a disability who requires a modification or accommodation in order to participate in the meeting. Language interpretation may be requested as soon as possible but by no later than 5 p.m. of the last business day prior to the meeting. Requests should be referred to the City Clerk's Office At 200 Lincoln Avenue, Salinas, 758-7381, as soon as possible but by no later than 5 p.m. of the last business day prior to the meeting. Hearing impaired or TTY/TDD text telephone users may contact the city by dialing 711 for the California Relay Service (CRS) or by telephoning any other service providers' CRS telephone number.

PUBLIC NOTIFICATION

This agenda was posted on April 26, 2023 at the City Clerk's Office, in the Council Rotunda, and the City's website.

Meetings are streamed live at https://salinas.legistar.com/Calendar.aspx and televised live on Channel 25 at 4 p.m. on the date of the regularly scheduled meeting and will be broadcast throughout the day on the Wednesday, Friday, Saturday and Monday following the meeting. For the most up-to-the-minute Broadcast Schedule for The Salinas Channel on Comcast 25, please visit or subscribe to our Google Calendar located at http://tinyurl.com/salinas25. Recent City Council meetings may also be viewed on the Salinas Channel on YouTube at http://www.youtube.com/thesalinaschannel.



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-231, Version: 1

An Ordinance Amending Article I-C of Chapter 30 of the Salinas Municipal Code - Special Events

Adopt an Ordinance amending Article I-C of Chapter 30 of the Salinas Municipal Code related to the revision of the Special Event process.



DATE: MAY 2, 2023

DEPARTMENT: LIBRARY & COMMUNITY SERVICES

CITY ATTORNEY'S OFFICE

FROM: KRISTAN LUNDQUIST, DIRECTOR

CHRISTOPHER A. CALLIHAN, CITY ATTORNEY

TITLE: AN ORDINANCE AMENDING ARTICLE I-C OF CHAPTER 30 OF

THE SALINAS MUNICIPAL CODE RELATED TO THE REVISION

OF THE SPECIAL EVENT PROCESS

RECOMMENDED MOTION:

A motion to adopt an Ordinance amending Article I-C of Chapter 30 of the Salinas Municipal Code related to the revision of the Special Event Process.

The proposed Ordinance may be adopted by the City Council at this first reading upon unanimous consent, otherwise the proposed Ordinance will be brought to the City Council's May 16, 2023 meeting for consideration and adoption. (Salinas Charter Section 11.3)

BACKGROUND:

On August 14, 2007, the City Council introduced an ordinance to define and to regulate special events held within the City of Salinas. This ordinance was subsequently adopted on August 21, 2007 following changes requested by the City Council. Article I-C took effect on September 21, 2007 and remained in effect until it was temporarily suspended in September 2019 in order to allow for a thorough review.

Over the last ten years, there have been a variety of concerns raised by event organizers and City staff regarding the process and requirements set forth in Article I-C. Staff began a review of the existing ordinance and requirements for special events occurring within the City limits. After an extensive review, staff recommended the revision of Article I-A and Article I-C of Chapter 30 of the Municipal Code. The originally proposed Ordinance incorporated a new permit requirement into the Municipal Code for filming activities modeled after the California Film Commission's model ordinance, the ordinance adopted by many jurisdictions across the state.

The major changes included in the revision to Article I-C are listed below:

2007 Adopted Ordinance	2022 Draft Ordinance	
Minor Event (less than 50 people) vs. Major Event	150 people or more on or creating impacts to City	
	property	
All Events Require Special	Exception for existing permit,	
Event Permit	lease, or contract	
Submittal deadline 30 days in	Submittal deadline of 45 days	
advance of event	advance of permit	

Other changes include clarification of what information is needed in the special event application, formally establishing no application fee for bona fide non-profit organizations and some other minor clean up items. The goal of revising the ordinance is to streamline the process and encourage community special events while ensuring safety and mitigating any risk to the City.

The attached ordinance revision was distributed to the City's Special Event Committee for review and feedback at the end of 2021. The City Attorney and Library & Community Services Director reviewed this feedback and incorporated it into the draft ordinance revision. The attached ordinance revision was also distributed to over 90 event organizers who have gone through the special event process since 2019 to seek their feedback.

A virtual community meeting was held on August 16, 2022. Notice for this meeting was included in the email that was sent out to the 90 event organizers. There were ten (10) community members in attendance and no major concerns regarding the ordinance update were brought up. Overall, those in attendance appreciated the opportunity to ask questions and receive clarification on the ordinance language.

We also provided an opportunity for written comments. Written comments were received from representatives of the California Rodeo, Kiddie Kapers Parade, Salinas High School and the Oldtown Salinas Foundation. Below is the list of comments received and staff's recommendations:

Oldtown Salinas Foundation:

Suggested Changes/Commer	nts	City Staff Recommendation		

Section 3-12.31a Purpose. In addition to public spaces, streets, and sidewaks, the City also regulates events on private properties through the permitting process. I see an opportunity to use this Municipal Code update to clarify use of private properties for events that can be of benefit the City and its residents. If a non-profit wants to u se a private parking lot for a community event, the Event's ordinance should be written to allow an event in all zoning categories as a permitted use, subject on to first obtaining an event permit. Currently, an expensive and time-consumint Zoning permit is required. This discourages events that could otherwise be easily permitted and benefit city groups and our residents and increase activities in our City.

The Draft Ordinance Update is intended to focus specifically on City owned, controlled or maintained property. Staff does not recommend including private property as the Temporary Use of Land Permit (TULP) process can be used for this purpose.

Section 30-12.31.b.2.C Please specifically add farmer's market to this section.

Sections 30-12.31.b.2.c As noted in the first bullet, if events on private properties (e.g.church or commercial parking lots) could be added, please modify language at the end of the paragraph as follows: "...observances conducted on public or private property.

Staff has added this to the Draft Ordinance Language

The Draft Ordinance Update is intended to focus specifically on City owned, controlled or maintained property. Staff does not recommend including private property as the Temporary Use of Land Permit (TULP) process can be used for this purpose

Section 30-12.31.c Similarly, adding private property to the "Permit Required" section would, I believe, increase event opportunities in Salinas and provide an opportunity for the City to regulate these events.

The Draft Ordinance Update is intended to focus specifically on City owned, controlled or maintained property. Staff does not recommend including private property as the Temporary Use of Land Permit (TULP) process can be used for this purpose

Section 30-12.31.d.3 Permit Application. Based on our experience, it can take city staff three or more weeks (sometimes 8-9 months) to review, approve and issue an event permit. While a 2day turn around Is ambitious, it sets

The 2 day turn around for permit issuance relates to Expressive Events.

an unreasonable public expectation. It may be that this is intended to read that a permit for an event involving 150 or less people can get a permit in 2 days. Regardless, a 2-day permit turn-around is still not a practical timeframe. Section 30-12.d.3, A-H I appreciate the City's efforts to An event checklist currently streamline documentation needed for an event and this exists and is provided to event sections should serve as a checklist for event organizers. organizers. This document will be updated to reflect any Clearly there are no clear guidelines, which results in changes as a result of the numerous informational follow-up requests by City staff, ordinance update. which slows down the permitting and is frustrating to event organizers. Section 30.12-31.d.5 Approval. Referrals Staff is always working to Departments or personnel should have a defined timeframe improve internal processes and for a written response to staff reviewing the event permit we will be reviewing to find application. As written, this section is open-ended. I would more effective ways of recommend using a 30-day agency/staff review and communication. No comment period, as is similar to Government Code Section recommended changes to the 65943. Draft Ordinance language. No recommended changes. Section30-12.30.31.d12 Interfering with Activity Prohibited. This section is particularly important to include in the Ordinance. It will all the City of Salinas Police Services to have a regulatory/legislative basis for enforcement/. An event on public streets and sidewalks can tend to attract other non-affiliated groups that enter the event space to take advantage of crowds drawn to this particular event/activity. Unwanted groups are a distraction and disruption to the purpose of the event. This is particularly true when unpermitted conflicting groups using amplified sound enter a permitted event space, including both streets and sidewalks. This provision would allow for the City to lawfully direct an unpermitted group to leave a permitted event space Make sure the final version of the adopted regulations are consistently applies consistently applied, I would ask that there be no additional requirements based on each information requirements placed on event organizers, other event details. In the event an than the information specifically contained in the adopted applicant feels differently, they regulations. Said another way, any updates to the City event can share their concerns with permit application or checklist must be consistent with the the LCS Director. requirements of the adopted version of the Special Events code. Currently, as City staff processes event applications, informational requests can be inconsistent year to year or be requested without a legislative basis. Only information required by the Code should be requested by City staff. Also suggest that a provision be added to the Code to allow Annual permits allows for a a single permit for recurring events. If an event is executed more consistent review. successfully, can't permitting allow for more than a single

year permit? This would minimize costs to the event			
organizer and reduce paperwork and staff costs to the city.			
While not mentioned in the ordinance, can the City allow an	City code allows for a business		
event organizer to only have to obtain a single City business	license to be purchased on a		
license for multiple events? Said another way, if a single	quarterly basis.		
entity does more than one event the City requires payment			
of a separate business license for each and every event. This			
approach adds additional volunteer time, fees to be paid, and			
another hurdle to clear in the event permit review process.			
Also for consideration, how will the City staff formalize a	This would require City		
process for priority ranking for use of City streets? In this	Council direction.		
case I am thinking about weekly events (farmers market)			
and street use vs. established and/or new events in the			
downtown.			

California Rodeo Association:

Suggested Changes/Comments	Staff Recommendation		
Sec. 30-12.31.2.B change to: Any activity or	Staff agrees with this recommendation		
event open to the public on City owned,	-		
controlled, or maintained property involving			
150 or more persons.			
Sec. 30-12.31.c Add 3. Special events held at	Staff does not recommend exempting all		
the Salinas Sports Complex, provided the	special events held at the Salinas Sports		
Salinas Sports Complex is operated by a third-	Complex. Based on draft language, events		
party pursuant to a lease specifically	held at the Sports Complex during Big Week		
authorized by the City Council.	(10 day period provided in the Lease) would be		
	exempt.		
Sec. 30-12.31.d.3 Change the application	Staff agrees with this recommendation		
submittal deadline from 90 business days to 45			
calendar days.			

Staff also received correspondence from the Salinas High School Activities Director who supports changing the deadline to submit the application to 45 days and the Kiddie Kapers Parade who following review of the draft Ordinance didn't have any concerns as requirements are consistent with the existing ordinance. In addition, staff received comments from other City Department staff with minor clean up language and these items were added to the draft language.

This item was scheduled to go before the Library & Community Services Commission at the regular meeting on August 10, 2022 however, the meeting had to be cancelled due to lack of quorum. It was subsequently presented to the LCS Commission on September 14, 2022 and the Commission was in favor of the revised language.

Following additional review, Article I-A was added in November 2022 to outline a formal process for film permits. Since this section was added following the outreach done over the summer, the

draft ordinance was distributed again in mid-December to the 90 event organizers. In addition, the revised draft ordinance, including Article I-A was presented to the LCS Commission on January 11, 2023. During this meeting, several members of the local film, photography and production industries spoke out in opposition of the language in Article I-A. They raised concerns regarding requirements and lack of input on language and process and other regulations. As a result, the LCS Commission voted to table the item until further outreach with stakeholders was completed. A sub-committee of the LCS Commission was also established to work with staff and the stakeholders to address the concerns and recommendations for updates to the language of Article I-A.

On February 2, 2023, LCS staff, the City Attorney and the LCS sub-committee members held a meeting with stakeholders of the film, photography, production, and real estate industries to review the draft language in Article I-A. As a result of the discussion, staff made a commitment to the stakeholders to revise the language to provide clarity as to who Article I-A applies to and to ensure the local film/photography industry would be exempt unless their work involves things like closing a street, etc. On February 24, 2023, a revised draft of Article I-A was distributed to the stakeholders for their review and comment. Staff received questions/comments from 3 members of the Stakeholders group and from the Monterey County Film Commission. The revised language fulfilled the commitment to the local stakeholders group and as such, was placed on the March LCS Commission Agenda.

On March 8, 2023, the LCS Commission received an update from the February stakeholder meeting and staff recommended to the Commission that they recommend the City Council adopt an Ordinance amending Article I-C of Chapter 30 of the Salinas Municipal Code related to the revision of the Special Event Process. During this meeting, the Commission received written and in person public comment from the Monterey County Film Commission, the Salinas Valley Chamber of Commerce and one of the local stakeholders recommending that the Commission again table this item. Ultimately, the LCS Commission voted 5-1 to table Article I-A, but move Article I-C of Chapter 30 of the Municipal Code forward to the City Council for adoption. In addition, the Commission also wanted to add to the previously established sub-committee to continue to work on Article I-A relating to the Film Permit Process. The modification to the sub-committee will need to be taken up at a future LCS Commission meeting as this item was not on the March 8, 2023 agenda.

Based on the LCS Commission recommendation, staff is requesting that the City Council adopt Article I-C of Chapter 30 of the Municipal Code related to the revision of the Special Event Ordinance.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The introduction of Ordinance update of Article I-C to Chapter 30 of the Salinas Municipal Code (Special Events) supports the City Council's Goals of:

- Public Safety
- Youth and Seniors
- Effective and Culturally Responsive Government

FISCAL AND SUSTAINABILITY IMPACT:

The draft Ordinance language does specify that bon-a-fide Non-Profit Organizations would be exempt from paying a special event application fee. There are approximately 15-20 applications submitted by Non-Profit Organizations annually. The new provision would result in a loss of revenue of up to \$5,460 however provide a community benefit to the Non-Profit Organizations and encourage community focused events.

ATTACHMENTS:

2007 Ordinance 2022 Draft Ordinance Language Resolution Comments Received

ORDINANCE NO. _____ (N.C.S.)

AN ORDINANCE AMENDING ARTICLE 1-C OF CHAPTER 30 OF THE SALINAS MUNICIPAL CODE RELATED TO THE ESTABLISHMENT OF A FILM PERMIT AND THE REVISION OF THE SPECIAL EVENTS PROCESS

City Attorney Impartial Analysis

The proposed Ordinance incorporates a new permit requirement into the Municipal Code for filming activities and revises and updates the existing requirements for special events that occur within the city. Article I-A of Chapter 30 of the Municipal Code is being revised to require a film permit for certain filming activities that occur within the city. News media, personal/family filming, and studio filming activities are exempt from the permit requirement. Article I-C of Chapter 30 of the Municipal Code is being revised and updated to clarify and to streamline the requirements for special events that occur within the city.

BE IT ORDAINED BY THE CITY COUNCIL OF SALINAS as follows:

SECTION 1. Article I-C of Chapter 30 of the Salinas Municipal Code is hereby revised and rewritten in its entirety to read as follows:

Article 1-C.- Special Events

Sec. 30-12.030.- Title.

This article shall be known as the "Special Events Ordinance"

Sec. 30-12.031. Special events.

- a. *Purpose*. The purpose of this article is to establish a process to manage competing uses of the City of Salinas's public spaces, streets, and sidewalks; to assure the preservation of public property and public places; prevent dangerous, unlawful or impermissible uses; protect the safety of persons and property; protection of the environment and control vehicular and pedestrian traffic in and around the venue, while protecting the rights of people to engage in expressive activities in the City's public places.
- b. *Definitions*. For the purposes of this section, certain words and phrases are defined as follows:
 - 1. "Expressive activity" means conduct, the sole or principal object of which is the expression, dissemination or communication by verbal, visual, literary or auditory means of opinion, views, or ideas. Expressive activity includes, but is not limited to, public oratory and the distribution of literature.
 - 2. "Special event" means:
 - A. Any organized formation, parade, march, procession, demonstration, run, motorcade, or promenade consisting of persons, animals, or vehicles, or a combination thereof, which

is to assemble or travel in unison on any street, sidewalk, park path, or other public rightof-way owned or controlled by the City that does not comply with applicable traffic regulations, laws or controls or that will interfere with the free use of any public way, or will impede or delay normal and usual vehicular or pedestrian traffic; or

- B. Any activity or event on City owned, controlled, or maintained property involving 150 or more persons.
- C. Examples of special events include, but are not limited to, farmers markets, concerts, parades, fairs, festivals, ticketed events, block parties, running events, athletic or sporting events, and community celebrations and observances conducted on public property or public rights-of-way.
- c. *Permit Required*. Except as provided by terms of a permit, lease, or contract that has been specifically authorized by the City Council, no person shall conduct or cause to be conducted, manage, or participate in any special event on any City street, sidewalk, alley, park, way, public place, public property, or public right-of-way which is owned or controlled by the City without first having obtained a permit in accordance with the provisions of subsection (d) of this section. The provisions of that section shall not apply to or affect:
 - 1. Activities conducted by a governmental agency acting within the scope of its authority;
 - 2. Expressive activities involving less than 150 people. However, when practicable, the organizers should give notice to the City Manager or his/her designee at least twenty-four hours prior to the event informing the City of the date and time of the event, and provide an estimate of the number of persons who will be participating.
 - 3. Activities that are not open to the general public including, for example, organizational meetings or private events.
- d. Issuance of Permits -- Procedure.
 - 1. The issuing authority shall be the City Manager or his/her designee.
 - 2. Permit Fees. Except as otherwise provided by this code, or any other applicable law, rule or regulation, or by the terms of a permit, license, lease or contract which has been specifically authorized by the City Council, the permit application fees and other additional fees and charges for the use of City streets or City owned or controlled property pursuant to this section shall be established by resolution. The permit fee charged is based on the actual costs that a department of the City incurs in connection with activities for which a permit is required, including, but not limited to, costs associated with public safety, fire safety, traffic and/or pedestrian control, stormwater pollution prevention, the closure of streets or intersections, the diverting of traffic, the salaries of City personnel involved in administration or coordination of City services for the event, the cost to the City to provide support personnel, equipment, materials and supplies, and related City costs such as employee overtime. If police protection is provided by the city it shall be limited to what the police department, in its sole discretion, can reasonably supply.

- 3. Permit Application. Any person desiring to conduct a special event as defined under subsection (b)(2) this section, or a special event as defined under subsection (b)(1) this section for expressive activities involving 150 or more persons, shall make a written application to the City Manager or his/her designee at least two days in advance of the proposed special event. All other special events, including but not limited to recreation events, competition/contests/spectator sports, ticketed events, and sales/auctions/trade shows, shall make a written application to the City Manager or his/her designee at least 45 business days in advance of the proposed special event. Such application shall include the following information:
 - A. The name, address, email, and telephone number of the person requesting the permit;
 - B. The name, address, email, and telephone number of the person, entity, or organization sponsoring or conducting the proposed special event;
 - C. A description of the special event, the estimated number of persons to participate and/or to attend, and the manner in which the public property will be utilized;
 - D. The date the special event is to be conducted and the hours the special event will commence and terminate, and the total time, including setup and tear-down time, that the public property is to be utilized for the described special event;
 - E. The street or other public property and the specific area or areas which will be utilized in connection with the proposed special event;
 - F. Site plan outlining event layout including all event components, locations of storm drains and trash management areas;
 - G. Such other information as the City Manager or his/her designee may deem necessary in order to properly provide for traffic control, street and property maintenance, administrative arrangements, police and fire protection, storm drain protection and the protection of the public health, safety, and welfare;
 - H. Certification that the event organizer shall be financially responsible for any City fees, departmental services charges or costs that may lawfully be imposed for the event; and
 - I. Each application shall be accompanied by a nonrefundable permit application fee in an amount established by resolution of the City Council. Non-profit organizations which qualify under Section 501(c)(3) of the Internal Revenue Code as a charitable organization are exempt from the permit application fee.
- 5. Approval. The approving authority shall be the City Manager or his/her designee. The City Manager or his/her designee may refer the application to City departments or personnel as needed to make recommendations regarding approval or disapproval of the application. In deciding whether to approve an application, no consideration may be given to the message of the event, the content of speech, the identity or associational relationships of the applicant, or to any assumptions or predictions as to the amount of hostility which may be aroused in the public by the content of speech or message conveyed by the event. The City Manager or

his/her designee shall issue a permit under this section if he or she finds that all of the following criteria have been met:

- A. The proposed use of the property is not governed by or subject to any other permit procedures provided elsewhere in this code or other applicable laws, rules, or regulations;
- B. The preparation for or the conduct of the proposed special event will not unreasonably or unfeasibly burden City resources necessary to preserve the public's use of the street in the area contiguous to the street or other public property;
- C. The preparation for or the conduct of the special event will not unduly impede, obstruct, or interfere with the operation of emergency vehicles or equipment in or through the permit area or adversely affect the City's ability to perform municipal functions or furnish City services in the vicinity of the permit area;
- D. The proposed special event of the property does not otherwise present a substantial safety, noise, environmental or traffic hazard;
- E. The proposed special event will be of a size appropriate to the proposed venue, location, or site;
- F. The proposed special event will not interfere with another special event for which a permit has been granted or with scheduled government functions;
- G. The proposed special event will not substantially interrupt public transportation or other vehicular and pedestrian traffic in the area of its location, which cannot be effectively mitigated;
- H. The proposed special event will not conflict with construction or development in the public right-of-way or at a public facility;
- I. The proposed special event will not substantially interrupt the safe and orderly movement of aerial or marine navigation;
- J. The proposed special event will not violate any federal, state, or local law;
- K. The proposed special event will comply with applicable licensure requirements, ordinances, or regulations concerning the sale, offering for sale, or distribution of any goods or services; and
- L. The provisions of subsection $(\underline{d})(8)$ of this section, if applicable, have been or will be satisfied.
- 6. Conditions. The City Manager or his/her designee, upon the issuance of the permit, may impose such reasonable requirements concerning the time, place, and/or manner of holding such event as are necessary to coordinate multiple uses of public property, assure the preservation of public property and public places, prevent dangerous, unlawful or impermissible uses, protect the safety of persons and property, and control vehicular and pedestrian traffic in and around the venue. Conditions may include, but are not limited to, the following:

- A. The establishment of assembly or disbanding areas for a parade or similar event;
- B. The accommodation of an event's pedestrian and vehicular traffic, including restricting events to City sidewalks, portions of a City street, or other public right-of-way;
- C. Conditions designed to avoid or lessen interference with public safety functions and/or emergency service access;
- D. The number and type of vehicles, animals, or structures to be displayed or used during the special event;
- E. The provision and use of traffic cones or barricades;
- F. The provision or operation of first aid stations or sanitary facilities, including handicap accessible sanitary facilities;
- G. The provision of a waste management plan, and the cleanup and restoration of the site of the special event;
- H. The provision of catch basin protection for stormwater pollution prevention;
- I. Restrictions on the use of sound amplification equipment;
- J. The manner of providing notice of permit conditions to event participants and those businesses or residents who may be directly affected by the conduct of the special event;
- K. The provision or use of emergency services;
- L. The reasonable designation of alternate sites, times, dates, or modes for exercising expressive activity;
- M. The obtaining of any and all business licenses or other necessary permits for the sale of food, beverages, or other goods or services at the special event; and
- N. The manner by which alcohol sales and service, if any, shall be conducted at the special event.
- 7. *Hold Harmless*. Each permittee shall execute a hold harmless agreement in a form approved by the City agreeing to defend, indemnify, and hold harmless the City against losses and liabilities incurred from the conduct of permittee or its officers, employees, and agents.
- 8. *Insurance*. As a condition precedent to the issuance of the permit, the permittee shall procure and maintain in full force and effect during the term of the permit insurance the City Attorney determines to be necessary and adequate under the circumstances. The insurance requirement set forth in this section shall not be construed to apply to special events involving expressive activity, which enjoy protection under the United States and/or California constitutions.
- 9. *Time for Action on Permit Application*. The City Manager or his/her designee shall approve, conditionally approve, or deny an application for a permit within ten (10) business days of

receipt of a completed application. An applicant whose permit application has been denied, or whose permit is revoked, shall be immediately notified of the action of denial or revocation, which notification shall contain a statement setting forth the reasons for said denial or revocation, as well as a reference to the appeal provisions set forth in this section. Notification pursuant to this section shall be deemed satisfied when the notice is placed, postage prepaid, for overnight delivery, or when sent by email if an email address is provided on the application.

- 10. *Denial*. The City Manager or his/her designee shall deny any application for a permit or revoke any permit if he or she finds any of the following:
 - A. The application contains incomplete, false, or misleading information or is otherwise materially incomplete;
 - B. One or more of the approval criteria specified in subsection $(\underline{d})(\underline{5})$ of this section are not met or is missing; or
 - C. The applicant fails to comply, or under prior special event permits has previously failed to comply, with conditions of approval including, but not limited to: (i) remittance of fees, charges, or deposits; (ii) submittal of an indemnification agreement and/or proof of insurance to the extent required; or (iii) timely receipt of all required approvals.
- 11. Appeals. The denial of a permit by the City Manager or his/her designee pursuant to the provisions of this section may be appealed to the City Manager by the applicant. Such appeal shall be in writing and shall be filed with the City Clerk within five business days of the decision of the City Manager or his/her designee. The City Manager shall act upon the appeal within ten (10) business days. The City Manager's decision shall be in writing and notice of the decision shall be provided to the applicant via overnight mail or email if an email address is provided on the permit application. The City Manager's decision shall be final except for judicial review.
- 12. *Interfering with Activity Prohibited*. It is unlawful for any person to obstruct, impede or interfere with any authorized special event for which a special event permit has been issued.
- 13. *Penalty*. Violation of any of the provisions of this section shall constitute a misdemeanor, and shall be punishable by any criminal, civil, or administrative means as set forth in the Salinas Municipal Code.

SECTION 3. CEQA CONSIDERATIONS. CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

SECTION 4. SEVERABILITY. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of any competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Salinas City Council hereby declares that it would have passed this ordinance, and each and every section, subsection, clause and phrase thereof not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE. This ordinance shall take effect and be in force thirty days from and after its adoption.

SECTION 5. The City Clerk of the City of Salinas is hereby directed to cause a summary of this ordinance to be published by one (1) insertion in a newspaper of general circulation printed, published, and circulated in the city of Salinas and hereby designated for that purpose by the Council of Salinas.

PASSED AND ADOPTED this following vote:	day of	, 202	_, by the
AYES:			
NOES:			
ABSTAIN:			
ABSENT:			
	Kimbley Craig, Mayor		
ATTEST:			
Patricia M. Barajas, City Clerk	-		
APPROVED AS TO FORM:			
Christopher A. Callihan, City Attorney	_		

Sec. 30-12,31. - Definitions.

For purposes of this section, the following definitions shall apply.

- (a) "Applicant" means the person, as further defined herein, submitting the application for a special event permit.
- (b) "Chief of police" means the chief of police of the city of Salinas.
- (c) "City" means the city of Salinas.
- (d) "City Code" means the Salinas City Code.
- (e) "City manager" means the city manager of the city of Salinas or his designee.
- (f) "Event organizer" means any person who conducts, manages, promotes, organizes, aids or solicits attendance at a special event or minor special event.
- (g) "Minor special event" means any special event involving less than fifty people at one time and which is no more than three hours in duration on any calendar day, including set-up and takedown.
- (h) "Person" means any individual, firm, partnership, corporation, company, association, joint-stock association, governmental entity or other legal entity, and includes a trustee, receiver, assignee or similar representative of any of them.
- (i) "Service charges" means the actual costs which a department of the city incurs in connection with activities for which a permit is required under this section including, but not limited to, costs associated with fire safety, traffic safety, and/or pedestrian control; the closure of streets or intersections; the salaries of city personnel involved in administration or coordination of city services for the event, including the review and processing of applications; the costs to the city to provide support personnel, equipment, materials and supplies; and other related city costs. Service charges shall include costs incurred by the city to provide police and fire protective services to those engaged in activities or conduct for which a special event permit is required pursuant to this section.
- (j) "Site" means a contiguous area of land, including a lot or lots or a portion thereof, which is developed or proposed to be developed.
- (k) "Special event" means an organized activity, assembly or event involving fifty or more people, and to which the public is invited to watch, listen or participate including, but not limited to, the following:
 - (1) Motorized vehicle races or contests;
 - (2) Remote radio or television broadcasts and similar advertising or fundraising events;
 - (3) Carnivals, circuses, fairs, festivals, concerts or similar activities;
 - (4) Any event with mechanized amusement rides;
 - (5) Promotional activities of a commercial nature;
 - (6) Athletic events;
 - (7) Public assemblies:
 - (8) Any event that will take place on a public right-of-way within the boundaries of the city of Salinas or on other property owned or occupied by the city of Salinas;
 - (9) Outdoor shows and exhibitions;

- (10) Any event, regardless of the number of people involved, requiring full or partial street closure that occur street, sidewalk, alley or public right-of-way, and/or which is likely to obstruct, delay or interfere with the pedestrian or vehicular traffic.
- (l) "Special event permit" or "permit," except as otherwise specifically provided in this article, means a permit for either a special event or a minor special event issued pursuant to this article.
- (m) "Tax exempt non-profit organization" means an organization that is exempted from payment of income taxes by federal or state law and which has been in existence for a minimum of six months preceding the date of application for a special event permit.
- (n) "Temporary use of land permit" means a permit required under Zoning Code <u>Section 37-50.300</u> for the temporary and intermittent use of land.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.32. - Permit required.

- (a) It is unlawful for any person to hold, engage in, or conduct, within the city of Salinas, any special event or minor special event subject to the provisions of this article and not expressly exempt hereunder without having first obtained a valid permit and without having first complied with all applicable provisions of this article.
- (b) The city manager or his designee is authorized to issue permits for special events or minor special events pursuant to the procedures established in this article.
- (c) A copy of the special event permit shall be kept on site at the venue of the special event and shall be made available for review by any city official upon request.
- (d) Compliance with the provisions of this article does not exempt the holder of a special event permit from compliance with all other provisions of the City Code or any other federal, state or local law or regulation.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.33. - Exceptions to special event permit requirements.

A special event permit is not required for the following activities:

- (a) Except as otherwise provided or more specifically defined herein, any activity or event held or conducted solely on private property and such activity or event meets all of the following requirements:
 - (1) Does not involve the use of, or have an impact on, public property or facilities and which may require the provision of city public services in response thereto;
 - (2) Does not use amplified sound;
 - (3) Does not involve the use of any pyrotechnic device as defined in the California Health and Safety Code;
 - (4) Does not involve the construction or installation of any temporary or permanent tents, canopies or other structures regardless of whether the construction or installation requires a permit from the city's fire department;
 - (5) Does not involve the use of any exotic or domestic animals or mechanical amusement rides; and

(6) Does not include the sale, service or use of alcoholic beverages.

Any activity or event held or conducted solely on private property which does not meet all of the requirements listed in this subsection shall be considered a special event or minor special event for which a permit must be obtained.

- (b) Funeral processions by a licensed mortuary or funeral home.
- (c) Lawful picketing or demonstrations on public sidewalks or other public rights-of-way owned or controlled by the city wherein applicable traffic regulations, laws or controls are complied with.
- (d) Any event or activity which is not a special event or minor special event, as defined in this article, and for which a temporary use of land permit is required under <u>Section 37-50.300(g)</u> of the Salinas City Code.
- (e) Any parade for which a permit must be obtained under <u>Chapter 30</u> of the City Code.
- (f) Although not required to obtain a special event permit for an activity exempted pursuant to this subsection, an event organizer is required to comply with general regulations governing public safety or health and all other applicable federal, state, and local laws and regulations.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.34. - Issuance of a special event permit does not obligate city services.

Issuance of a special event permit pursuant to this article does not obligate or require the city to provide services, equipment or personnel in support of a special event or minor special event.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.35. - Time for filing application for special event permit.

- (a) General Provisions. An application for a special event permit required by this article shall be filed with the city manager on a form furnished by the city, and signed by the applicant under penalty of perjury. If the application is filed by an organization or corporation, the application shall be prepared, signed under penalty of perjury, and filed by an authorized officer of such organization. No special event permit shall be issued to any person who is not at least eighteen years of age and no special event permit shall be issued unless the owner of the property upon which the special event is proposed to be held, or that person's representative or agent, has first given their express written consent.
- (b) Special Events. A completed application shall be filed not less than thirty calendar days, nor more than six months before the date of the proposed special event. However, it is recommended that a completed application be filed at least thirty calendar days prior to the proposed special event to accommodate unforeseen circumstances or delays. If an applicant for a special event desires to ensure the opportunity for an appeal to the city council in accordance with <u>Section 30-12.44</u>, the application shall be filed with the city manager not less than sixty calendar days, nor more than six months before the date of the proposed special event. Applications filed less than sixty calendar days prior to the proposed special event shall not be subject to appeal to the city council and the decision of the city manager shall be final. In the event the decision of

- the city manager becomes final, the event organizer or other affected person may then file a petition for writ of mandate pursuant to the California Code of Civil Procedure regarding the validity of the city manager's decision to grant or deny the application.
- (c) Special Circumstances. No application filed for a special event proposed to be scheduled fewer than forty-eight hours from the filing of an application will be accepted unless such special event is precipitated by news, circumstances or events coming into public knowledge fewer than forty-eight hours before the proposed event. The application shall be accompanied by a declaration under penalty of perjury demonstrating that the failure to submit a timely application was not within the applicant's control because the precipitating news, circumstances or events did not exist or could not have been known to the applicant in time to file a timely application under this section.
- (d) Minor Special Events. An application for a minor special event may be filed with the city manager on a form furnished by the city and signed by the applicant under penalty of perjury. If the application is filed by an organization or corporation, the application shall be prepared, signed under penalty of perjury, and filed by an authorized officer of such organization or corporation. In no event shall an application for a minor special event be filed less than ten calendar days before the date of the minor special event and in no event shall a minor special event be held unless the permittee for such event has notified the city in writing at least ten calendar days before the date of such minor special event; has otherwise complied with all other applicable provisions of this article including, but not limited to, the requirements set forth in Sections 30-12.47 and 30-12.41(a) and (b) of this article.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.36. - Frequency of permits.

The total number of special event permits allowed on a site in a calendar year is:

- (a) Special Events. The total number of permits issued for special events and/or temporary use of land permit issued for any site shall not exceed the total number of temporary use of land permits allowed on a site pursuant to Zoning Code Section 37-50.300, as that section may be amended from time to time. A permit issued for a special event pursuant to this article shall be counted toward the site's maximum number of temporary use of land permits allowed for that site.
- (b) Minor Special Events. A permit issued for a minor special event pursuant to this article and minor special events held throughout the calendar year during which such permit is valid shall not be counted toward the maximum number of temporary use of land permits allowed for that site pursuant to Section 37-50.300 of the City's Zoning Code. A permit issued pursuant to this article:
 - (1) Shall be valid for the calendar year during which it was issued;
 - (2) Shall be valid for the specific site for which such permit was issued; and
 - (3) Shall cover all minor special events held at such site by the permittee during that calendar year.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.37. - When application deemed complete.

An application for a special event is deemed complete when the applicant has provided all the information and paid all the fees required by this article, and the application has been approved by the city manager or his designee for consideration.

Notwithstanding the city manager's acceptance of a completed application, no special event date shall be considered approved until a special event permit is issued pursuant to this article and no minor special event shall be held pursuant to such permit unless prior written notice has been given as specified in the article.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.38. - Advertising and promotion.

The event organizer shall not perform any advertising or other promotion of a proposed special event or minor special event unless and until a special event permit has been issued pursuant to this article.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.39. - Interference with pedestrian or vehicular traffic.

- (a) No special event or minor special event shall be conducted in such a manner or under such conditions as to impede or obstruct the free movement of pedestrian or vehicular traffic, and no person shall stop, stand, park or place any vehicle or any other object or structure in such a position as to impede or obstruct the free movement of pedestrian or vehicular traffic or to block the driveway entrance to any of the property on which the special event or minor special event is to be held or that of any abutting or adjacent property.
- (b) An encroachment permit issued pursuant to <u>Chapter 20</u> of the City Code shall be required for any special event or minor special event that impacts city owned property and/or requires the closure of any street(s).

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.40. - Permit application—Fee.

All applications shall be submitted with payment of a nonrefundable application fee established by resolution of the city council, unless said special event or minor special event is funded in full or in part by the city, or said fee is waived by the city council. Any application submitted without said application fee shall be deemed incomplete.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.41. - Contents of permit and permit application.

- (a) A special event application and a special event permit may contain the following information or conditions:
 - (1) The location of the special event venue, which may be identified by a map attached to the special event permit;
 - (2) The date, assembly area, time for assembly and starting and anticipated ending times of the special event;
 - (3) The specific route plan to the special event;

- (4) The number and types of persons, animals and vehicles, the number of bands, other musical units and equi capable of producing sound, if any, and limitations thereon pertaining to noise abatement;
- (5) The maximum interval of space to be maintained between booths or other structures to be used for the special event;
- (6) The portion of the street and sidewalk that is to be occupied by the event and the location of reviewing or audience stands, if any;
- (7) A crowd control plan to include the number and location of traffic and crowd controllers, monitors, other support personnel and equipment and barricades to be furnished by the special event organizer;
- (8) The area and time for disbanding;
- (9) Conditions or restrictions on the use of alcoholic beverages and authorization for and conditions of the exclusive control or regulation of vendors and related sales activity by the special event organizer during the special event;
- (10) Provisions for any required emergency medical services;
- (11) The required presence of the special event organizer or its designated representatives for all special event coordination and management purposes; and
- (12) Such other information and conditions as are reasonably necessary for the conduct of the special event and the enforcement of this article.
- (b) As a condition of the issuance of a special event permit, the applicant shall be required to make adequate provisions for cleaning the area or route of the special event or minor special event both during and upon completion of the special event or minor special event and to return the area or route to the same condition of material preservation and cleanliness as existed prior to the special event or minor special event.
- (c) Any violation of any condition, limitation or restriction placed upon a special event in the special event permit, and the conducting of any activities beyond the scope of activities authorized in the permit, shall be considered a misdemeanor and may be punished as such; however, at the discretion of the city attorney, the violation of any provision of this article may be filed as an infraction or may be prosecuted administratively pursuant to the city's administrative remedies provisions provided in <u>Chapter 1</u> of the City Code.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.42. - Action by city manager upon application or notice of minor special event.

- (a) Upon the filing of a completed application or upon notification of a minor special event, the city manager shall refer the application or the minor special event notification to the special events committee for review, evaluation, investigation, and recommendations regarding approval or disapproval of the application or the minor special event.
- (b) In determining whether to approve an application or a minor special event, no consideration may be given to the message of the event, the content of the speech, the identity or associational relationship of the applicant, or to any assumptions or predictions as to the level or nature of emotion which may be aroused in the public by the content of speech or message conveyed by the special event.
- (c) Consistent with this section, the city manager may impose conditions on any permit issued pursuant to this article or any minor special event held pursuant to this article to coordinate multiple uses of public property;

assure preservation of public property and public places; prevent dangerous, unlawful or impermissible uses; protect the safety of persons and property and to control vehicular and pedestrian traffic in and around the venue, provided that such requirements shall not be imposed in a manner that will unreasonably restrict activities or conduct protected by the California or United States Constitutions.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.43. - Permit-Denial.

- (a) The city manager may, in his sole discretion, deny an application for a permit, revoke any permit or prevent any minor special event if the city manager finds any of the following:
 - (1) The application contains materially false or intentionally misleading information;
 - (2) The event or activity is proposed to be located or is located in or upon a premises, building or structure which is hazardous to the health or safety of the employees or patrons of the premises, business or activity or event, or the general public under the standards established by the California Building Code or Fire Codes;
 - (3) The event or activity is proposed to be located or is located in or upon a premises, building or structure which lacks adequate on-site parking for participants attending the proposed event or activity;
 - (4) The event or activity is in conflict with other applicable provisions of any federal, state, and/or local laws;
 - (5) The event or activity is scheduled to occur at a location and time in conflict with another event or activity scheduled for the same day or weekend where such conflict would adversely impact on the city's ability to provide adequate city services in support of other scheduled events or scheduled governmental functions;
 - (6) The event will substantially disrupt public transportation or other vehicular and pedestrian traffic in the area of its location;
 - (7) The event will require the diversion of public safety or other city employees from their normal duties so as to unreasonably reduce adequate levels of service or municipal functions to any other portion of the city;
 - (8) The concentrations of persons, animals or vehicles will unreasonably interfere with the movement of police, fire, ambulance, and other public safety or emergency vehicles on the streets;
 - (9) The event or activity will have a substantial adverse impact on the health and safety of the general public, residents and businesses within a five hundred foot radius of the event or violate the city's noise ordinance;
 - (10) The event or activity will take place in an area of the city or on any public right-of-way that is scheduled for maintenance, construction or repair prior to the application for the special event or minor special event and the conduct of the event would interfere with such maintenance, construction or repair, or the maintenance, construction or repair would represent a threat to the health or safety of the participants in the event;
 - (11) The ability of persons to enter and exit residential or business properties impacted by the event will be unreasonably impaired considering factors such as the duration, size, and scope of the event;
 - (12) The proposed use, event or activity will have a significant adverse environmental impact;

- (13) The applicant has violated any provision(s) or condition(s) of this article or a previous permit issued for the s similar event within the prior thirty-six months;
- (14) The applicant has failed to provide sufficient security to adequate control the crowds and provide safety;
- (15) The applicant has failed to provide sufficient safety, health or sanitation equipment, services or facilities that are reasonably necessary to ensure the special event or minor special event will be conducted with due regard for public health and safety;
- (16) The applicant has failed to provide a plan for cleanup and removal of recyclable goods, waste, and garbage during the special event or minor special event, such plan shall include recycling opportunities for the participants and the location of any recycling containers;
- (17) The applicant has failed to meet any of the requirements for submitting an application for a special event permit;
- (18) The applicant has failed to obtain a necessary license or permit, if required; or
- (19) The special event may create a high probability of violent disorderly conduct likely to endanger public safety or result in significant property damage.
- (b) When the grounds for denial of an application is based on any of the circumstances specified in subsections (a)(1) through (19) above which can be corrected by altering the date, time, duration, route or location of the special event or minor special event, the city manager may, instead of denying the application, conditionally approve the application upon the applicant's acceptance of conditions for permit issuance. The condition imposed shall provide for only such modification of the applicant's proposed special event or minor special event as are necessary to achieve compliance with subsections (a)(1) through (19) above.
- (c) The city manager shall notify the applicant of a denial in writing as soon as is reasonably practical. (Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.44. - Appeals from denial.

An applicant whose application for a special event permit has been denied or has been granted conditionally may appeal such decision to the city council by filing an appeal with the city clerk, unless the applicant has not allowed sufficient time to appeal to the city council. An appeal shall be made in writing within ten calendar days of the date of the written denial. Decisions that are appealed shall not become effective until the appeal is resolved.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.45. - City council action upon appeal.

After a hearing and consideration of the report and recommendation of the city manager, and any written materials submitted by the applicant or other affected person(s), the city council shall either grant the special event permit with conditions or deny the special event permit upon determining that issuance thereof would result in any one of the circumstances set forth in <u>Section 30-12.39</u>. The decision on appeal by the city council shall be based on written findings, shall be final and conclusive on the matter, and shall be subject to review pursuant to the California Code of Civil Procedure.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.46. - Service fees and charges.

- (a) In addition to the nonrefundable permit application fee, permit fee, and any user fees or other fee prescribed by resolution of the city council, an applicant shall pay the city for all city department service charges incurred in connection with or due to the applicant's activities under the special event permit. Such charges include, but are not limited to, the salaries of city personnel involved in permit processing, public safety, event traffic control, fire safety or other facility or event support, and the costs associated with the use of city equipment and other non-personnel expenses. Such charges shall be paid by the applicant at the time the completed application is approved.
- (b) Departmental service fees will be established by separate city council resolution that will reflect the city's full cost of providing personnel on an hourly basis at rates established in accordance with city personnel rules and regulations and conditions contained within memoranda of understanding between the city and employee labor organizations.
- (c) City departments shall submit final invoices and billings for departmental charges to be charged the applicant. If the amount paid upon submission of the application is less than the final charges the applicant shall pay the different to the city within ten working days of being invoiced for such charges from the city. If the amount paid upon submission of the application is more than such final charges, the city shall refund the difference to the applicant within sixty days after the event.
- (d) If city property is damaged or destroyed by reason of the applicant's use, event or activity, the applicant shall reimburse the city for the actual replacement or repair cost of the destroyed or damaged property.
- (e) If the holder of a special event permit fails to perform adequate cleanup during or after the special event as indicated in the special event permit application, the applicant shall reimburse the city for the actual costs and expenses incurred for cleanup.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.47. - Insurance and indemnity requirements.

- (a) For all special events or minor special events subject to the requirements of this article, as a condition of the issuance of a permit the applicant shall obtain, furnish proof of and maintain a policy of insurance consistent with the Administrative Memorandum prepared by the city manager; provided, however, that in no case shall the minimum limits of liability be lower than one million dollars combined single limit per occurrence. If the special event or minor special event has a demonstrated high or low risk, the city manager, in his sole discretion, may require a greater or authorize a lesser amount of coverage than required. Evidence of such proof of insurance must be submitted with the application and prior to the date of any subsequent minor special event in the time and manner set forth in this article.
- (b) The applicant shall be required to sign an indemnity agreement in a form approved by the city attorney which shall expressly provide that the applicant agrees to defend, protect, indemnify, and hold the city, its officers, employees, and agents harmless from and against any and all claims, damages, expenses, losses or liabilities of any kind or nature arising out of, or resulting from, the alleged acts or omissions of applicant related to the special event. Such indemnity agreement must be submitted with the application and prior to the date of any subsequent minor special event in the time and manner set forth in this article.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.48. - Revocation or suspension of permit.

- (a) A special event permit issued under this article shall be revoked or suspended by the city manager or chief of police or their designees if either finds that one or more of the following exists and has not been corrected by the applicant after reasonable notice of the existence of the condition has been given:
 - (1) The special event permit is being used to conduct an activity different from that for which it was issued;
 - (2) The activity is being conducted in a manner which violates one or more of the conditions, restrictions or limitations imposed upon the issuance of the special event permit or fails to conform to the plans and procedures described in the application or permit;
 - (3) The applicant violated or attempted to violate any federal, state or local laws and regulations; or
 - (4) The special event is being conducted in a fraudulent or disorderly manner, or in a manner which endangers the public health or safety or in a manner which violates any provision of the City Code.
- (b) Such revocation or suspension shall become effective immediately upon order of the city manager or chief of police or their designees and shall remain in effect until the applicant has corrected the violation or the special event permit has expired on its own terms.
- (c) In the event the special event permit is revoked or suspended pursuant to the provisions of this section, another special event permit shall not be granted to the applicant within twelve months after the date of such revocation or suspension. The determination of the city manager or chief of police, or their designees, to revoke or suspend a special event permit shall be based upon written findings and shall be final and conclusive in the matter.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.49. - Delegation of authority.

The city manager and the chief of police may delegate any or all of his functions under this chapter to designated deputy city managers and/or their designees.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.50. - City manager's authority to adopt rules and regulations.

The city manager is authorized to promulgate additional rules and regulations that are consistent with and that further the terms and requirements set forth within this chapter and the provisions of law that pertain to the conduct and operation of an activity or event regulated by this article.

(Ord. No. 2476 (NCS), § 1.)

Sec. 30-12.51. - Penalty for violation.

(a) A violation of this article shall be considered a misdemeanor and may be punished as such, however, at the discretion of the city attorney, the violation of any provision of this section may be prosecuted administratively pursuant to the administrative remedies provisions of the City Code or pursuant to any

other remedies available under the law or in equity.

(b) The holding or conducting of a special event subject to the provisions of this article without a valid special event permit issued pursuant to the provisions of this article, unless expressly exempted hereunder, is hereby declared to be unlawful and a public nuisance and may be abated by action of the city attorney, in addition to any other remedies as may be available under the law.

(Ord. No. 2476 (NCS), § 1.)

OLDTOWN SALINAS FOUNDATION

P.O. Box 2325 Salinas, CA 93902 Telephone 831/758-0725

August 21, 2022

Kristan Lundquist Library & Community Services Director City of Salinas, 200 Lincoln Avenue Salinas, CA 93901

RE: Comments on DRAFT update to Special Event Ordinance (Article 1-C, Section 30-12.30)

Via e-mail: kristanl@ci.salinas.ca.us

Dear Ms. Lundquist:

Thank you for the opportunity to comment on the proposed update to the Salinas City Code relating to "Special Events Ordinance". As you are aware, the Oldtown Salinas Foundation has a long history of conducting public events in the City, including our annual Salinas Valley Food and Wine Festival and our weekly Farmer's Market. As such, we have a unique insight into the event permit process.

Our comments on the Draft Ordinance update are as follows:

- Section 30-12.31.a "Purpose". In addition to public spaces, streets, and sidewalks, the City also regulates events on private properties through the permitting process. I see an opportunity to use this Municipal Code update to clarify use of private properties for events that can be of benefit the City and its residents. If a non-profit wants to use a private parking lot for a community event, the Event's Ordinance should be written to allow an event in all zoning categories as a permitted use, subject only to first obtaining an event permit. Currently, an expensive and time-consuming Zoning permit is required. This discourages events that could otherwise be easily permitted and benefit city groups and our residents and increase activities in our City.
- <u>Section 30-12.31.b.2.C.</u> Please specifically add *farmer's markets* to this section.
- <u>Section 30-12.31.b.2.C.</u> As noted in the first bullet, if events on private properties (e.g. church or commercial parking lots) could be added, please modify language at the end of the paragraph, as follows: "...observances conducted on public or <u>private</u> property..."
- <u>Section 30-12.31.c.</u> Similarly, adding private property to the "Permit Required" section would, I believe, increase event opportunities in Salinas and provide an opportunity for the City to regulate these events.

A California non-profit organization dedicated to the promotion and enhancement of Oldtown Salinas.

- Section 30-12.31.d.3. Permit Application. Based on our experience, it can take city staff three or more weeks (sometimes 8 9 months) to review, approve and issue an event permit. While a 2-day turn-around is ambitious, it sets an unreasonable public expectation. It may be that this is intended to read that a permit for an event involving 150 or less people can get a permit in 2 days. Regardless, a 2-day permit turn-around is still not a practical timeframe.
- <u>Section 30-12.31.d.3</u>, <u>A-H</u>. I appreciate the City's efforts to streamline documentation needed for an event and this section should serve as a checklist for event organizers. Currently, there are no clear guidelines, which results in numerous informational followup requests by City staff, which slows down permitting and is frustrating to event organizers.
- <u>Section 30-12.31.d.5 Approval</u>. Referrals to City Departments or personnel should have a defined timeframe for a written response to staff reviewing the event permit application. As written, this section is open-ended. I would recommend using a 30-day agency/staff review and comment period, as is similar to Government Code Section 65943.
- Section 30.12.31.d.12 Interfering with Activity Prohibited. This section is particularly important to include in the Ordinance. It will allow the City of Salinas Police Services to have a regulatory/legislative basis for enforcement. An event on public streets and sidewalks can tend to attract other non-affiliated groups that enter the event space to take advantage of crowds drawn to this particular event/activity. Unwanted groups are a distraction and disruption to the purpose of the event. This is particularly true when unpermitted conflicting groups using amplified sound enter a permitted event space, including both streets and sidewalks. This provision would allow for the City to lawfully direct an unpermitted group to leave a permitted event space.

In addition to the comments above, I have three other recommendations:

- 1. To make sure the final version of the adopted regulations are consistently applied, I would ask that there be no additional informational requirements placed on event organizers, other than the information specifically contained in the adopted regulations. Said another way, any updates to the City event permit application or checklist must be consistent with the requirements of the adopted version of the Special Events code. Currently, as City staff processes event applications, informational requests can be inconsistent year to year or be requested without a legislative basis. Only information required by the Code should be requested by City staff.
- 2. I would also suggest that a provision be added to the Code to allow a single permit for recurring events. If an event is executed successfully, can't permitting allow for more than a single year permit? This would minimize costs to the event organizer and reduce paperwork and staff costs to the City.
- 3. While not mentioned in this ordinance, can the City allow an event organizer to only have to obtain a single City business license for multiple events? Said another way, if a single entity does more than one event the City requires payment of a separate business license for each and every event. This approach adds additional volunteer time, fees to be paid, and another hurdle to clear in the event permit review process.

The tenor of this Code update appears to encourage entities to provide activities in the City, which ultimately benefit our residents at minimal to no cost to the City (e.g. the Farmer's Market is a free community event each Saturday). We are supportive of this direction in the proposed Code.

Thank you for the opportunity to comment on this important Special Event update.

Sincerely,

Joel R. Panzer, Vice -President

Oldtown Salinas Foundation

RE: City of Salinas Special Event Ordinance Update

Kristan Lundquist < kristanl@ci.salinas.ca.us>

Tue 8/16/2022 3:08 PM

To: 'Kirsty Ryan' <megsmom1110@sbcglobal.net>

Great. Thank you.

Kristan

From: Kirsty Ryan <megsmom1110@sbcglobal.net>

Sent: Tuesday, August 16, 2022 2:15 PM

To: Kristan Lundquist <kristanl@ci.salinas.ca.us>

Subject: Re: City of Salinas Special Event Ordinance Update

It does clarify.

We will do Cal Trans in January in hopes they can complete by May so we can get into you 45 days before July 16.

Thank you so much!

Kirsty

On Aug 16, 2022, at 11:42 AM, Kristan Lundquist < kristanl@ci.salinas.ca.us> wrote:

Hi Kirsty,

Yes, it is very similar and not much changes for parades. The one thing I would point out is a type-o regarding the deadline to submit applications. The current deadline is 30 days. The draft indicates 90 however, I had planned to change this to 45 days and this will be my recommendation going forward.

The City Manager has always been the issuing authority but that is delegated to me for final approval of permits. Julia is the collector of information, interfaces with event organizers and coordinates with the special event committee. Julia is in my Department (LCS). This will remain the same going forward. I hope this helps clarify things.

Let me know if you have any other questions.

Kristan

From: Kirsty Ryan < megsmom1110@sbcglobal.net >

Sent: Tuesday, August 16, 2022 11:19 AM

To: Kristan Lundquist < kristanl@ci.salinas.ca.us>

Subject: Re: City of Salinas Special Event Ordinance Update

This all seems to be exactly what we do each year for Kiddie Kapers.

Is the City Manager different than the City Permit Dept (Julia Nix) who we send everything to now? Please help me to understand this.

Kirsty

On Aug 16, 2022, at 8:38 AM, Kristan Lundquist < kristanl@ci.salinas.ca.us> wrote:

Here you go.

Kristan

From: Kirsty Ryan < megsmom1110@sbcglobal.net >

Sent: Tuesday, August 16, 2022 7:18 AM

To: Kristan Lundquist < kristanl@ci.salinas.ca.us >

Subject: Re: City of Salinas Special Event Ordinance Update

Yes, please resend it. I can't find the 8/3 one.

Thank you, Kirsty

On Aug 15, 2022, at 8:00 PM, Kristan Lundquist <<u>kristanl@ci.salinas.ca.us</u>> wrote:

Hi Kirsty,

Yes, it involves parades. I sent the draft ordinance out with the original email dated 8/3. The one I sent today was just a reminder. If you need me to resend it, I can do so tomorrow morning. Let me know.

Kristan

Sent from my Verizon, Samsung Galaxy smartphone Get <u>Outlook for Android</u>

From: Kirsty Ryan < megsmom1110@sbcglobal.net >

Sent: Monday, August 15, 2022 7:44:46 PM **To:** Kristan Lundquist kristanl@ci.salinas.ca.us

Subject: Re: City of Salinas Special Event Ordinance Update

Kristen,

Hi,

I don't see an attached draft ordinance.

I am just involved with the Kiddie Kaper Parade through Salinas Center once a year.

Does this impact parades? Thank you for all you do! Kirsty Ryan

On Aug 15, 2022, at 4:20 PM, Kristan Lundquist <<u>kristanl@ci.salinas.ca.us</u>> wrote:

Good Afternoon,

I just wanted to remind you about the Virtual Community Meeting tomorrow evening at 6:00 PM Zoom ID 852 2008 2847 Passcode 949303 RSVP

https://tinyurl.com/SalinasEvents. Written comments on the draft Special Event Ordinance Update can be submitted through August 23, 2022.

If you have any questions, please feel free to contact me.

Thank you, Kristan

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave. Salians, CA 93901 O: (831) 758-7222

"We Create Community Through People, Parks & Programs"

From: Kristan Lundquist

Sent: Wednesday, August 3, 2022 4:29 PM To: A. Olsen, Salinas Steinbeck Rotary Club <aolsen@afolaw.com>; Aaron Snyder <aaron.snyder@outlook.com>; Adan Gomez <gomezautorepair@att.net>; Adan Gomez <<u>salinastarppullers@att.net</u>>; Alejandro Chavez, Salinas Bizcom/SUBA < <u>subadirector@gmail.com</u>>; Alex Carmona, iHeart Media <alexcarmona@iheartmedia.com>; Angie Connell <aconnell@mdausa.org>; Annalisa Carrillo <annalisa.carrillo@ecoact.org>; Anthony Lane <anthony@foxtheatersalinas.com>; Ashley McDonnell, Salinas Valley Food and Wine <ashley.mcdonnell@hubinternational.com>; Brandon Hill, Alliance on Ageing < bhill36242@gmail.com>; California International Airshow <info@salinasairshow.com>; Cary Swensen < cswensen 98@yahoo.com >; Cassy Waggy <<u>cwaggy@coastalkidshomecare.org</u>>; Cesar Torres <<u>ctorres@fiestainsurance.com</u>>; Chris Clay <<u>chrisclay5537008@gmail.com</u>>; Christopher Barrera <christopherbarrera@mindermere.com>; Ciclovia < <u>Cicloviasalinas@gmail.com</u>>; Crystal Andon, American Cancer Society < crystal.andon@cancer.org; Crystal Sanchez < sanchezcc@co.monterey.ca.us >; Danny Garcia, Salinas PAL Carshow < daneilga@ci.salinas.ca.us; Danny Little, CA Rodeo Carnival <<u>dlittle@nheh.com</u>>; Dean

Callender < deancallender@sbcglobal.net >; Edgar De La

```
Cruz, Sainas Valley Disc Golf
<salinasvalleyDGC@gmail.com>; Elsa Jimenez
<jimenezm@co.monterey.ca.us>; Epifanio Nunez & Yolanda
Saldana, Christ the King Church < <a href="mailto:yrsaldana86@gmail.com">yrsaldana86@gmail.com</a>;
Erick Lopez <elopez@csvs.org>; Estela Gutierrez, Salinas
Valley Recycles, Salinas Valley Solid Waste Authority
<estelag@svswa.org>; Future Citizens Fiundation
<dmartinez@fcf-ca.org>; Gilbert Chavez, Street Low
<<u>Streetlow1@aol.com</u>>; Harry Wardwell
< harry@salinasairshow.com >; Holly Andrus-Harris
<<u>flaironthefarm@gmail.com</u>>; Isabel Valtierra, MCOE Head
Start < <u>ivaltier@montereycoe.org</u>>; Jarren Coleman
<jerren@hgcreative.com>; Jason Cook
<cooksphoto353@gmail.com>; Jason T. Wold, Wold
Amusements, Inc. < woldamusements@yahoo.com >;
Jennifer Bunden < jennifer.bunden@salinasuhsd.org >;
Jennifer Highland, American Cancer Society
<jennifer.highland@cancer.org>; Jessica Matias, iHeart
Media Inc. < <u>jessicamatias@iheartmedia.com</u>>; Joel Panzer,
Old Town Salinas Foundation < joel@mwruck.com >; John E.
Arriaga, JEA & Associates < <u>jea@jeaandassociates.com</u>>;
John T. Hirasuna, Buddhist Temple of Salinas
< HI2JTSUMO@GMAIL.COM >; Johnna Meister, First Baptist,
Streets of Bethlehem < <u>Johnna@fbcsalinas.com</u>>; Jonathan
Green < jonathan.green@salinasuhsd.org>; Jorge Rojas,
Monterey County Soccer Club < <a href="mpjorgerojas@gmail.com">mpjorgerojas@gmail.com</a>;
Jose Velasquez <<u>jvelasquez@velasquezlawoffice.com</u>>;
Karina Ramires < kramires@csumb.com >; Kirsty Ryan
<megsmom1110@sbcglobal.net>; Krista Hamar
<a href="mailto:krista@hgcreative.com">krista@hgcreative.com</a>; Larry Hirahara
<seedguy@aol.com>; Lauro Barajas, United Farm Workers
<lbarajas@ufw.org>; Leticia Hernandez
< leticiabhernandez@gmail.com >; Lindsay Ezykowich,
Forbes Media LLC < <a href="mailto:lezykowich@forbes.com">lezykowich@forbes.com</a>; Lorisa
McKelvey Day, Event Planner Salinas Rotary Club
< lorisa@mad-about-events.com >; Lupe Covarrubia,
Monterey County WIC < covarrubias L@co.monterey.ca.us >;
Madonna del Sasso Church < <u>mnavarretemds@aol.com</u>>;
Maria CArdenas < maria@gomsalinas.com >; Maria Carrasco,
Empresa De Fuego < empresadefuego@gmail.com >; Maria
Ferdin < ferdinme@co.monterey.ca.us >; Mark Dover
<mark.dover@salinasuhsd.org>; Mark Landon, Circo
Caballero < mark@landonagency.com >; Mark Rollins
<mvrollins@comcast.net>; Matthew Silvestre, Venture
Church Salinas < info@venturechurchsalinas.org >; Michael
Schleicher, MDA < mschleicher@mdausa.org >; Mike L Ann
Miller < malymiller 2@gmail.com >; Mitch Massey
<mmassey@firstteemontereycounty.org>; Monica Gonzalez
<mgonzalez@entravision.com>; Nancy Valdez
<nancy.valdez@cancer.org>; Nick Nelson
<nnelson@firstteemontereycounty.org>; Nomads Disc Golf
Club < nomadsdiscgolfclub@gmail.com >; Orlando Osornio
<ofosornio@gmail.com>; Pete Tavares
<pete@!tavaresfamilycarclub.com>; Pete Tavares, Tavares
```

Family Car Club com; Phillip M. Nava, Church of Christ in the Americas < Revista@evalverde.com >; Phillip M. Nava, Church of Jesus Christ in the Amercicas < <u>Devista@evalverde.com</u>>; Quirino Vazquez < vazquezquirino@yahoo.com >; Ramon Castro, Wolfhose Radio Group, Inc. < <u>jrcastro5@aol.com</u>>; Ray Pulver < upbeatparades@aol.com >; Ricky Cabrera, Rotary Club of Salinas Alisal < rickycabrera@mac.com >; Robert Blodgett <ri@montereybayaltmed.com>; Roberto Osorio, American Crown Circus <americancrowncircus@yahoo.com>; Roly Cabrera, Salinas Police Foundation < drroly@hotmail.com>; Ronald Bitar, The Car Lot <<u>juan@carlot831.com</u>>; Sabrina Delk <sdelk@ecoact.org>; Salinas Juneteenth <<u>salinasjuneteenth@gmail.com</u>>; Salinas Pride < info@salinasvalleypride.com >; Salinas Valley Chamber of Commerce < membership@salinasvalleychamber.com >; Sam Jenkinson, Salinas Monster Jam <a1telecomsam@gmail.com>; Samantha Alvarez, AIDS Lifecycle <<u>salvarez@aidslifecycle.org</u>>; Seth Short <<u>sethshorty@yahoo.com</u>>; St. Mary of the Nativity Church <<u>business@stmarysalinas.org</u>>; Steinbeck Rotary <info@steinbeckrotary.org>; Stuart Li <<u>slstrtsr@gmail.com</u>>; Todd Farrington, Big Sur Land Trust <tfarrington@bigsurlandtrust.org>; Tony Valenzia, Empresas Azteca < tvalencia@lazerbroadcasting.com; Tony Virrueta <veteransdayparadesalinas@gmail.com>; Ty Brownfield, CA Rodeo Assoc., Rodeo Events < tbrownfield@carodeo.com; Vicki Law <<u>vlaw@p4pmc.org</u>>; Victor Garcia, Caminos del Arte < vicsgarcia@hotmail.com >; Victor Juarez, Yaocuauhtli <yaocuauhtli@yahoo.com>; Yadira Hobby <<u>yadira.hobby@gmail.com</u>> Cc: Julia Nix < julian@ci.salinas.ca.us >; Vivian Salinas

<vivians@ci.salinas.ca.us>; Ana Ambriz <anaa@ci.salinas.ca.us>

Subject: City of Salinas Special Event Ordinance Update

Good Afternoon,

The City has been reviewing Article I-C Sec. 30-12.30 of the Salinas Municipal Code and is recommending an update to the Special Event Ordinance. We are reaching out to you because you have organized a special event within the City of Salinas and gone through the special event process sometime between 2019 and 2022. Your thoughts on the process and requirements set forth in the DRAFT Special Event Ordinance is important and we are seeking feedback from you prior to recommending a change to the City Council. If you wish to provide feedback, please review the attached DRAFT Ordinance and send your feedback to specialevents@ci.salinas.ca.us by August 23, 2022.

In addition to this, we will also have two additional opportunities to provide feedback:

- Library & Community Services Commission Meeting, August 10 at 6:00 PM in the City Hall Rotunda, 200 Lincoln Ave.; or
- Virtual Community Meeting on August 16 at 6:00 PM Zoom ID 852 2008 2847 Passcode 949303 RSVP https://tinyurl.com/SalinasEvents

This item will be considered by the City Council on September 6, 2022.

The purpose of the Special Event Ordinance is to ensure the health and safety of all residents while mitigating impacts to the overall community. We hope the updated DRAFT Ordinance will assist in supporting an event friendly City.

If you have any questions, please feel free to contact me.

Thank you, Kristan

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave. Salians, CA 93901 O: (831) 758-7222

"We Create Community Through People, Parks & Programs"

Re: City of Salinas Special Event Ordinance Update

Mark Dover < Mark.Dover@salinasuhsd.org>

Mon 8/8/2022 3:48 PM

To: Kristan Lundquist <kristanl@ci.salinas.ca.us>

Hi Kristan,

I think that is a fair compromise. We will just need to make sure the schools understand that if we are doing a September Parade, you will need it by the first week of August. Usually no one has a Homecoming any earlier than the second or third week of September. Thank you for sharing this with me. I will submit my Application tomorrow. This actually aligns with Caltrans who also require the same 45 days.

Thanks,

Mark

On Mon, Aug 8, 2022 at 3:39 PM Kristan Lundquist < kristanl@ci.salinas.ca.us > wrote:

Hi Mark,

Thank you for the feedback on the time frame for submitting a permit. You parades are part of the fabric of our community and your feedback is critical! I have already contemplated the time frame and actually had planned to list 45 days (current ordinance has a 30 days) and just realized the document I sent out still references 90 days. How do you feel about having to submit an application 45 days in advance?

Do you have any other feedback on the draft ordinance language?

Kristan

From: Mark Dover < <u>Mark.Dover@salinasuhsd.org</u>>

Sent: Monday, August 8, 2022 2:55 PM

To: Kristan Lundquist < kristanl@ci.salinas.ca.us >

Subject: Re: City of Salinas Special Event Ordinance Update

Hi Kristan,

Thank you for including me in the email for this important topic. I am the Activities Director at Salinas High School. I know that our Homecoming Parade is a small event. I have the paperwork complete and have a question. The 90 day prior to the City manager will be difficult to navigate. The sports schedules just got finished and will be that way every year. I am looking at October 27 (Thursday) for the parade this year. It could be earlier in subsequent years. This only impacts Salinas High and Alisal as we are the two schools with parades. Will we still be ok.
Thanks,

Mark

On Wed, Aug 3, 2022 at 4:29 PM Kristan Lundquist < kristanl@ci.salinas.ca.us > wrote:

Good Afternoon,

The City has been reviewing Article I-C Sec. 30-12.30 of the Salinas Municipal Code and is recommending an update to the Special Event Ordinance. We are reaching out to you because you have organized a special event within the City of Salinas and gone through the special event process sometime between 2019 and 2022. Your thoughts on the process and requirements set forth in the DRAFT Special Event Ordinance is important and we are seeking feedback from you prior to recommending a change to the City Council. If you wish to provide feedback, please review the attached DRAFT Ordinance and send your feedback to specialevents@ci.salinas.ca.us by August 23, 2022.

In addition to this, we will also have two additional opportunities to provide feedback:

- 1. Library & Community Services Commission Meeting, August 10 at 6:00 PM in the City Hall Rotunda, 200 Lincoln Ave.; or
- Virtual Community Meeting on August 16 at 6:00 PM Zoom ID 852 2008 2847 Passcode 949303 RSVP https://tinyurl.com/SalinasEvents

This item will be considered by the City Council on September 6, 2022.

The purpose of the Special Event Ordinance is to ensure the health and safety of all residents while mitigating impacts to the overall community. We hope the updated DRAFT Ordinance will

	assist in supporting an event friendly City.		
	If you have any questions, please feel free to contact me.		
	Thank you,		
	Kristan		
	Kristan Lundquist		
	Library & Community Services Director		
	City of Salinas		
	200 Lincoln Ave.		
	Salians, CA 93901		
	O: (831) 758-7222		
	"We Create Community Through People, Parks & Programs"		
_	-		
Mark Dover			
Activities Director			
Salinas High School			
G	Go Cowboys!!!		

	resources		
	FOOD BANK: https://foodbankformontereycounty.org/		
	MONTEREY COUNTY SOCIAL SERVICES: http://mcdss.co.monterey.ca.us/		
	HOUSING RESOURCE CENTER: http://www.hrcmontereycounty.org/about/		
	MONTEREY COUNTY CRISIS LINE: (831) 424-HELP (4357)		
	SUICIDE HOTLINE: 1-800-273-8255		
	Mark Dover Activities Director Salinas High School Go Cowboys!!!		
resources FOOD BANK:			
	https://foodbankformontereycounty.org/ MONTEREY COUNTY SOCIAL SERVICES:		
	http://mcdss.co.monterey.ca.us/ HOUSING RESOURCE CENTER:		
	http://www.hrcmonterevcounty.org/about/		

http://www.hrcmontereycounty.org/about/
MONTEREY COUNTY CRISIS LINE: (831) 424-HELP (4357)

SUICIDE HOTLINE: 1-800-273-8255

Proposed Special Events Ordinance

Little, Daniel < DLittle@nheh.com>

Tue 8/23/2022 4:15 PM

To: SpecialEvents < specialevents@ci.salinas.ca.us >

Cc: Baldwin, Tim <TBaldwin@nheh.com>;Jim Slaten <jslaten@carodeo.com>;Fred Hooker <fredhcarodeo@yahoo.com>

Hello,

The California Rodeo offers the following comments on the proposed City of Salinas Special Event Ordinance:

The California Rodeo requests the City of Salinas Special Event Ordinance be revised to explicitly carve out all events held at the Salinas Sports Complex that are organized, sponsored, or held by the California Rodeo or pursuant to a written agreement with the California Rodeo. The stated purpose of the ordinance is to manage competing uses of the City's public facilities; to assure preservation of public places; to prevent dangerous, unlawful or impermissible uses; to protect the safety of people and property; and to control traffic around public venues. The California Rodeo believes its current and historical practices at the Salinas Sports Complex have achieved and will continue to achieve all of these goals without the need for additional special event permits.

The California Rodeo is well-versed and practiced with hosting special events of a large scale — it has held a lease agreement with the City for the Sports Complex since 1987 and held over 1,000 events since that time without any major incidents. Currently, it is estimated that the Rodeo and the Salinas Sports Complex will hold approximately 100 events a year moving forward that would require a Special Event Permit under the terms of the new ordinance: softball and baseball games and tournaments, high school football and soccer games, weddings, festivals, markets, banquets, meetings and other entertainment events held for the benefit of the Salinas community (Monster Jam, circuses/carnivals, concerts, etc.) The administrative burden and cost on the City and the California Rodeo associated with applying for and issuing a special event permit for each of these events would be enormous. Further, if the proposed ordinance is adopted in its current form, the Rodeo is exempt from paying any permit application fee as a non-profit organization; the City would be without a reimbursement mechanism to recover its costs for events conducted by, caused to be conducted by, managed, or participated in by the California Rodeo at the Sports Complex.

The California Rodeo understands from the public meeting held to discuss the proposed ordinance that: (1) Big Week events (only) are intended to be excluded from the permitting process, and (2) only events open to the public are intended to be subject to the permitting process. First, the California Rodeo is concerned that the language of the Rodeo's lease with the City and/or the proposed ordinance could be interpreted in such a way that would require the Rodeo to apply for a special events permit for every event it directly hosts at the Sports Complex – even those held during Big Week. Under the expansive language of the proposed ordinance, the California Rodeo arguably could be considered to "conduct or cause to be conducted, manage, or participate" nearly every other event that occurs at the Sports Complex throughout the year. Big Week's events are the most notable and largest events in terms of patrons, but as touched on above, are only a handful volume-wise of the estimated 100+ events held at the Sports Complex each year. Second, the Rodeo does not believe the proposed ordinance as currently drafted differentiates in any way between public and private events. As a result, even routine, regularlyoccurring private events of the Rodeo such as the bi-monthly general meetings of the Rodeo's directors/committee members and stockholders would be implicated by the ordinance and require a special events permit. We believe this is inconsistent with the intent of the lease and the proposed ordinance.

Finally, many of the objectives and requirements of the proposed ordinance are already achieved or met by the existing lease between the City and the Rodeo:

- Permit Fees: Each year the City is entitled to a fee from a surcharge on tickets sold by the Rodeo for Big Week events.
- Maintenance of City Property: The Rodeo is solely obligated to maintain the Sports Complex in good, safe, operable, usable and sanitary conditions.

- Insurance: The Rodeo is required pursuant to the terms of the lease to carry insurance for fire, general liability, automobile, workers compensation, employer's liability, and such other additional insurance coverage as the City requires. The City is additionally insured under these policies.
- Hold Harmless and Liability: The Rodeo is bound to hold the City harmless, indemnify, and defend the City (and its officers, employees, and agents, etc.) from claims for the Rodeo's use of the Salinas Sports Complex.

Thank you for your consideration of the California Rodeo's suggested revisions to the proposed ordinance. Best,

Danny Little

NOLAND, HAMERLY, ETIENNE & HOSS

A Professional Corporation 333 Salinas Street P.O. Box 2510 Salinas, CA 93902 (831) 424-1414 ext. 220 (831) 424-1975 (fax) dlittle@nheh.com www.nheh.com

Serving the Central Coast for 90 Years

CONFIDENTIALITY NOTICE: The information contained in this e-mail message is attorney-client privileged and/or confidential information. It is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are notified that any disclosure, copying, distribution, electronic storage or use of this communication is prohibited. If you received this communication in error, please notify me immediately by e-mail, attaching the original message, and delete the original message from your computer. Thank you.

RE: City of Salinas Special Event Ordinance Update to be Considered City Council on January 24, 2023

Little, Daniel <DLittle@nheh.com>

Fri 1/13/2023 9:03 AM

To: Kristan Lundquist <kristanl@ci.salinas.ca.us>;Christopher Callihan <chrisc@ci.salinas.ca.us>

Cc: Jim Slaten <jslaten@carodeo.com>;Baldwin, Tim <TBaldwin@nheh.com>

Thank you Kristan!

Danny Little

Noland, Hamerly, Etienne & Hoss

A Professional Corporation

333 Salinas Street

P.O. Box 2510

Salinas, CA 93902

(831) 424-1414 ext. 220

(831) 424-1975 (fax)

dlittle@nheh.com

www.nheh.com

Serving the Central Coast for 90 Years

CONFIDENTIALITY NOTICE: The information contained in this e-mail message is attorney-client privileged and/or confidential information. It is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are notified that any disclosure, copying, distribution, electronic storage or use of this communication is prohibited. If you received this communication in error, please notify me immediately by e-mail, attaching the original message, and delete the original message from your computer. Thank you.

From: Kristan Lundquist [mailto:kristanl@ci.salinas.ca.us]

Sent: Thursday, January 12, 2023 4:19 PM **To:** Little, Daniel; Christopher Callihan

Cc: Jim Slaten; Baldwin, Tim

Subject: RE: City of Salinas Special Event Ordinance Update to be Considered City Council on January 24, 2023

Hi Danny,

Thank you for your email. We agree with your proposed change and will update the draft ordinance accordingly. Wanted to let you know that we have some additional outreach to do on Article I-A relating to the Film Permit process so this item will not go to Council on January 24th. I will let you know when it gets scheduled.

Thank you, Kristan

From: Little, Daniel <DLittle@nheh.com>
Sent: Wednesday, January 11, 2023 1:02 PM

To: Kristan Lundquist <kristanl@ci.salinas.ca.us>; Christopher Callihan <chrisc@ci.salinas.ca.us>

Cc: Jim Slaten <jslaten@carodeo.com>; Baldwin, Tim <TBaldwin@nheh.com>

Subject: RE: City of Salinas Special Event Ordinance Update to be Considered City Council on January 24, 2023

Hi Kristan,

We have one comment on the revised proposed Special Events Ordinance at this time.

In Section d(3)(I), the language describing which organizations are exempt from application fee was changed from "Bona fide non-profit organizations" to "Non-profit organizations which qualify under Section 501(c)(3) of the Internal Revenue Code as charitable organization..." We believe this language is unnecessarily restrictive as it precludes other non-profit, tax-exempt organizations that qualify under other areas of the IRC (e.g., social welfare organizations qualifying under 501(c)(4)).

We propose revising the ordinance as follows: "Non-profit organizations which qualify as tax-exempt organizations under the Internal Revenue Code..."

Thank you for your consideration.

Best,

Danny Little
NOLAND, HAMERLY, ETIENNE & HOSS
A Professional Corporation
333 Salinas Street
P.O. Box 2510
Salinas, CA 93902
(831) 424-1414 ext. 220
(831) 424-1975 (fax)
dlittle@nheh.com
www.nheh.com

Serving the Central Coast for 90 Years

CONFIDENTIALITY NOTICE: The information contained in this e-mail message is attorney-client privileged and/or confidential information. It is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are notified that any disclosure, copying, distribution, electronic storage or use of this communication is prohibited. If you received this communication in error, please notify me immediately by e-mail, attaching the original message, and delete the original message from your computer. Thank you.

From: Kristan Lundquist [mailto:kristanl@ci.salinas.ca.us]

Sent: Friday, January 6, 2023 1:58 PM

To: A. Olsen, Salinas Steinbeck Rotary Club; Aaron Snyder; Adan Gomez; Adan Gomez; subadirector@gmail.com; Alex Carmona, iHeart Media; Angie Connell; Annalisa Carrillo; Anthony Lane; Ashley McDonnell, Salinas Valley Food and Wine; Brandon Hill, Alliance on Ageing; California International Airshow; Cary Swensen; Cassy Waggy; Cesar Torres; Chris Clay; Christopher Barrera; swimbikerunaxs@yahoo.com; Crystal Andon, American Cancer Society; Crystal Sanchez; Danny Garcia, Salinas PAL Carshow; Little, Daniel; Dean Callender; Edgar De La Cruz, Sainas Valley Disc Golf; Elsa Jimenez; Epifanio Nunez & Yolanda Saldana, Christ the King Church; Erick Lopez; Estela Gutierrez, Salinas Valley Recycles, Salinas Valley Solid Waste Authority; Future Citizens Fiundation; Gilbert Chavez, Street Low; Harry Wardwell; Holly Andrus-Harris; Isabel Valtierra, MCOE Head Start; Jarren Coleman; Jason Cook; Jason T. Wold, Wold Amusements, Inc.; Jennifer Bunden; Jennifer Highland, American Cancer Society; Jessica Matias, iHeart Media Inc.; Joel Panzer, Old Town Salinas Foundation; John E. Arriaga, JEA & Associates; John T. Hirasuna, Buddhist Temple of Salinas; Johnna Meister, First Baptist, Streets of Bethlehem; Jonathan Green; Jorge Rojas, Monterey County Soccer Club; Jose Velasquez; Karina Ramires; Kirsty Ryan; Krista Hamar; Larry Hirahara; Lauro Barajas, United Farm Workers; Leticia Hernandez; Lindsay Ezykowich, Forbes Media LLC; Lorisa McKelvey Day, Event Planner Salinas Rotary Club; covarrubiasl@co.monterey.ca.us; Madonna del Sasso Church; Maria CArdenas; Maria Carrasco, Empresa De Fuego; Maria Ferdin; Mark Dover; Mark Landon, Circo Caballero; Mark Rollins; Matthew Silvestre, Venture Church Salinas; Michael Schleicher, MDA; Mike L Ann Miller; Mitch Massey; Monica Gonzalez; Nancy Valdez; Nick Nelson; Nomads Disc Golf Club; Orlando Osornio; Pete Tavares; Pete Tavares, Tavares Family Car Club; Phillip M. Nava, Church of Christ in the Americas; Phillip M. Nava, Church of Jesus Christ in the Amercicas; Quirino Vazquez; Ramon Castro, Wolfhose Radio Group, Inc.; Ray Pulver; Ricky

Cabrera, Rotary Club of Salinas Alisal; Robert Blodgett; Roberto Osorio, American Crown Circus; Roly Cabrera, Salinas Police Foundation; Ronald Bitar, The Car Lot; Sabrina Delk; Salinas Juneteenth; Salinas Pride; Salinas Valley Chamber of Commerce; Sam Jenkinson, Salinas Monster Jam; Samantha Alvarez, AIDS Lifecycle; Seth Short; St. Mary of the Nativity Church; Steinbeck Rotary; Stuart Li; Todd Farrington, Big Sur Land Trust; Tony Valenzia, Empresas Azteca; Tony Virrueta; Ty Brownfield, CA Rodeo Assoc., Rodeo Events; Vicki Law; Victor Garcia, Caminos del Arte; Victor Juarez, Yaocuauhtli; Yadira Hobby

Cc: Vicky Sargent; Vivian Salinas; Ana Ambriz

Subject: City of Salinas Special Event Ordinance Update to be Considered City Council on January 24, 2023

Good Afternoon,

As you are aware, the City of Salinas has been reviewing Article I-C of Chapter 30 of the Salinas Municipal Code and is recommending an update to the Special Event Ordinance. A prior draft was shared with you in August of 2022 and a Virtual Community Meeting was held on August 16, 2022 allowing for your feedback on the changes. Due to other competing priorities, there was a delay in taking this item to the City Council. Staff has continued to review the Draft Ordinance and feedback already received. During this review, it was determined that additional information was needed in order to address Film Permits so Article I-A has added.

Attached please find the updated Draft in final form that will be considered by the City Council on January 24, 2023.

If you have any questions, please let me know.

Thank you, Kristan

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave. Salians, CA 93901 O: (831) 758-7222

"We Create Community Through People, Parks & Programs"

Public Comment Received

Sent: Friday, March 3, 2023 8:21 AM

Senter Frinay, Nartin 3; 22/23 e.2.1 AWN
To Kristan Lundusit - Kristangusit - Kri

Thank you, feels very safe and I think other small single or small local crew film makers will feel comfortable with this. Thanks again!



Creative Director/Owner

Studio:831-800-7639 x105 Address:369 Main St. Ste. 201, Salinas, CA 93901

660

om meeting with me

On Mar 2, 2023, at 4:52 PM, Kristan Lundquist < kristanl@ci.salinas.ca.us> wrote

Appreciate you responding. The item you are referring to is in the definitions and defines the term Studio. If you look at item 3 under Exemptions, we added "or otherwise wholly indoors" to address the comments you made at the stakeholder meeting. I think you referenced either filming and taking photos of a Hospital Boardmember in his office and your concern that the way Article I-A previously was written would require that you get a permit.

I hope this clarifies your concern.

Kristar

From: Alex Garcia <alex@magonemedia.com>
Sent: Thursday, March 2, 2023 4:00 PM
To: Kristan Lundquist <a href="https://doi.org/10.1016/j.com/10

Sorry Kristan I have had my hand and plate full. This is looking great! Thank you for your work on this. This one area isn't very clear.

This line seems like this needs to be in exemptions. Other than this its seems very clear, understandable and reasonable. Anyone else in this email agree!

Alex Garcia Creative Director/Owner

Studio: 831-800-7639 x105

Website: www.magonemedia.com
Address: 369 Main St. Ste. 201, Salinas, CA 93901

<~WRD0001.ipg>

<~WRD0001 ing>

<~WRD0001.ipa>

Schedule a Zoom meeting with me

On Mar 2, 2023, at 8:54 AM, Kristan Lundquist < kristanl@ci.salinas.ca.us > wrote:

Good Morning Salinas Film, Media and Production Stakeholders,

I hope you have all had an opportunity to review the updated draft language related to Article I-A establishing a film permit process. As a reminder, please send any comments and/or feedback that you may have regarding the draft to me today.

Thank you, Kristar

Kristan Lundquist

Library & Community Services Director City of Salinas 200 Lincoln Ave

"We Create Community Through People, Parks & Programs"

From: Kristan Lundquist
Sent: Friday, February 24, 2023 11:25 AM
To: Kristan Lundquist <a href="https://doi.org/10.1001/journal-news-align-center-of-the-process-align-center-of-the-process-align-center-of-the-process-align-center-of-the-process-align-center-of-the-process-align-center-of-the-process-align-center-of-the-process-align-center-of-th-process-align-center-of-

Good Morning Salinas Film, Media and Production Stakeholders,

Thank you to those of you who attended the meeting on February 2, 2023 regarding draft Article I-A of Chapter 30 of the Municipal Code which outlines a process for the issuance of Film Permits within the City of Salinas. It was a robust discussion and as you are aware, the City Attorney and I agreed to revise the language to mitigate concerns raised by local stakeholders.

Attached for your review is the updated draft ordinance outlining the changes via track change. The City Attorney and I believe this addresses the concerns raised, however, we are looking for your feedback and comments prior to presenting this item to the LCS Commission. Please submit your comments and/or feedback to me by Thursday, March 2, 2023.

l appreciate your enthusiasm and desire to develop a process that works for Salinas, and I look forward to receiving your feedback on the revised language. If you have any questions and/or concerns, please don't hesitate to contact me.

Thank you,

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave Salians, CA 93901 O: (831) 758-7222

"We Create Community Through People, Parks & Progra

From: Chris Carpenter <ccarpenter@csumb.edu>
Sent: Friday, February 24, 2023 7:24 PM
To: Kristan Lundquist https://disables.ca.us-y-karen@filmmonterey.org
Cc: Christopher Callbian https://cia.plians.ca.us-y-karen@filmmonterey.org
Cc: Christopher Callbian https://cia.plians.ca.us-y-karen@filmmonterey.org
Cc: Christopher Callbian https://cia.plians.ca.us-y-karen@filmmonterey.org
Cc: Christopher (Callbian https://cia.plians.ca.us-y-karen@filmmonterey.org
Cc: Christop

Thank you, Kristan for including me on this email.

Our university film and risk management departments will review it next week and give you feedback regarding the support for our Cinematic Arts and Technology students.

I also wanted to ensure the Monterey County Film Commissioner, Karen Nordstrom, sees these revised changes. I am extremely worried that the changes do NOT make Salinas a film friendly environment. If you intend not to have big-budget national feature films or commercials shoot in Salinas, this document could be the HUGE Wall you want. I know many local location scouts, and they want to build relationships with city staff. Mostly to see if it will be painful or if the city is willing to work with these large production companies without a lot of time/hassle.

Karen, In the last in-person meeting, I mentioned to the city staff that they should consult with you and if they did, please disregard this email.

Can you and the county staff review the attachment and advise the Salinas City Staff? We know Monterey and several other local cities have successfully brought many film productions to their respected city limits over the last couple years. I think Salinas hasn't had a major motion film production in their city limits since the late 80's, but I know you can confirm this.

Any feedback you can give them would help greatly. Your decades of being the Monterey County Film Commissioner is invaluable!

Chris Carpenter Lecturer / Media Production Specialist III Cinematic Arts & Technology, CSU, Monterey Bay p: 831.582.3772 m: 831.915.3421 a: 100 Campus Center, Bldg. 27, Seaside, CA. 93955 w: csumb.edu e: ccarpenter@csumb.edu

On Fri, Feb 24, 2023 at 11:24 AM Kristan Lundquist <<u>kristanl@ci.salinas.ca.us</u>> wrote

Good Morning Salinas Film, Media and Production Stakeholders.

Thank you to those of you who attended the meeting on February 2, 2023 regarding draft Article I-A of Chapter 30 of the Municipal Code which outlines a process for the issuance of Film Permits within the City of Salinas. It was a robust discussion and as you are aware, the City Attorney and I agreed to revise the language to mitigate concerns raised by local stakeholders.

Attached for your review is the updated draft ordinance outlining the changes via track change. The City Attorney and I believe this addresses the concerns raised, however, we are looking for your feedback and comments prior to presenting this item to the LCS Commission. Please submit your comments and/or feedback to me by Thursday, March 2, 2023.

1 appreciate your enthusiasm and desire to develop a process that works for Salinas, and 1 look forward to receiving your feedback on the revised language. If you have any questions and/or concerns, please don't hesitate to contact me.

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave. Salians, CA 93901 O: (831) 758-7222

"We Create Community Through People, Parks & Programs"

From: Kristan Lundquist
Sent: Thursday, March 2, 2023 12:50 PM
To: Alfredo Availa - availa@hartnell.edu>
Ct: Albert Fong - albertgfong@yahoo.com; Christopher Callihan - chrisc@ci.salinas.ca.us>; Gloria De La Rosa - glo.delarosa@att.net>; Vicky Sargent - vickys@ci.salinas.ca.us>; joey martinez - ventanadesigns@gmail.com>
Subject. RE: NY: Filin Permit Process: Draft Article I-A of Chapter 30 of the Salinas Municipal Code

Thank you for the question. If the individual requesting the film permit is a sole proprietor, then they would not be subject to WC insurance requirements however, if the individual requesting the permit has a team of employees working on the shoot, they would be required to provide WC insurance

Thank you, Kristan

From: Alfredo Avila <a href="https://doi.org/10.1007/j.com

Hi Kristan,
I'm curious of the worker's compension implications of a non-major film production that requires a permit. Can you give us an example of how this would work?
Grax
Freddy

On Thu, Mar 2, 2023 at 8:54 AM Kristan Lundquist < kristanl@ci.salinas.ca.us> wrote:

Good Morning Salinas Film, Media and Production Stakeholders,

I hope you have all had an opportunity to review the updated draft language related to Article I-A establishing a film permit process. As a reminder, please send any comments and/or feedback that you may have regarding the draft to me today.

Thank you,

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave. Salians, CA 93901

0: (831) 758-7222

"We Create Community Through People, Parks & Programs"

From: Kristan Lundquist

From: Kristan Lundquist
Sent: Friday, February 24, 2023 11:25 AM
To: Kristan Lundquist kristanl@ci.salinas.ca.us
Cc: Christopher Callihan krist@ci.salinas.ca.us; Vicky Sargent krist@ci.salinas.ca.us; Vicky Sargent krist@ci.salinas.ca.us; Sloria De La Rosa krist@ci.salinas.ca.us; Vicky Sargent krist@ci.salinas.ca.us; Sloria De La Rosa krist@ci.salinas.ca.us; Albert Fong albertgfong@yahoo.com> Subject: Film Permit Process- Draft Article I-A of Chapter 30 of the Salinas Municipal Code

Good Morning Salinas Film, Media and Production Stakeholders

Thank you to those of you who attended the meeting on February 2, 2023 regarding draft Article I-A of Chapter 30 of the Municipal Code which outlines a process for the issuance of Film Permits within the City of Salinas. It was a robust discussion and as you are aware, the City Attorney and I agreed to revise the language to mitigate concerns raised by local stakeholders.

Attached for your review is the updated draft ordinance outlining the changes via track change. The City Attorney and I believe this addresses the concerns raised, however, we are looking for your feedback and comments prior to presenting this item to the LCS Commission. Please submit your comments and/or feedback to me by Thursday, March 2, 2023.

I appreciate your enthusiasm and desire to develop a process that works for Salinas, and I look forward to receiving your feedback on the revised language. If you have any questions and/or concerns, please don't hesitate to contact me.

Thank you, Kristar

Kristan Lundquist Library & Community Services Director

City of Salinas 200 Lincoln Ave

Salians, CA 9390 O: (831) 758-7222

"We Create Community Through People, Parks & Programs"

Alfredo Avila, M.A.

Ethnic Studies | Theatre & Cinema Faculty

411 CENTRAL AVENUE | SALINAS, CA 93901

aavila@hartnell.edu

From: Kristan Lundquist Sent: Thursday, March 2, 2023 5:22 PM Sent: Inuriday, Marchi, 2, 2023-322 PW
TC: Karen Sepan Nordstrand Karen@FilmMonterey.org>
CC: Nordstrand3@hotmail.com
Subjects RE: MorCC - Film Permit Process- Draft Article I-A of Chapter 30 of the Salinas Municipal Code

I've worked with a few film permit request in the past and am aware they generally come together fairly quickly so we did not address a deadline to submit (like the 45 days for special events) to give flexibility for a quick turn around. The original draft language was modeled after the California Film Commissions model ordinance and our local folks had lots of concerns. I met with close to 20 or 25 local film makers, photographers and media influencers in early February to discuss their concerns with the initial draft language. Chris Carpenter was there as well. Their biggest concerns was to clearly define who Article I-A was meant to address and exempt our local film, photographers and media influences from a permit process unless otherwise doing something like closing the street. This is what drove the red line changes that you see in the document. Please see my answers to your questions below in red.

Please let me know if you have any additional questions

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave Salians CA 93901 O: (831) 758-7222

"We Create Community Through People, Parks & Programs"

From: Karen Senna Nordstrand < Ka @FilmMonterev.org> Sent: Thursday, March 2, 2023 5:04 PM To: Kristan Lundquist <kristanl@ci.salinas.ca.us> Cc: Nordstrand3@hotmail.com
Subject: RE: MCFC -- Film Permit Process- Draft Article I-A of Chapter 30 of the Salinas Municipal Code

"I'm reviewing the proposed changes but was hoping some meeting with film industry professionals in the area might be in order to help in the understanding of how the film industry works and the best practices of statewide cities and the California Film Commission. Productions these days come together rather quickly (especially the videos, commercials and still shoots that we most often attract since we don't have the lure of big tax incentives that studio films often seek first).

- 1. Section 30-12 Definitions –(02) What is the need for (b.) definition? Permits are for all types of Commercial Film Productions. We may have a movie wanting to film just a few days of scenes. The movies may be studios or independent filmmakers. How they are financed and/or distributed should not make a difference, nor if they are for presentation to a mass audience. The wording filming in (a.) seems comprehensive enough and includes "shooting commercial motion pictures" This was included to address concerns from our local film and photography industry.

 2. Sec. 30-12 (04) Again the word major motion picture activity seems unnecessary. Does the rule ment that every film applicant needs "approval by Resolution of the City Council"? Or what is the intent of that involvement with City Council ? I think that the City Manager would be taking film permit requests and have a system of vetting possibilities with impacted agencies (police if necessary, parking dept., etc.) like City of Monterey does. No, this provides for the City Manager or his designee to issue permits. The City Council does not have to approve any film or special event
- permit.
 3. I don't see any language about how far out a permit request may need to be submitted to the City Manager. The only deadline I see is 45 days for Special Events, which filming really is not. Is this left to the discretion of the City Manager? Most productions these days—especially the commercials, documentaries, stills and videos that would most likely shoot in Salinas—move more quickly and a film-friendly jurisdiction tries hard to turn around the permit approval in a few days. I do not read the 45 days in the Special Events section as applicable to filming, am I right? Yes, as indicated above, no time frame or deadline to submit is included to allow for flexibility based on my previous experience with film permit requests. You are correct, the 45 days is specifically for special event permits.

 4. Big productions (movies, TV series, etc.) do not come often (again incentives are lacking) but will logically start out much earlier in deciding if they can film in a city. Even then, the director over some days may want to change locations and get permitted quickly as the filming gets going.
- rstood and this isn't an issue

I have heard from several locals in the film industry, and they have sent letters and offers of help to craft the ordinance based on their professional experience with many city film offices. I hope you have received their input. We all want to keep locals employed and create an economic boost from the clean, temporary business of filmmaking for the City of Salinas and staying competitive with the many other places seeking the film business.

Llook forward to clarification on the above questions

Karen Seppa Nordstrand AFCI Certified Film Commissione Monterey County Film Commissio 831-646-0910 / c 831-594-9410

From: Kristan Lundquist [mailto.kristanl@cj.salinas.ca.us]
Sent: Thursday, March 02, 2023 8:54 AM
To: Kristan Lundquist kristanl.undquist <a href="mailto.kristanl.undquist <a href="mailto.kristanl.undquist <a href="mailto.kristanl.undquist <a href="mailto.kristanl.undquist <a href="mailto.kristanl.undquist <a href="mailto.kristanl.undquist | kristanl.undquist |

Importance: High

Good Morning Salinas Film, Media and Production Stakeholders,

I hope you have all had an opportunity to review the updated draft language related to Article I-A establishing a film permit process. As a reminder, please send any comments and/or feedback that you may have regarding the draft to me today.

Thank you, Kristar

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave 0: (831) 758-7222

"We Create Community Through People, Parks & Programs"

From: Kristan Lundquist

From: Nistan Lunoquust Sentian Britan Britan Britan Lunoquust Certistan Britan Certistan Britan Certistan Britan Lunoquust Certistan Britan Lunoquust Certistan Britan Certistan Britan Lunoquust Certistan Lunoquust Certista

Good Morning Salinas Film, Media and Production Stakeholders,

Thank you to those of you who attended the meeting on February 2, 2023 regarding draft Article I-A of Chapter 30 of the Municipal Code which outlines a process for the issuance of Film Permits within the City of Salinas. It was a robust discussion and as you are aware, the City Attorney and I agreed to revise the language to mitigate concerns raised by local stakeholders.

Attached for your review is the updated draft ordinance outlining the changes via track change. The City Attorney and I believe this addresses the concerns raised, however, we are looking for your feedback and comments prior to presenting this item to the LCS Commission. Please submit your comments and/or feedback to me by Thursday, March 2, 2023.

I appreciate your enthusiasm and desire to develop a process that works for Salinas, and I look forward to receiving your feedback on the revised language. If you have any questions and/or concerns, please don't hesitate to contact me.

Thank you, Kristar

Kristan Lundquist Library & Community Services Director City of Salinas 200 Lincoln Ave O: (831) 758-7222

"We Create Community Through People, Parks & Progra



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-273, Version: 1

2023 California Department of Housing and Community Development Local Housing Trust Fund Application

Approve a Resolution authorizing submittal of a Local Housing Trust Fund Program Application to the California Department of Housing and Community Development; and establishment of a Salinas Local Housing Trust Fund and a Salinas LHTF account fund with revenue and expenditure accounts to include the pre-application allocation of Housing Production Fund CIP #9021 (\$500,000), and General Funds (\$500,000), as required local match and SB2 PLHA (\$100,000); and authorizing the City Manager, or designee, to execute all applicable forms, grant-related documents, and subsequent amendments as needed.

DATE: MAY 2, 2023

DEPARTMENT: COMMUNITY DEVELOPMENT DEPARTMENT

FROM: MEGAN HUNTER, DIRECTOR

THROUGH: ROD POWELL, PLANNING MANAGER

BY: LUIS OCHOA, SR. COMMUNITY DEVELOPMENT ANALYST

DAVID VIGIL, HOUSING PRODUCTION VISTA

TITLE: 2023 CALIFORNIA DEPARTMENT OF HOUSING AND

COMMUNITY DEVELOPMENT LOCAL HOUSING TRUST FUND

APPLICATION

RECOMMENDED MOTION:

A motion to approve a Resolution authorizing:

- 1. establishment of a Salinas Local Housing Trust; and
- 2. establishment of a Salinas Local Housing Trust Fund with revenue and expenditure accounts to include pre-application appropriations totaling \$1,020,000, including \$20,000 from the SB2 PLHA Fund as required, incremental operating revenue, and planned appropriations of \$20,000 per year for the upcoming four fiscal years for the SB2 (PLHA) Fund; and
- 3. transfers from Housing Production Fund CIP #9021 (\$500,000), the General Fund (\$500,000), and SB2 PLHA Fund (\$20,000); and
- 4. commitment of nine (9) City-owned properties at 921 E. Market St., an easement and 115, 123, 137, 145, 151 Division St., and 37-39 and 34-38 Soledad St. as Salinas LHTF match assets; and
- 5. submittal of a Local Housing Trust Fund Program Application to the California Department of Housing and Community Development; and
- 6. the City Manager, or designee, to execute all applicable forms, grant-related documents, and subsequent amendments as needed.

EXECUTIVE SUMMARY:

The California Department of Housing and Community Development (HCD) Local Housing Trust Fund (LHTF) Program provides matching funds to local and regional housing trust funds dedicated to the creation, rehabilitation, or preservation of affordable housing, transitional housing, and emergency shelters. As part of the Program, applicant jurisdictions are required to provide a dollar-for-dollar match of funds and/or property assets to support equivalent funding requests up to five

million dollars (\$5,000,000). The City of Salinas (City) is considered to be a new applicant to the LHTF Program and, as such, is required to have a minimum LHTF Program application request of at least \$500,000 with corresponding match and operating revenues. It is proposed that the City satisfy these requirements with an appropriation of \$500,000 from the Housing Production Fund CIP # 9021; \$500,000 of General Funds; the appraised valuations of nine (9) owned, undeveloped City-owned properties; and an incremental amount not to exceed \$100,000 of SB2 PLHA funds as operating revenues. Each match property would become an affordable housing project beneficiary of awarded LHTF funds.

BACKGROUND:

On December 4, 2018, Council adopted the Salinas Plan (SP). One of the thirty-two (32) recommendations highlighted in the SP was to establish a housing trust fund with local and state resources to support the creation of 2,000 new units of affordable housing. As discussed in SP updates, the City ultimately participated in a regional trust fund through Monterey Bay Economic Partnership (MBEP). Unfortunately, no housing project within Salinas has ever tapped into the MBEP Trust Fund because of funding restrictions. As a result, the City established a Housing Capital Improvement Project (CIP) Fund to serve as a funding source for affordable housing projects. Until last fiscal year, City allocations to the CIP have been minimal.

On March 7, 2023, HCD released a Notice of Funding Availability (NOFA) announcing the availability of approximately fifty-three million (\$53,000,000) in LHTF Program funds to local, compliant jurisdictions. Source funding for HCD's LHTF Program was established by the Veterans and Affordable Housing Bond Act of 2018 (Proposition 1), adopted by California voters on November 6, 2018.

LHTF Program funds must be used to provide construction loans and/or permanent financing loans to pay for predevelopment costs, acquisition, construction, or rehabilitation of affordable rental housing projects, emergency shelters, transitional housing, and permanent supportive housing. Program funds may also be used to assist income-eligible first time-time homebuyers to purchase homes and to rehabilitate houses owned by income eligible occupants as well as to construct, convert, repair, and rehabilitate accessory dwelling units (ADUs) or junior accessory dwelling units (JADUs).

All funds provided by the LHTF Program must be matched by the applicant on a dollar-for-dollar basis with funds from dedicated sources of funding such as taxes, fees, loan repayments, land donations, or public or private contributions. If land donations/valuations are used as matching funds, that land must be utilized as part of an affordable housing project. Prior to the disbursement of LHTF Program funds, jurisdictions must demonstrate proof of deposit of match funds in a designated LHTF account or provide proof of a legally binding commitment to do so. Funds restricted for housing use by state or federal law, such as funds from HOME, CDBG, HSA, or state housing programs administered by HCD, may not be used as LHTF match funds.

DISCUSSION:

To reach City goals for affordable housing, more funding, especially for gap financing is needed. The LHTF presents a unique opportunity to essentially double City resources dedicated to housing production. The City would apply as a new LHTF applicant and as such is required to demonstrate sufficient sources of ongoing revenues from public or private sources that will cover operating costs for a minimum of five (5) years from the date of an LHTF Program award. Applicants are also allowed to use up to five percent (5%) of an LHTF Program award to supplement administration and operations of the program. HCD SB2 PLHA funds may be used as a source of ongoing operating revenue to support a new LHTF.

New LHTF Program applicants may request five hundred thousand (\$500,000) to five million dollars (\$5,000,000) in funding contingent upon the provision of a dollar-for-dollar match of funds and/or property assets. In support of its LHTF application, the City proposes to use a portion of its Housing Production Fund CIP #9021 (\$500,000) and new allocation of General Funds (\$500,000) towards its match as well as the valuations of seven (7) of its owned parcels on Division and Market Streets and two (2) of its owned parcels on Soledad Street with an approximate value of one million dollars (\$1,000,000). In summary, and contingent upon in-progress appraisals of city owned property, the City is seeking to identify and commit a total of two million dollars (\$2,000,000) in allowable assets (funds and property) that would effectively result in a total of four million dollars (\$4,000,000) towards viable, future affordable housing projects. The City would also commit up to one hundred thousand dollars (\$100,000) of its SB2 (PLHA) funds as a required ongoing source of revenues to incrementally support LHTF operations for five (5) years.

LHTFs are of significant value to local jurisdictions seeking to attract new developers or support existing planned projects by enhancing and expanding available local resources and offering supportive funding for emerging affordable housing developments. The City is currently engaged in discussions and/or partnering on various proposed housing projects that could readily benefit from these matching funds.

If awarded, the City's new LHTF Program would utilize funds for the new construction of multifamily and rental housing that is affordable to extremely low-, very low-, and low-income households, including necessary operating subsidies. While the LHTF Program allows for broader use (i.e., rehabilitation of housing, ownership housing, and moderate-income housing), the additional restrictions listed here enable the City to score more highly in this competitive grant program. Allocation of awarded LHTF funds to the City, would be overseen by the City Council acting as a Salinas LHTF Board of Directors.

Proposed Local Housing Trust Fund Match and Administration Assets		
Funds:	Allocation Amount	
Existing Housing Production Fund (CIP 9021)	\$ 500,000	
General Funds	\$ 500,000	
Owned Property Valuations:		
921 E. Market Street	TBD	
115 Division Street	appraisals in-progress,	
123 Division Street	estimated to be	
137 Division Street	+/- \$575,000	

145 Division Street			
Easement on Division Street			
151 Division Street			
37-39 Soledad Street	\$140,000		
34-38 Soledad Street	\$300,000		
Ongoing Revenues (To support 5 years of Housing Trust operating costs)			
SB2 Permanent Local Housing Allocation (PLHA)	\$100,000		
Total Local Funds and Assets Committed	TBD +/- \$2,100,000		

Below is a timeline of anticipated milestones and actions related to the City's LHTF Program application. To ensure completion of a competitive application inclusive of required operational guidelines and policies within the extremely short 30-day submission period, the City has also enlisted support from an experienced LHTF consultant, Harris and Associates.

Proposed LHTF Program Timeline		
HCD 2023 LHTF Program NOFA Release	March 7, 2023	
LHTF Application Release	April 6, 2023	
HCD LHTF Application Portal open for submissions	April 19, 2023	
City Council consideration of City of Salinas LHTF Program	May 2, 2023	
Internal transfer of local match funds to new LHTF account	May 2-5, 2023	
LHTF Application Deadline	May 17, 2023	
HCD LHTF Award Announcements	August 2023	

2023 LHTF Program applications are due to HCD by no later than May 17, 2023.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

Application to the HCD LHTF Program supports the City of Salinas Strategic Plan 2022-2025 Goals and Strategies of *Housing/Affordable Housing and Effective and Culturally Responsive Government*.

DEPARTMENTAL COORDINATION:

The City's Community Development Department Housing and Community Development Division has assumed a primary role in the completion and submission of an HCD LHTF application in consultation with the City Manager, City Attorney and Finance Department. If awarded, the City's new LHTF will become part of the portfolio of available affordable housing development tools and resources administered by CDD Housing staff.

FISCAL AND SUSTAINABILITY IMPACT:

HCD's 2023 LHTF application requires an initial dollar-for-dollar match of allowable funds and/or property as well as an identified source of fund to support operating costs and administration for a minimum of five (5) years. The City's application will include \$500,000 of General Funds, \$500,000 of Housing Production Fund CIP #9021, and nine (9) allowable properties currently under appraisal and estimated to be valued at approximately \$1,000,000. Originally, staff had requested \$500,000 from Measure E for the Housing Production CIP in the FY 23/24 budget. However, HCD's LHTF application requires matching funds to be appropriated at time of application. Therefore, it is recommended that City Council approve the \$500,000 General Funds appropriation as part of action taken on May 2nd. The \$500,000 of Housing Production CIP #9021 funds have been previously appropriated and should be transferred into the Salinas LHTF account.

Per LHTF Guidelines, an additional \$100,000 of SB2 (PLHA) funds will also be committed incrementally over a five (5) year period to support the ongoing operations LHTF. Identified match funds and the first increment of LHTF operating revenues (\$20,000) must also be transferred to the newly created Salinas LHTF prior to submission of the application.

ATTACHMENTS:

Resolution HCD Local Housing Trust Fund Application State HCD Resolution Local Housing Trust Fund Application Salinas LHTF Program Guidelines and Standards

RESOLUTION NO. (N.C.S.)

A RESOLUTION OF THE CITY OF SALINAS CITY COUNCIL AUTHORIZING ESTABLISHMENT OF A SALINAS LOCAL HOUSING TRUST FUND; ESTABLISHMENT OF A SALINAS LHTF ACCOUNT AND TRANSFER OF IDENTIFIED LOCAL MATCH FUNDS, PROPERTY ASSETS, AND OPERATING REVENUE FUNDS; SUBMITTAL OF A LOCAL HOUSING TRUST FUND PROGRAM APPLICATION TO THE CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT; AND THE CITY MANAGER OR DESIGNEE TO EXECUTE ALL APPLICABLE FORMS, GRANT-RELATED DOCUMENTS, AND SUBSEQUENT AMENDMENTS AS NEEDED

WHEREAS, on December 4, 2018, City Council adopted the Salinas Plan including a recommendation to establish a housing trust fund with local and state resources to create 2,000 new units of affordable housing; and

WHEREAS, the City had participated in a regional housing trust fund and established a Housing Production Capital Improvement Fund in the past, but had not generated enough gap financing needed by affordable housing developers; and

WHEREAS, on March 7, 2023, the State of California, Department of Housing and Community Development (HCD) issued a Notice of Funding Availability (NOFA) under its Local Housing Trust Fund (LHTF) Program; and

WHEREAS, HCD is authorized to provide up to \$53 million under the LHTF Program from the Veterans and Affordable Housing Bond Act of 2018 (Proposition 1) (as described in Health and Safety Code section 50842.2 et seq. (Chapter 365, Statutes of 2017 (SB 3)) (Program); and

WHEREAS, the City is an eligible 'new' Local Housing Trust Fund applicant and able to apply for up to \$5,000,000 in Program funds to support the creation, rehabilitation, or preservation of affordable housing, transitional housing, and emergency shelter; and

WHEREAS, to satisfy LHTF application threshold requirements the City of Salinas ("City") proposes to establish a Salinas Local Housing Trust Fund; and

WHEREAS, per HCD LHTF Application requirements, the City intends to establish a Salinas LHTF account fund prior to submission and appropriate \$500,000 from the Housing Production Fund CIP # 9021, \$500,000 of General Funds, and \$20,000 of SB2 PLHA funds as its applicable match and initial operating revenue; and

WHEREAS, the City intends to commit the appraised values of its 34-38 Soledad St., 37-39 Soledad St., 921 E. Market St., and 115-151 Division St properties and up to an additional \$80,000 of SB2 PLHA funds as additional required Salinas LHTF assets and operating revenue; and

WHEREAS, the City intends to submit its LHTF Program Application to HCD no later than May 17, 2023.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council authorizes the establishment of a Salinas Local Housing Trust Fund; and

BE IT FURTHER RESOLVED that the Salinas City Council authorizes establishment of a Salinas LHTF fund with revenue and expenditure accounts to include the pre-application appropriation from the Housing Production Fund CIP #9021 (\$500,000), General Funds (\$500,000), and SB2 PLHA (\$20,000) as required match and operating revenues; and

BE IT FURTHER RESOLVED that the Salinas City Council authorizes the commitment of nine (9) City-owned properties at 921 E. Market St., an easement and 115, 123, 137, 145, 151 Division St., and 37-39 and 34-38 Soledad St. as Salinas LHTF match assets; and

BE IT FURTHER RESOLVED that the Salinas City Council authorizes submittal of a Local Housing Trust Fund Application to the California Department of Housing and Community Development, and

BE IT FURTHER RESOLVED that the Salinas City Council authorizes the City Manager, or designee, to execute all applicable forms, agreements, grant-related documents, and subsequent amendments as needed.

PASSED AND APPROVED this 2nd day of May 2023, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	APPROVED:
	Kimbley Craig, Mayor
ATTEST:	
Patricia M. Barajas, City Clerk	



Resolution Number: _____ City of Salinas AUTHORIZING RESOLUTION

A necessary quorum and majority of the council members of the City of Salinas, a municipality ("Applicant"), hereby consents to, adopts, and ratifies the following resolution:

- A. WHEREAS, the State of California (State) Department of Housing and Community Development ("Department") is authorized to provide up to \$53 million under the Local Housing Trust Fund ("LHTF") Program from the Veterans and Affordable Housing Bond Act of 2018 (Proposition 1) (as described in Health and Safety Code section 50842.2 et seq. (Chapter 365, Statutes of 2017 (SB 3)) ("Program").
- B. WHEREAS, the Department issued a Notice of Funding Availability ("NOFA") dated 3/7/2023 under the LHTF Program;
- C. WHEREAS, the City of Salinas is an eligible Local or Regional Housing Trust Fund applying to the Program to administer one or more eligible activities using Program Funds.
- D. WHEREAS, the Department may approve funding allocations for the LHTF Program, subject to the terms and conditions of H&S Code Section 50842.2, the LHTF Program Guidelines, NOFA, Program requirements, the Standard Agreement and other related contracts between the Department and LHTF award recipients.

NOW THEREFORE BE IT RESOLVED THAT:

- 1. If the City of Salinas (City) receives an award of LHTF funds from the Department pursuant to the above referenced LHTF NOFA, it represents and certifies that it will use all such funds on Eligible Projects in a manner consistent and in compliance with all applicable state and federal statutes, rules, regulations, and laws, including, without limitation, all rules and laws regarding the LHTF Program, as well as any and all contracts Applicant may have with the Department ("Eligible Project").
- 2. The Salinas Local Housing Trust Fund is hereby authorized to act as the manager in connection with the Department's funds to Eligible Projects pursuant to the above described Notice of Funding Availability in an amount not to exceed the sum of \$1,000,000 plus an amount equal to the appraised value of nine parcels (the "LHTF Award"). NOTE: Dollar amount must include amount used for administrative costs, pursuant to Section 105(b) of the Guidelines.
- 3. The City hereby agrees to match on a dollar-for-dollar basis the LHTF Award pursuant to Guidelines Section 104. The City hereby agrees to utilize matching finds on a dollar-for-dollar basis for the same Eligible Project for which Program Funds are used, as required by HSC Section 50843.5(c).
- 4. Pursuant to Attachment 1 and the Applicant's certification in this resolution, the LHTF funds will be expended only for Eligible Projects and consistent with all program requirements.

- 5. Nonprofit Housing Trust Funds and Native American Tribe Housing Trust Funds agree to use Program Funds only for Eligible Projects located in cities and counties that submitted an adopted Housing Element that was found by the Department to be in compliance and that have submitted their Housing Element Annual Progress Report (APR) for the current year or prior year by the application due date.
- 6. The City shall be subject to the terms and conditions as specified in the Standard Agreement, H&S Section 50842.2 and LHTF Program Guidelines
- 7. The City Manager or designee is authorized to execute the LHTF Program Application, the LHTF Standard Agreement and any subsequent amendments or modifications thereto, as well as any other documents which are related to the Program or the LHTF Award to Applicant, as the Department may deem appropriate.
- 8. The City Clerk shall certify to the adoption of this Resolution, and henceforth and thereafter the same shall be in full force and effect.

PASSED AND 2023, by the fol	<u>e</u>	ting of the City of	Salinas City Council this 2 nd da	ay of May
AYES:	ABSTENTIONS:	NOES:	ABSENT:	
			Officer:	
The undersigne		ricia M. Barajas,	does hereby attest and certify a resolution duly adopted at a r	
the City of Salindocument has r	nas City Council which was du	ly convened and h	eld on the date stated thereon, an ed since its date of adoption and	d that saic
	icia M. Barajas, City Clerk			

Attachment 1

City of Salinas Local Housing Trust Fund Program Expenditure Plan

The City of Salinas Local Housing Trust Fund commits to use Local Housing Trust Fund ("LHTF") Program Funds and Matching Funds from the 2023 Notice of Funding Availability as follows:

- 100% of Program Funds and Matching Funds received will be spent to provide construction/permanent financing loans at simple interest rates of no higher than three percent per annum with deferred payments based on residual receipts, for payment of predevelopment costs, acquisition, or construction of multifamily rental housing serving Lower-Income (80% of Area Median Income ("AMI")), Very Low-Income (50% of AMI), and Extremely Low-Income Households (30% of AMI).
- At least 30% of Program Funds and Matching Funds received will be spent on assistance to Extremely Low-Income Households.
- 100% of Program Funds and Matching Funds received will be spent on loans for the new construction of multifamily rental housing developments with average household income restrictions of no more than 60% of AMI.
- No more than 5% of Program Funds and Matching Funds received will be spent on administrative expenses.

Unless expressly permitted otherwise by the State Department of Housing and Community Development ("HCD"), all activities and projects funded by the LHTF Program Funds and Matching Funds will be located within the City of Salinas.

The source of Matching Funds will be an allocation of Housing Production Fund CIP #9021 (\$500,000), General Funds (\$500,000), and nine (9) City-owned properties.

SALINAS LOCAL HOUSING TRUST FUND PROGRAM GUIDELINES AND STANDARDS

Background

The City of Salinas ("City") is forming a housing trust for the purposes of funding and financing the planning and construction of affordable housing serving extremely-low, very-low, low-, and moderate-income (collectively, "Low- and Moderate-Income") households and homeless housing (e.g., emergency shelters, permanent supportive housing, transitional housing) in the City. These "Guidelines" provide parameters for the creation and operation of the housing trust.

The Salinas Local Housing Trust (SLHT) will be governed by a Board of Directors consisting of the members of the Salinas City Council. The Board of Directors is responsible for overseeing the activities of the SLHT and administration of the SLHT Fund (SLHTF). The SLHTF provides an ongoing funding source for affordable housing and homeless housing projects located in the City of Salinas.

Applicability

The Guidelines apply to funds that are allocated to the SLHTF – Fund or Account No. _____ and may be amended from time to time. Additional restrictions may apply to certain sources of funds.

Funding Sources & Availability

The City will provide funding available through various funding sources listed below. The SLHT will continuously seek additional capital from public and private sources. Awards will be sized based on number of eligible projects and available funds.

- City of Salinas Housing Production Fund
- City of Salinas Measure E funds
- Permanent Local Housing Allocation funds
- Inclusionary Housing In-Lieu Fees
- Land owned by the City of Salinas
- Other sources (to be determined)

The City shall provide funding and support for the operations of the SLHT for a minimum of five years after the date of its first award of funds from the California Local Housing Trust Fund grant program.

Eligible Projects

Projects must be consistent with the SLHT's purpose of supporting affordable housing. Eligible projects and activities include, but are not limited to, the following:

- Development of new affordable ownership and rental housing
- Housing acquisition and/or rehabilitation that creates new or extends existing affordability covenants

Page 1 of 6 Original: 05/02/2023

- First-time homebuyer assistance
- Property acquisition for the purpose of housing development
- Development of accessory dwelling units with affordability covenants
- Housing rights education
- Tenant assistance for temporary housing

Projects must be located in the City of Salinas and must be supported by the Board of Directors in order to be eligible for funding.

Types of Assistance

The SLHT will provide financing for the planning and construction of Low- and Moderate-Income housing developments (including multifamily rental, ownership, and predevelopment) in the form of low-interest, deferred loans. The SLHT will provide financing for homeless housing projects, education, and tenant assistance in the form of grants. Assistance for other Eligible Projects (including first-time homebuyer assistance) may be provided as loans or grants. The SLHT may also provide assistance directly to homeowners or tenants.

Eligible Applicants

Eligible applicants include non-profit and for-profit organizations, joint ventures, or partnerships that serve the loan purpose. Applicants for new development, acquisition, or rehabilitation projects must demonstrate sufficient prior experience and current capacity in housing development and management to successfully secure financing and entitlements, construct, complete, and operate the proposed project. Applicants for homebuyer assistance programs, education, tenant assistance, or similar activities must demonstrate sufficient prior experience with and current capacity for the Eligible Project(s) for which they are applying.

Eligible Costs

Eligible Costs for development, predevelopment, acquisition, and rehabilitation include all reasonable and necessary costs associated with:

- Property acquisition (applicants are required to submit a recent appraisal of the project site and any existing improvements as part of the application)
- Demolition
- On-site improvements
- Off-site utility connections
- Construction and rehabilitation
- Developing common areas and supportive service spaces serving the residents
- Soft costs associated with the development and financing of the project (including environmental review costs)
- Reasonable developer fees
- Operating reserve
- Capitalized replacement reserve

• Relocation costs (Borrowers must provide a relocation plan acceptable to the City demonstrating relocation compliance prior to construction start)

Applicants/borrowers must provide project budgets with sufficient itemized detail to evaluate whether the projected costs are sufficient and reasonable, and provide related documentation as needed. Prior to loan closing, the City will request and review documentation such as appraisals, cost estimates, contracts for professional services, and agreements covering reserves with regard to cost reasonableness. Proposed development costs must be sufficient to complete the project proposed and meet property standards, as applicable.

Eligible Costs for other types of Eligible Projects shall allocate no more than 10% of costs for program administration, outreach, and promotion. Applicants for homebuyer assistance programs, education, tenant assistance, or similar activities must demonstrate that at least 90% of program costs provide direct benefits to Low- and Moderate-Income households.

Minimum Affordability

The following minimum affordability requirements apply. The City may refuse to consider applications that cannot meet the following requirements:

- 1. 100% of SLHT assistance shall support households whose income does not exceed 150% of Area Median Income (AMI) or the creation or preservation of housing affordable to such households.
- 2. Due to the City's location in a "high-cost area," as defined by the Federal Housing Finance Agency and/or the Federal Department of Housing and Urban Development, these Guidelines define "moderate income" with a maximum of 150% of AMI.
- 3. SLHT may apply further restrictions based on the requirements of funding sources or programmatic considerations. Borrowers may provide units restricted at deeper levels of affordability than required by the SLHT.
- 4. Restricted rents will be set based on the rent limit for the applicable income level and unit size published by the California Tax Credit Allocation Committee (TCAC), regardless of whether the project includes tax credit financing.
- 5. Income and rent restrictions will apply for the full length of the loan term and regulatory agreement, surviving loan repayment.

Equal Housing Opportunity

All developments receiving SLHT funding from governmental revenue sources must comply with applicable Equal Housing Opportunity laws.

The remaining portion of the Guidelines applies to the SLHT's assistance for Projects involving predevelopment, development, and acquisition/rehabilitation of affordable housing. All

requirements apply to multifamily housing Projects. Some may not apply to ownership housing Projects.

Occupancy Requirements

The City's regulatory agreement or another document will establish occupancy requirements that restrict occupancy of subsidized units to households that meet income and other eligibility criteria.

Annual Recertification of Tenant Income and City Monitoring

For multifamily rental housing, borrowers are required to re-examine tenant incomes annually to ensure that tenants continue to meet the income requirements of this and other applicable funding programs. Rent schedules and utility allowances, including any increases, are subject to restrictions in the loan documents. Borrowers will be required to report on compliance with income and rent restrictions on an annual basis, and to make records available for on-site monitoring.

The loan documents will address how over-income tenants will be handled, consistent with the project's funding sources. An annual compliance monitoring fee will be negotiated during underwriting.

City Loan Terms and Affordability Period

When the SLHT provides assistance in the form of a loan, the loan will be typically structured as a residual receipts loan, except as otherwise approved by the SLHT.

The SLHT can fund three types of loans: predevelopment (short term), acquisition / construction (long term with short term requirements), and development loans (long term). Any requests for forgiveness of these loans will be reviewed and decided by the SLHT Board of Directors upon a recommendation from the staff.

Development loans will be for a term of fifty-five (55) years from the date of Certificate of Occupancy, except as approved by the SLHT. At the time a development proposal is submitted, the applicant must demonstrate that it has, and will maintain until the land is acquired, site control of the property for which funding is being requested. Examples of site control include fee ownership, an option to purchase or enter into a long-term lease dependent only on factors within the applicant's control, and a long-term lease.

Affordability requirements will be recorded with a Regulatory Agreement executed at closing. Except as approved by the SLHT Board of Directors, all projects shall be required to maintain the project's affordability for the term of the restrictive covenant, regardless of whether the loan is fully repaid.

Interest Rate

3% simple interest unless otherwise determined during underwriting.

Origination Fee

An origination fee of 1% may be assessed.

Debt Coverage Ratio

Generally, between 1.10:1 and 1.20:1 for the first year of stabilized operations, unless a senior lender has a higher requirement.

Cash Flow

Borrowers will submit a proforma with their applications showing at least 35 years of cash flow and positive cash flow for at least a 15-year period.

Operating Expenses

Total Operating Expenses shall not be less than those specifically listed in California Code of Regulations, Title 4, Section 10327 as minimum Operating Expenses. An operating reserve shall be funded in an amount equal to three months of estimated operating expenses and debt service under stabilized occupancy. Projects utilizing tax credits must satisfy the operating cost minimums published by CTCAC for the Central Coast Region and the applicable project type and year. In the event that the equity investor and the permanent lender are in place and provide evidence that they have agreed to lesser operating expenses, the SLHT Board of Directors may agree to such lesser operating expenses.

HCD Funded Projects

If HCD funding is utilized in combination with SLHT funding, such as with Local Housing Trust Fund (LHTF) program, the SLHT and Borrower will comply with all HCD regulations and requirements.

Repayment and Monitoring

The loan will be typically structured as a residual receipts loan except as otherwise approved by the SLHT. The loan for the project will be repaid from the Net Operating Income (NOI), if any. Borrowers will be required to submit rent rolls and operating expenses within one hundred and twenty (120) days after the close of each calendar year.

Due Diligence

Borrowers will be asked to provide due diligence with their applications which may include but is not limited to the following:

- Preliminary Title Report
- Appraisal
- Phase I Environmental Report
- Preliminary development estimate and narrative
- Proposed sources and uses

Disbursement of Funds

Loan funds will be made available at the closing of the predevelopment, the construction, and/or the permanent loans.

Program Documents

Loans will be provided in the form of a Promissory Note, secured by a deed of trust. Regulatory Agreements will be recorded to secure affordability covenants. Borrower and SLHT will enter into a development agreement for construction loans.

Subordination

The City will not subordinate its affordability covenants (typically the regulatory agreement) to the deeds of trust securing other lenders' financing, with the exception of State, Federal, and County funding sources (subject to City approval and to the ratio of debt to total development cost). The City Manager may review exceptions. The affordability covenants control, among other things, the maximum income of tenants of project units, and the maximum rents allowed for project units. The City deed of trust may be subordinated to other financing on a case-by-case basis.

Exceptions to Underwriting Guidelines

The SLHT may, at its sole discretion, approve a loan that does not conform with the above underwriting guidelines if approving the loan will provide significant benefits to the local community or SLHT. Each loan request is evaluated on its own merits. The SLHT has the authority to approve a loan with one or more waivers and/or exceptions to these guidelines. For development underwriting considerations not covered by these Guidelines (including, but not limited to, replacement reserves, capitalized operating reserves, projected vacancy rates, construction contingency, other lender requirements, and leasehold security requirements), the SLHT will follow the California Uniform Multifamily Regulations.

for additional information, please contact the Housing T	rust Fund at:
(Name),	_ (Title)
City of Salinas Local Housing Trust	
(email address)	

2023 CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT LOCAL HOUSING TRUST FUND APPLICATION



Megan Hunter, Community Development Director Community Development Department May 2, 2023

Background HCD 2023 LHTF NOFA

- \$53 million statewide
- Amounts of \$500,00 \$5,000,000
- New and existing LHTFs
- Local and Regional LHTFs
- Requires dollar-for-dollar match
 - Non-HCD funds and property assets
- Requires 5 years of 'ongoing operating revenue'

2023 Local Housing Trust Fund Program

Notice of Funding Availability



Gavin Newsom, Governor State of California

Lourdes M. Castro Ramírez, Secretary Business, Consumer Services and Housing Agency

Gustavo Velasquez, Director California Department of Housing and Community Development

2020 West El Camino Avenue, Suite 500, Sacramento, CA 95833 Telephone: (916) 263-2771

> Website: http://www.hcd.ca.gov LHTF email: LHTF@hcd.ca.gov

> > March 7, 2023

LHTF Program Background

Eligible Projects and Activities

- New affordable ownership and rental housing
- Housing acquisition and/or rehabilitation
- o First-time homebuyer assistance
- Property acquisition for housing development
- ADUs with affordability covenants
- o Housing rights education
- Tenant assistance for temporary housing



Discussion

- Salinas Local Housing Trust Fund (SLHTF)
 - Fund and finance the planning and construction of affordable housing
 - o City-wide
 - Focus on included match properties
- Board of Directors = City Council
 - Responsible for general oversight and consideration of emerging projects and developments
- SLHTF Guidelines & Standards
 - Required application threshold



Discussion

Proposed Activities

- Affordable Multifamily Rental Housing
 - o Predevelopment
 - o Development
 - o Acquisition
 - o Rehabilitation
 - o Preservation

Resident Income Thresholds

- Extremely-low
- Very-low
- Low
- Moderate



Proposed Local Housing Trust Fund Match Assets						
Funds:	Allocation Amount					
General Funds - Housing Production Fund (CIP 9021)	\$ 500,000					
General Funds	\$ 500,000					
Owned Property Assets:						
921 E. Market Street	TBD					
115 Division Street	appraisals in-progress, estimated to					
123 Division Street	be +/- \$550,000 - \$650,000					
137 Division Street						
145 Division Street						
Easement on Division Street						
151 Division Street						
37-39 Soledad Street	\$140,000					
34-38 Soledad Street	\$300,000					
Operating Revenue (5 years of incremental funding)						
Permanent Local Housing Allocation (SB2 PLHA)	\$100,000					
Total Local Matching Funds & Assets	TBD +/- \$2,100,000					

SLHTF Program Application Timeline



CEQA Consideration

The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378)

Strategic Plan Goals & Strategies

- Housing/Affordable Housing
- Effective and Culturally Responsive Government

Fiscal Impact

- Dollar-for-dollar match funds and/or assets
 - \$500,000 of General Funds
- \$500,000 of Housing Production Fund (CIP #9021)
 - 9 City-owned Parcels
 - Potential HCD LHTF award of \$2,000,000

Recommended Motion

A motion to approve a Resolution authorizing:

- 1. establishment of a Salinas Local Housing Trust Fund; and
- 2. establishment of a Salinas LHTF account fund with revenue and expenditure accounts to include the pre-application allocation of Housing Production Fund CIP #9021 (\$500,000) and General Funds (\$500,000) as required local match and SB2 PLHA (\$100,000) as required, incremental operating revenue; and
- 3. commitment of nine (9) City-owned properties at 921 E. Market St., an easement and 115, 123, 137, 145, 151 Division St. and 37-39 and 34-38 Soledad St. as Salinas LHTF match assets; and
- 4. submittal of a Local Housing Trust Fund Program Application to HCD; and
- 5. the City Manager, or designee, to execute all applicable forms, grant-related documents, and subsequent amendments as needed.

Questions & Comments



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-256, Version: 1

Adoption of the Salinas Sanitary Sewer Master Plan Update

Approve a Resolution adopting the Salinas Sanitary Sewer Master Plan Update and related Appendices.



DATE: May 2, 2023

DEPARTMENT: PUBLIC WORKS

FROM: DAVID JACOBS, PE, PLS, DIRECTOR

BY: BRIAN FRUS, PE, SENIOR ENGINEER

TITLE: ADOPTION OF THE SALINAS SANITARY SEWER MASTER

PLAN UPDATE

RECOMMENDED MOTION:

A motion to approve a resolution adopting the Salinas Sanitary Sewer Master Plan Update and related Appendices.

EXECUTIVE SUMMARY:

The Draft Salinas Sanitary Sewer Master Plan Update presents the findings from the development of a calibrated sewer model to create a Sanitary Sewer Capital Improvement Program. This Program will assist the City in prioritizing both existing and future sewer collection system needs through repair, rehabilitation, replacement, or new sanitary sewer facilities.

BACKGROUND:

The City of Salinas owns and operates a municipal sanitary sewer collection system for the residents and businesses within its service area. The City periodically conducts studies to plan for current and future sanitary sewage collection needs. In February 2021, the City authorized an agreement with Wallace Group to perform the Salinas Sanitary Sewer Master Plan (SSMP) Update (Resolution No. 22051). This report presents an overview of the findings from the Draft SSMP which is a comprehensive update to the City's 2011 Sewer Master Plan.

The City's current wastewater service area incorporates approximately 12,430 acres, with over 280 miles of gravity sewer mains and 11 lift stations that convey sewer flow to the wastewater treatment plant, operated by Monterey One Water. The preparation of the Draft Sanitary Sewer Master Plan Update included document review and data collection, field survey of 689 sewer manholes, comprehensive lift station assessment, in-line sewer flow monitoring, wastewater flow projections, development and calibration of a hydraulic sewer model to identify collection system deficiencies for existing and future build-out conditions, and development of a Sanitary Sewer Capital Improvement Program.

Sanitary Sewer Capital Improvement Program

The Sanitary Sewer Capital Improvement Program is separated into existing and future projects. The existing projects are based on system hydraulic deficiencies, operation and maintenance repairs identified by City staff, and lift station upgrades. These projects range from \$98-\$129 million and include six (6) projects identified as hydraulic deficiencies, twenty-one (21) operation and maintenance repair projects, an ongoing CCTV program, inflow and infiltration evaluation, brick manhole coating/replacement and flushing inlet inspection/replacement. Projects are ranked based on overflow to a water body, hydraulic capacity, maintenance hot spot, and community impact. The estimated cost also includes over \$38 million in lift station upgrades that were identified through assessments of each individual location.

Future sewer projects were identified based on impact of future developments per the City's General Plan. Nine (9) projects were identified as hydraulic deficiencies, with project costs totaling \$48.5 million. The timing of these future projects is dependent on when future developments connect to the City's sewer collection system. These improvements are recommended to be completed prior to or as a part of a development project comes online.

Next Steps

The next step for this Sanitary Sewer Master Plan Update is to develop an Impact Fee Nexus Study and Sanitary Sewer Rate Study based on the findings from the Draft Sanitary Sewer Master Plan Update. These reports will be prepared under separate cover.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The proposed project and agreement meet the City Council's Strategic Plan Goals of Infrastructure and Environmental Sustainability and Economic Development.

DEPARTMENTAL COORDINATION:

Preparation of the SSMP has relied on coordination between the Wastewater, GIS, and Water, Waste and Energy (WWE) divisions in Public Works and the Community Development Department. WWE has coordinated the overall execution of the SSMP, with GIS supporting database update and the Wastewater Division providing valuable input to the SSMP from an operations perspective. Update of the General Plan has fed the development of the SSMP sewer model. The model may be adjusted as needed following completion of the General Plan Update.

FISCAL AND SUSTAINABILITY IMPACT:

Funds for the preparation of the SSMP have already been appropriated. Thus, there are no direct fiscal impacts from the adoption of this report.

Implementation of the recommended capital improvement projects listed in the SSMP which address existing projects, lift station upgrades and improvements needed for future development total some \$147 million to \$178 million. The current revenue and capital reserves available in the Sanitary Sewer Enterprise Fund are insufficient to cover expenses of this magnitude. The City's sewer rates were last increased in 2016 and have remained relatively low. The proposed Sanitary Sewer Rate Study will examine capital funding needs identified in the SSMP while minimizing the annual impact on ratepayers. City staff will work closely with the chosen consultant to evaluate financial and rate alternatives, gain input from rate payers, and build consensus for any recommended rate adjustments.

ATTACHMENTS:

Resolution

Final Draft - Salinas Sanitary Sewer Master Plan Update

Appendices - Salinas Sanitary Sewer Master Plan Update

RESOLUTION NO. ____(N.C.S.)

A RESOLUTION AUTHORIZING THE CITY COUNCIL'S ADOPTION OF THE SALINAS SANITARY SEWER MASTER PLAN UPDATE

WHEREAS, the City of Salinas owns and operates a municipal sanitary sewer collection system for the residents and businesses within its service area and periodically conducts studies to plan for current and future sanitary sewage collection needs; and

WHEREAS, on February 16, 2021, the City authorized an agreement with Wallace Group to perform he Sanitary Sewer Master Plan (SSMP) Update (Resolution No. 22051); and

WHEREAS, the SSMP Update will serve to assist the City in prioritizing both existing and future sewer collection system needs through repair, rehabilitation, replacement, or implementation of new facilities; and

WHEREAS, the information and findings from the SSMP Update will assist in the development of an Impact Fee Nexus Study and a Sanitary Sewer Rate Study based on Draft Sanitary Sewer Master Plan Update; and

WHEREAS, the City of Salinas has determined the SSMP Update is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SALINAS, that the Salinas Sanitary Sewer Master Plan Update and related appendices attached hereto as Attachment A are hereby adopted.

PASSED AND ADOPTED this 2nd day of May 2023, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	APPROVED:
	ATTROVED.
	Vimbles Casia Massa
ATTEST:	Kimbley Craig, Mayor
Patricia M. Barajas, City Clerk	







Submitted by:





201 John Street. STE H Salinas, CALIFORNIA 93901 T 831 772-5260

www.wallacegroup.us

City of Salinas Final Draft Sanitary Sewer Master Plan Update April 2023

CERTIFICATION

In accordance with the provisions of Section 6735 of the Business and Professions Code of the State of California, this report was prepared by or under the direction of the following Civil Engineer, licensed in the State of California:

ENGINEER IN RESPONSIBLE CHARGE:

DRAFT FOR REVIEW

Kari Wagner, PE C66026 Expiration: 6/30/2024 Date



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1-1
CHAPTER 1 INTRODUCTION	1-1
ENVIRONMENTAL REVIEW	1-1
AUTHORIZATION AND SCOPE OF WORK	1-1
Task 1. Document Review and Data Collection	1-1
Task 2. Field Effort & GIS Update	
Task 3. Wastewater Flow Characteristics and Projections	
Task 4. Develop and Calibrate Sewer Model	1-2
Task 5. Develop Capital Improvement Program	1-3
Task 6. Develop Capital Improvement Program	
Task 7. Draft and Final Sanitary Sewer Master Plan Update	1-3
CHAPTER 2 LAND USE AND POPULATION	2-1
INTRODUCTION	2-1
Existing Wastewater Service Area	2-1
Study Area	2-1
LAND USE	2-2
Land Use: Existing Wastewater Service Area	2-2
Study Area: Future Land Use	2-3
POPULATION	2-7
Existing Population	
Population Densities	2-7
Future Population	
CHAPTER 3 COLLECTION SYSTEM OVERVIEW	3-1
COLLECTION SYSTEM OVERVIEW	3-1
Gravity Sewer Mains	
Manholes	
Lift Stations	3-3
Salinas Area Pump Station (SAPS)	3-4
Inverted Siphons	3-4
Industrial Wastewater Diversion	3-4
Reclamation Ditch Diversion	3-4
HIGH PRIORITY AREAS	3-5
City Manhole Monitors	3-5
2017 Mark Thomas CCTV Evaluation	
O&M Repairs	3-7
CHAPTER 4 WASTEWATER FLOWS	4-1
INTRODUCTION	4-1
WASTEWATER FLOW MONITORING	4-1
Flow Meters	4-1
Flow Monitoring Summary	4-2
SALINAS AREA PUMP STATION AVERAGE DAILY FLOWS	4-5
WATER USE DATA	4-6
EXISTING WASTEWATER FLOWS	4-6
PEAKING FACTOR ANALYSIS	4-9
Average Daily Flow (ADF)	4-9



Maximum Day Dry Weather Flow (MDDWF)	
Peak Hour Dry Weather Flow (PHDWF)	4-9
Peak Hour Wet Weather Flow (PHWWF)	4-9
INFILTRATION AND INFLOW	
Historical Rainfall Dependent Infiltration and Inflow	4-10
2011 Sanitary Sewer Master Plan RDII Peak Unit Flow Rates	
FUTURE WASTEWATER FLOWS	4-13
CHAPTER 5 LIFT STATION EVALUATION	5-1
LIFT STATION BACKGROUND	5-1
PHYSICAL DESCRIPTION	5-3
Airport (Moffett) Lift Station	5-3
Carpenter Hall Lift Station	
De La Torre Lift Station	5-4
Harkins Road Lift Station	5-5
Lake Street Lift Station	5-5
Las Casitas Lift Station	5-6
Mill Lake Lift Station	5-6
Santa Rita Lift Station	5-7
Spicer Lift Station	5-7
TP2 Lift Station	5-8
Vista Nueva Lift Station	5-8
Harris Road Lift Station	
HYDRAULIC PERFORMANCE EVALUATION – EXISTING CONDITIONS	5-10
Force Main Hydraulic Evaluation	5-10
Existing Lift Station Inflow	5-13
Pumping Capacity Evaluation	5-13
Wet Well Capacity Evaluation	5-16
Emergency Response Time Evaluation	
HYDRAULIC PERFORMANCE EVALUATION - FUTURE CONDITIONS	5-26
Future Wastewater Flows and Recommendations	5-26
Airport (Moffett) Lift Station	5-26
Carpenter Hall Lift Station	5-26
De La Torre Lift Station	5-26
Harkins Road Lift Station	5-27
Lake Street Lift Station	5-27
Las Casitas Lift Station	5-27
Mill Lake Lift Station	5-27
Santa Rita Lift Station	5-27
Spicer Lift Station	5-28
TP2 Lift Station	5-29
Vista Nueva Lift Station	5-29
SITE INVESTIGATION SUMMARY & OVERALL RECOMMENDATIONS	5-31
Airport (Moffett)	5-32
Carpenter Hall	5-33
De La Torre	5-34
Harkins Road	5-35
Lake Street	5-36
Las Casitas	5-37
Mill Lake	5-38
Santa Rita	5-39
Spicer	5-40
TP2	5-41



Vista Nueva	5-42
CHAPTER 6 COLLECTION SYSTEM ANALYSIS	6-1
INTRODUCTION	6-1
COLLECTION SYSTEM ANALYSIS CRITERIA	
COLLECTION SYSTEM MODEL DEVELOPMENT	6-2
Flow Allocation	
Model Calibration	6-3
System Conditions Analyzed	6-3
COLLECTION SYSTEM MODEL RESULTS – EXISTING FLOW CONDITIONS	6-4
Deficient System Capacity	6-4
Low Pipe Velocity	6-7
COLLECTION SYSTEM MODEL RESULTS – FUTURE FLOW CONDITIONS	
Deficient System Capacity	6-7
CHAPTER 7 CAPITAL IMPROVEMENT PROGRAM	
BASIS OF CAPITAL IMPROVEMENT PROGRAM COSTS	7-1
Sewer Main Upgrade Unit Costs	7-1
CIP RANKING	
Lift Station CIPs	7-3
TIMING OF RECOMMENDED IMPROVEMENTS	

APPENDICES

APPENDIX A: ECONOMIC DEVELOPMENT ELEMENT TABLES

APPENDIX B: 2017 MARK THOMAS CCTV SANITARY SEWER ANALYSIS

APPENDIX C: CITY SEWER REPAIR ATLAS MAP APPENDIX D: LIFT STATION PUMP CURVES

APPENDIX E: FRM LIFT STATION CONDITION ASSESSMENT APPENDIX F: EXHIBIT 1 EXISTING AND FUTURE CIPS

APPENDIX G: SEWER MODEL RESULTS



LIST OF TABLES

TABLE 2-1 CITY EXISTING LAND USE	2-2
TABLE 2-2. COUNTY BORONDA AREA EXISTING LAND USE	2-3
TABLE 2-3 SPECIFIC PLAN DEVELOPMENT CAPACITY	2-5
TABLE 2-4 FUTURE DEVELOPMENT CAPACITY	2-6
Table 2-5. RESIDENTIAL DENSITIES	2-7
TABLE 3-1. GRAVITY SEWER INVENTORY BY DIAMETER	3-2
TABLE 3-2. MANHOLE MONITORING LOCATIONS	3-6
TABLE 3-3. PACP AND MACP GRADING TABLE	3-7
TABLE 3-4. O&M REPAIRS	3-8
TABLE 3-5. CCTV COSTS	3-10
TABLE 3-6. ANNUAL CCTV PROGRAM	3-10
TABLE 4-1. FLOW MONITORING SUMMARY	
TABLE 4-2. SAPS DOMESTIC WASTEWATER FLOWS	4-5
TABLE 4-3. WATER USE	
TABLE 4-4. EXISTING FLOW FACTORS	4-6
TABLE 4-5. EXISTING AVERAGE DAILY FLOWS BY SEWERSHED	4-7
TABLE 4-6. EXISTING FLOW FACTORS	
TABLE 4-7. PEAK WET WEATHER FLOW FOR 10-YEAR, 6-HOUR STORM	4-12
TABLE 4-8. ADDITIONAL FUTURE AVERAGE DAILY FLOWS BY GROWTH AREA	4-13
TABLE 4-9. EXISTING AND FUTURE FLOW SUMMARY	4-13
Table 5-1. LIFT STATION SUMMARY	5-2
TABLE 5-2. FORCE MAIN EVALUATION SUMMARY	5-12
TABLE 5-3. EXISTING LIFT STATION INFLOW BY LAND USE	5-14
TABLE 5-4. LIFT STATION FLOW COMPARISON SUMMARY	
TABLE 5-5. WET WELL CYCLE TIMES	
TABLE 5-6. LIFT STATION EMERGENCY RESPONSE TIMES	5-25
TABLE 5-7. LIFT STATION FUTURE FLOW SUMMARY	5-30
TABLE 5-8. SUMMARY OF LIFT STATION UPGRADES BASED UPON VISUAL INSPECTION	5-31
TABLE 6-1. HYDRAULIC CRITERIA FOR EXISTING SYSTEMS	6-2
TABLE 7-1. SEWER MAIN CONSTRUCTION UPGRADE UNIT COSTS	
TABLE 7-2. EXISTING HYDRAULIC AND MAINTENANCE REPAIR CIP RANKING MATRIX	7-5
TABLE 7-3. EXISTING LIFT STATION CIP RANKING MATRIX	7-7
TABLE 7-4. CITY OF SALINAS EXISTING CAPITAL IMPROVEMENT PROGRAM (CIP)	7-8
TABLE 7-5. CITY OF SALINAS EXISTING LIFT STATIONS CAPITAL IMPROVEMENT PROGRAM (CIP)	7-12
TABLE 7-6. CITY OF SALINAS FUTURE CAPITAL IMPROVEMENT PROGRAM (CIP)	7-13



LIST OF FIGURES

FIGURE 2-1: EXISTING SEWER SERVICE AREA	
FIGURE 2-2: EXISTING LAND USE	2-10
FIGURE 2-3: CITY GROWTH AREAS	2-11
FIGURE 2-4: FOCUSED GROWTH AREAS LAND USE	2-12
FIGURE 2-5: FUTURE GROWTH AREAS LAND USE	2-13
FIGURE 2-6: NORTH BORONDA FGA SPECIFIC PLANS	2-14
FIGURE 3-1: EXISTING PIPE DIAMETER FIGURE 3-2: BRICK MANHOLES & FLUSHING INLETS	3-11
FIGURE 3-3: LIFT STATIONS AND SIPHONS	3-13
FIGURE 3-4: CITY MANHOLE MONITORING LOCATIONS	3-14
FIGURE 3-5: CCTV ANALYSIS FINDINGS	3-15
FIGURE 4-1: FLOW MONITORING LOCATIONS & SEWERSHEDS	4-15
FIGURE 4-2: POPULATION DENSITY HEATMAP	
FIGURE 4-3: DIURNAL CURVES	4-17
FIGURE 4-4: SEWERSHED 1 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-5: SEWERSHED 2 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-6: SEWERSHED 3 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-7: SEWERSHED 4 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-8: SEWERSHED 5 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-9: SEWERSHED 6 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-10: SEWERSHED 7 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-11: SEWERSHED 8 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-12: SEWERSHED 9 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-13: SEWERSHED 10 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-14: SEWERSHED 11 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-15: SEWERSHED 12 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-16: SEWERSHED 13 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-17: SEWERSHED 14 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-17: SEWERSHED 14 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-19: SEWERSHED 16 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-19: SEWERSHED 17 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-20: SEWERSHED 18 AVERAGE DAILY MONITORED FLOW	
FIGURE 4-22: FEBRUARY 2017 DRY WEATHER VS WET WEATHER FLOW	
FIGURE 5-1: EXISTING LIFT STATION TRIBUTARY AREA MAP	
FIGURE 5-2: FUTURE LIFT STATION TRIBUTARY AREA MAP	
FIGURE 6-1: WASTEWATER MODEL OVERVIEW MAP	
FIGURE 6-2: FUTURE FLOW ALLOCATIONS	
FIGURE 6-3: EXISTING CAPACITY DURING PEAK CONDITIONS	
FIGURE 6-4: EXISTING SEWER UPGRADES	
FIGURE 6-5: LOW PIPE VELOCITIES DURING ADF	
FIGURE 6-6: FUTURE CAPACITY DURING PEAK CONDITIONS	
FIGURE 6-7: FUTURE PIPE UPGRADES	
FIGURE 7-1 EXISTING CIP: CESAR CHAVEZ PARK	
FIGURE 7-2 EXISTING CIP: UPSTREAM TP2 DIVERSION	
FIGURE 7-3 EXISTING CIP: NORTHRIDGE MALL	
FIGURE 7-4 EXISTING CIP: CHEROKEE DRIVE	_
FIGURE 7-5 EXISTING CIP: NOICE DRIVE/TYLER STREET	
FIGURE 7-6 EXISTING CIP: NATIVIDAD ROAD OR ALTERNATIVE NATIVIDAD CONSOLIDATION	
FIGURE 7-7 EXISTING CIP (BY LIFT STATION): LAKE STREET LIFT STATION	
FIGURE 7-8 EXISTING CIP (BY LIFT STATION): SANTA RITA LIFT STATION	
FIGURE 7-9 EXISTING CIP (BY LIFT STATION): SPICER LIFT STATION	7-23



FIGURE 7-10 EXISTING CIP (BY LIFT STATION): MILL LAKE LIFT STATION	7-24
FIGURE 7-11 EXISTING CIP (BY LIFT STATION): CARPENTER HALL LIFT STATION	7-25
FIGURE 7-12 EXISTING CIP (BY LIFT STATION): DE LA TORRE LIFT STATION	7-26
FIGURE 7-13 EXISTING CIP (BY LIFT STATION): VISTA NUEVA LIFT STATION	7-27
FIGURE 7-14 EXISTING CIP (BY LIFT STATION): HARKINS LIFT STATION	7-28
FIGURE 7-15 EXISTING CIP (BY LIFT STATION): LAS CASITAS LIFT STATION	7-29
FIGURE 7-16 EXISTING CIP (BY LIFT STATION): TP2 LIFT STATION	7-30
FIGURE 7-17 EXISTING CIP (BY LIFT STATION): AIRPORT LIFT STATION	
FIGURE 7-18 EXISTING CIP (BY PROJECT): CONTROLLER UPGRADES AND STANDARDIZATION	
FIGURE 7-19 EXISTING CIP (BY PROJECT): INSTALL EMERGENCY BYPASS AND WASHDOWN WATER	
FIGURE 7-20 EXISTING CIP (BY PROJECT): SAFETY/FALLING HAZARD CONCERN	
FIGURE 7-21 EXISTING CIP (BY PROJECT): GENERATOR REPLACEMENT	
FIGURE 7-22 EXISTING CIP (BY PROJECT): ONSITE STANDBY GENERATOR	
FIGURE 7-23 EXISTING CIP (BY PROJECT): POWER RECEPTACLE	
FIGURE 7-24 EXISTING CIP (BY PROJECT): PAINTING/COATING MAINTENANCE	
FIGURE 7-25 FUTURE CIP: SAN JUAN GRADE	
FIGURE 7-26 FUTURE CIP: NORTH DAVIS ROAD	
FIGURE 7-27 FUTURE CIP: WEST LAUREL DRIVE	
FIGURE 7-28 FUTURE CIP: VICTOR STREET	
FIGURE 7-29 FUTURE CIP: FREEDOM PARKWAY	
FIGURE 7-30 FUTURE CIP: NATIVIDAD CREEK PARK	
FIGURE 7-31 FUTURE CIP: EAST ALISAL STREET	
FIGURE 7-32 FUTURE CIP: ABBOTT STREET	7-46
FIGURE 7-33 FUTURE CIP: SOUTH SANBORN ROAD	7-47



LIST OF ACRONYMS

ABS Acrylonitrile Butadiene Styrene

ADF Average Daily Flow

AMBAG Association of Monterey Bay Area Government

CASP Central Area Specific Plan

CEQA California Environmental Quality Act

cfs Cubic feet per second

CIMIS California Irrigation Management Information System

CIP Capital Improvements Project

City City of Salinas

CIWQS California Integrated Water Quality System Project

County Monterey County
d/D Depth over Diameter
DOF Department of Finance
du/ac Dwelling Units per Acreage
EDE Economic Development Element

E.I.T. Engineer in Training

EIR Environmental Impact Reports
ENR Engineering New Record

ESRI Environmental Systems Research Institute

FAR Floor Area Ratio
FGA Future Growth Area
FOG Fats, Oils, and Grease
FPS Feet per Second

FRM Fluid Resource Management

Ft Feet

Ft/Sec Feet per Second

GIS Geographic Information System

GISP Geographic Information System Professional

gpapd Gallons per acre per day

GPD Gallons Per Day
GPM Gallons Per Minute
HDPE High Density Polyethylene
I/I Infiltration and Inflow

IWCCS Industrial Waste Water Collection and Conveyance System
LAFCO Monterey County Local Area Formation Commission

LF Linear Feet

MACP Manhole Assessment and Certification Program

MDDWF Maximum Day Dry Weather Flow

MGD Million Gallons Per Day

min Minute

MRWPCA Monterey Regional Water Pollution Control Agency

M1W Monterey One Water

NA Not Applicable

NAD North American Datum

NASSCO National Association of Sewer Service Companies



NAVD North American Vertical Datum

ND Negative Declarations

O&M Operations and Maintenance

PACP Pipeline Assessment and Certification Program

P.E. Professional Engineer
P.L.S. Professional Land Surveyor

PF Peaking Factor

PHDWF Peak Hour Dry Weather Flow PHWWF Peak Hour Wet Weather Flow

PVC Polyvinyl Chloride

RDII Rainfall-Dependent Infiltration and Inflow

RDWWTP Regional Domestic Wastewater Treatment Plant

SAPS Salinas Area Pump Station

S.F. Square Foot

SCADA Supervisory Control and Data Acquisition
SSMPU Salinas Sanitary Sewer Master Plan Update

SSO Sanitary Sewer Overflow

US³ USCubed

VCP Vitrified Clay Pipe

VFD Variable Frequency Drive WASP West Area Specific Plan

w/ With



CHAPTER 1 INTRODUCTION

This report presents the Sanitary Sewer Master Plan Update (SSMPU) for the City of Salinas (City). Preparation of the SSMPU will assist the City of Salinas in prioritizing both existing and future collection system needs through repair, rehabilitation, replacement, or new facilities.

ENVIRONMENTAL REVIEW

In accordance with Title 14, California Code of Regulations, Chapter 3, Article 18 (Statutory Exemptions), this SSMPU is considered a planning study and therefore adoption of this document is exempt from the requirements to prepare Environmental Impact Reports (EIR) or Negative Declarations (ND). However, on a project-specific basis, the California Environmental Quality Act (CEQA) must be satisfied for any major capital improvement projects described in this report that will be implemented by the City in the future, through the preparation of an appropriate EIR or ND.

AUTHORIZATION AND SCOPE OF WORK

In March 2021, the City authorized Wallace Group to prepare a comprehensive Sanitary Sewer Master Plan Update. The scope of work is as follows:

Task 1. Document Review and Data Collection

We will review the existing 2011 Sanitary Sewer System Master Plan and City documents, including but not limited to the Sanitary Sewer Management Plan (SSMP), the Sewer Rate Study, the Salinas General Plan, and the Economic Development Element. Data collection will include review of the City's sanitary sewer records, future development plans, CCTV inspection videos, and maintenance records.

Task 2. Field Effort & GIS Update

Task 2.1 Survey Sanitary Sewer Manholes

Wallace Group, in conjunction with Fluid Resource Wallace Group will survey the rim elevations of each sewer manhole to be modeled (based on 1,025 manholes) and dip the manhole to obtain the invert elevation (invert in and invert out) of the flow lines. Wallace Group will also take pictures of each of the manholes, which would then be included in the GIS database. Based on photos and visual observation from ground surface, we will ascertain pipe material.

Task 2.2 Lift Station Assessment

Wallace Group, in conjunction with Fluid Resource Management (FRM), will conduct evaluations of the City's eleven lift stations. FRM will provide a Cal-OSHA confined space entry permit, and perform such confined space entry to evaluate the wet well for visible signs of corrosion and "wear and tear", and will make recommendations if a structural investigation of the wet well is warranted based on observation. We will evaluate the condition of piping and internal components, document the size of the wet well/pumping station, approximate depth and size of inverts, perform a pump draw down test and determine approximate flow from each pump, perform full load amperage and Meg-ohm readings on each motor, verify automation of controls, evaluate the electrical system for possible deficiencies/code violations, document the pumps and motors make/model



number, pull and inspect the pumps for signs of wear and tear including inspecting pump seals and fittings, electrical components for code violations, evaluate the pump seals, fittings, and overall condition, and perform a pump test to determine approximate flow, and measure amperage/power draws to check for signs of pump motor concerns. We will evaluate the system's ability to meet existing and future demands based on the pumping capacity and will provide the City with lift station upgrade recommendations.

Task 2.3 In-Line Flow Monitoring

Wallace Group will develop a flow monitoring program (FMP) in support of calibrating the hydraulic model of the sanitary sewer system. The flow data will evaluate average flow rates and representative diurnal flow patterns throughout the City including in/out of all pump stations, and to assist in the review/identification of average flow rates for residential (single and multi-family), commercial, hotel/motel, and apartment land uses. As part of the FMP, we will work with US3 to review site conditions of the potential monitoring sites, assuring they are hydraulically suitable for accurate flow monitoring measurements. The FMP is based on an assumed total number of 16 monitoring stations, with a total duration of 60 calendar days at each location. It is envisioned the winter monitoring will extend 45 calendar days, and the dry weather monitoring will extend 15 calendar days.

Task 2.4 Update GIS Database

Based on data collected, Wallace Group will update the City's GIS database. Wallace Group will also utilize data collected to incorporate any new developments and upgraded sewer mains that are not already included in the GIS database.

Task 3. Wastewater Flow Characteristics and Projections

We will develop unit flow factors in order to better project wastewater flows from future developments and calibrate the sewer model using existing wastewater flows. These unit factors will be developed for development types including residential, multi-family, commercial, industrial, hotels and other factors. We will request from Cal Water, water meter records/bills that will be used to evaluate usage from the various types of developments. Using actual water use data will provide the most accurate projection of wastewater generation unit factors, especially for residential and hotel units. Water demand data will be evaluated for a minimum of 12 months in order to assess indoor water demands (which generate wastewater flows) versus outdoor water demands (which do not generate wastewater flows). We will also use population and density information from the City's General Plan, Specific Plans, and other planning documents provided by the City, to project future build-out (15-year planning horizon) population and wastewater flows. We will compile all the information reviewed and gathered under Tasks 1, 2, and 3 and prepare a Preliminary Findings Memorandum stating our findings.

Task 4. Develop and Calibrate Sewer Model

We will utilize survey data collected in Task 1 and 2, and the updated GIS database for use in the Innovyze sewer modeling program (InfoSWMM). We will model the collection system under dry and wet weather conditions for the existing and future loadings. We typically will only model the trunk sewer mains (typically 10-inch and larger), with some exceptions. Using flow data collected in the Field Investigations, we will model simulations for dry and wet weather flow conditions for existing and future (build-out) development scenarios. We will use the model results to identify locations in the wastewater system that have hydraulic capacity constraints under existing and future flow conditions, peak dry weather and wet weather flow conditions, based on the criteria developed for the 2011 report. Based on the flow monitoring data obtained, we will provide the City with general observations



of tributary areas exhibiting signs of I/I. Based on this observation, we will recommend areas for further I/I investigation.

Task 5. Develop Capital Improvement Program

Using data collected during Field Investigations, and the modeling efforts of Task 4, we will develop a Sanitary Sewer Capital Improvement Program (CIP) recommending short-term (5-year) and long-term (15-year) improvements necessary to maintain a desired level of service for the City's sanitary sewer assets such as mainlines, manholes, and pump stations. We will also provide one additional Program focused on Development induced improvement recommendations. These upgrades are required to be completed when development occurs, which the timing may not be known.

Task 6. Develop Capital Improvement Program

Wallace Group will team with DTA to complete a Sanitary Sewer Development Impact Fee Nexus Study. This Task will not start until after the completion of Task 7. This Study will be completed under separate cover.

Task 7. Draft and Final Sanitary Sewer Master Plan Update

Upon completion of Tasks 1-5, we will submit five (5) printed copies and 1 digital copy in pdf format of a draft Sanitary Sewer Master Plan report to the City for review and comment.

Upon receiving written comments from the City for the draft Sanitary Sewer Master Plan report and discussion at the City Council, Wallace Group will prepare the Final Sanitary Sewer Master Plan Update.



ACKNOWLEDGEMENTS

The City of Salinas Sanitary Sewer Master Plan Update (SSMPU) is prepared by Wallace Group on behalf of the City of Salinas. Wallace Group gratefully acknowledges the City of Salinas, Monterey One Water, Utility System Science & Software (US3), and Fluid Resource Management (FRM) for their efforts, involvement, and assistance in preparing the City of Salinas SSMPU.

City of Salinas

Adriana Robles, P.E., City Engineer Brian Frus, P.E., Senior Civil Engineer Gary Gabriel, Wastewater Manager Ray Lerma, Maintenance Supervisor Doyle McFarland, Pump Mechanic

Monterey One Water

Jennifer Gonzalez, P.E., Engineering Manager Alison Imamura, P.E., Principal Engineer

Utility System Science & Software (US3)

Darlene Szczublewski, P.E., Project Engineer
Cari Campbell, Engineer

Fluid Resource Management (FRM)
Mike Ellison

Jason Molinari

The City of Salinas SSMPU was completed with the efforts of many Wallace Group team members. They include:

Kari Wagner, P.E., Principal/Director of Water Resources Rick Riedl, P.E., Principal Engineer Steve Tanaka, P.E., Principal Engineer Valerie Huff, P.E., Senior Civil Engineer Andrea Kingsbury, P.E., Civil Engineer Alexandra Cass, E.I.T, Associate Engineer



CHAPTER 2 LAND USE AND POPULATION

This Chapter presents the land use and existing and future population forecasts for the City's SSMPU study area. The purpose of establishing the existing population and land use is to better understand the existing wastewater flow characteristics throughout the City's collection system, which provides a framework to forecast the wastewater flows that may be contributed in the future by vacant or under-utilized land. All figures are located at the end of this chapter.

INTRODUCTION

The City of Salinas is the largest city in Monterey County and serves as the County seat. The City has a long heritage as the financial and industrial center of Monterey County. US Route 101 bisects the City, while California State Route 68 heads west to Monterey and California State Route 183 runs northwest to Castroville. The City was incorporated in 1874 and is known as the "Salad Bowl of the World" for its large agricultural industry.

Existing Wastewater Service Area

The City's current wastewater service boundary incorporates approximately 12,455 acres. Sewer facilities within the existing service area are owned and operated by the City. Bolsa Knolls is a rural neighborhood just outside of City limits. There is a small portion of Bolsa Knolls near Rogge Road that is also served by the City through a special assessment district. The remaining area of Bolsa Knolls is planned for future connection to the City's collection system.

Study Area

One major purpose of this SSMPU is to evaluate the impacts that potential developments and future growth areas will have on the sewer collection system. The sphere of influence is defined as the territory outside the city limits which the Monterey County Local Area Formation Commission (LAFCO) recognizes as the appropriate and probable future jurisdictional boundary and service area of the City. Figure 2-1 displays City limits, the existing service area, and the SSMPU Study Area.

The study area for this SSMPU includes this sphere of influence, including the following areas:

- Future Growth Areas (FGA) include the North Boronda FGA, East FGA, Southeast FGA, and West Boronda FGA
- Target Areas, as identified by City's Economic Development Element (EDE)
- County Boronda Area is currently tied to the City's collection system, however, the sewer facilities are owned and operated by Monterey County
- Bolsa Knolls is an area in the County planned for future connection to the City's collection system
- Salinas Ag-Industrial Center



LAND USE

The following sections discuss the existing and future land uses within the study area. The existing land uses are based on the City's GIS database and General Plan Land Use Map.

Land Use: Existing Wastewater Service Area

The City is comprised of 12,455 acres of land, zoned for residential, commercial, industrial, agricultural, and public facilities. Table 2-1 summarizes the different land uses in the City's boundary and includes the special assessment district in Bolsa Knolls since it is part of the City's existing service area. Land use data shown on Figure 2-2 is a combination of GIS data provided by the City and the General Plan Land Use Map.

TABLE 2-1 CITY EXISTING LAND USE

	NUMBER OF PARCELS	% OF SERVICE AREA	
LOW DENSITY RESIDENTIAL	18,253	3,003	24.1%
MEDIUM DENSITY RESIDENTIAL	6,906	929	7.5%
HIGH DENSITY RESIDENTIAL	2,007	635	5.1%
MOBILE HOME	9	116	0.9%
COMMERCIAL	1,397	1,297	10.4%
INDUSTRIAL	306	814	6.5%
HOTEL	34	34	0.3%
SCHOOL	59	752	6.0%
PUBLIC/SEMI-PUBLIC	232	1,294	10.4%
OPEN SPACE	4	31	0.2%
AGRICULTURE	51	3,261	26.2%
VACANT	324	289	2.3%
TOTAL	29,482	12,455	100%



As discussed, the County Boronda Area flows into the City's collection system. Table 2-2 breaks down the land use for the County Boronda Area, also shown on Figure 2-2.

TABLE 2-2. COUNTY BORONDA AREA EXISTING LAND USE

	Number of Parcels	Area (Acres)
COMMERCIAL	35	63
LOW DENSITY RESIDENTIAL	358	111
HOTEL	2	7
OPEN SPACE	1	1
SCHOOL	1	6
PUBLIC/SEMI-PUBLIC	7	4
TOTAL	404	192

Study Area: Future Land Use

One major purpose of the SSMPU is to forecast the wastewater flows that will be contributed by growth areas in the future, both within and outside City limits. Both the City's General Plan and Economic Development Element (EDE) were used as the sources to evaluate future land use and development capacity. The EDE is the most recent document, dated September 2017, and is the eighth element of the 2002 City's General Plan. The EDE provides amendments to the City's General Plan that reflects the goals, policies, and actions outlined in the EDE. Table LU-3 of the Proposed General Plan Amendments (attached in Appendix A) was used to project future dwelling units and non-residential building capacities for the City's focused growth areas and future growth areas. Additional development capacities, known as Target Areas, are identified in Table LU-ED-1 (attached in Appendix A). Although most of these Target Areas fall outside the City boundary, they are included in the SSMPU study area. Focused Growth Areas, Future Growth Areas, and Target Areas are shown on Figure 2-3.

The development capacities found in the General Plan and the EDE provide the most conservative projections for City buildout in the Year 2045. However, it is important to note that these numbers are based on planning projections and preliminary locations around the City. As future developments enter final engineering and design, it is recommended that the City re-evaluate the sewer model based on more accurate flow projections, engineering plans, and sewer main tie-in locations.

Focused Growth Areas

The General Plan identifies (5) Focused Growth Areas to accommodate new developments. The Focused Growth Areas are:

- Laurel Drive at North Main Street
- North Main Street/Soledad Street
- East Alisal Street/East Market Street
- ❖ Abbott Street
- South Main Street



According to the General Plan, these areas of existing developments would "benefit from redevelopment or revitalization, change of land uses, and/or the incorporation of mixed-use residential uses." Wastewater flows for these focused growth areas will be modeled based on the future land use designation; however, the impact to the City's collection system is likely marginal since most focused growth areas already contribute existing wastewater flows. Additional modeling may be necessary in the event more intensification of use, such as a hotel, is incorporated. These Focused Growth Areas and the future land uses per the City's General Plan are shown on Figure 2-4.

Bolsa Knolls Septic Conversion

As discussed, a small portion of the Bolsa Knolls area is currently served by the City through a special assessment district. The remaining Bolsa Knolls area is on septic tanks. As part of the future analysis for this SSMPU, this remaining Bolsa Knolls area is included in the hydraulic model as a future connection to the City's collection system.

Future Growth Areas

Four (4) Future Growth areas (FGA) were identified in the City's General Plans as areas outside the City limits where new growth will occur on land that is currently used for agricultural production. The Future Growth Areas are:

- North Boronda FGA
- East FGA
- Southeast FGA
- West Boronda FGA

The Future Growth Areas and future land uses associated per the City's General Plan are shown on Figure 2-5. In 2008, the North Boronda FGA was annexed into the City. Prior to development, Future Growth Areas are subject to the adoption of Specific Plans by the City Council. The North Boronda FGA was split into three (3) Specific Plans: West Area, Central Area, and East Area, shown on Figure 2-6. In December 2019, the West Area Specific Plan (WASP) was approved by City Council, and in 2020, the Draft Central Area Specific Plan (CASP) was made public for review. Table 2-3 summarizes the development capacities identified in the WASP and CASP. The East Area Specific Plan has not been made public and is not included in Table 2-3. These Plans specify the ultimate distribution, location, and intensity of land uses. Unsewered areas such as open space and parks are not included in this table as they do not contribute wastewater base flow.



TABLE 2-3 SPECIFIC PLAN DEVELOPMENT CAPACITY

	WES	T AREA	CENTRAL AREA			
	DWELLING UNITS	NON- RESIDENTIAL (SF)	DWELLING UNITS	NON- RESIDENTIAL (SF)		
LOW DENSITY RESIDENTIAL	1,361	-	1,367	-		
MEDIUM DENSITY RESIDENTIAL	1,803	-	1,359	-		
HIGH DENSITY RESIDENTIAL	1,085	-	1,185	-		
COMMERCIAL/ MIXED USE	91	571,500	_	489,700		
TOTAL	4,340	571,500	3,911	489,700		

Salinas Ag-Industrial Center

The Salinas Ag-Industrial Center, within City limits, is a 257-acre area planned for agricultural-related businesses. Ruggeri-Jensen-Azar and Associates prepared the Sanitary Sewer System Analysis Report & Calculations for the Salinas-Ag Industrial Center, dated November 2021. The proposed sewer system will connect to the City's existing system at Abbott Street, Burton Avenue, and Dayton Street. Projected square footage of these industrial buildings is based on the average floor area ratio (FAR) of 0.3 for general industrial land uses, as identified in Table LU-3 of the City's General Plan.

Target Areas

With the adoption of the EDE, the City amended the General Plan to include Economic Opportunity Target Areas to provide additional land capacity for new economic development. Five of the six Target Areas are currently outside of the City's Sphere of Influence but have been included in the SSMPU study area to account for future wastewater flows. The sixth target area, Target Area V, shown on Figure 2-3, is within Carr Lake, inside City limits. Table LU-ED-1 (attached in Appendix A) summarizes the land use and building capacities for these Target Areas.

Table 2-4 summarizes the total projected dwelling units and projected non-residential area, as shown in Table LU-3 of the proposed General Plan amendments. These numbers include the units identified in the CASP and WASP. The land uses and development capacities for the Target Areas are also shown on Table 2-4. Inaccurate totals for Focused Growth Area acres, Future Growth Area acres, and Future Growth Area projected non-residential square feet were corrected on Table LU-3 in Appendix A. The City's General Plan land use areas in GIS were used to allocate projected dwelling units and non-residential areas to the Focused Growth Area and Future Growth Areas. The GIS areas did not match the projected areas, so a multiplier was used to scale the GIS areas to match each designated land use shown in Table 2-4.



TABLE 2-4. FUTURE DEVELOPMENT CAPACITY

PROJECTED

ACRES					DWELLING UNITS		PROJECTED NON-RESIDENTIAL (SF)			
L A N D U S E	FOCUSED GROWTH AREA	FUTURE GROWTH AREA	T A R G E T A R E A S	SALINAS AG- INDUSTRIAL CENTER	FOCUSED GROWTH AREA	FUTURE GROWTH AREA	FOCUSED GROWTH AREA	FUTURE GROWTH AREA	T A R G E T A R E A S	SALINAS AG- INDUSTRIAL CENTER
OPEN SPACE	4	696			0	0	5,000	420,000		
LOW DENSITY RESIDENTIAL	9	1,042			57	6,771	0	0		
MEDIUM DENSITY RESIDENTIAL	43	515			507	6,052	0	0		
HIGH DENSITY RESIDENTIAL	9	160			153	2,680	0	0		
COMMERCIAL	148	183	201		0	9	4,361,000	208,000	2,193,478	
MIXED USE	212	120			989	360	10,891,000	2,613,000		
INDUSTRIAL	73	995	218	257	0	0	950,000	10,773,000	3,073,158	3,361,743
PUBLIC/ SEMI-PUBLIC	58	247			0	0	636,000	2,799,000		
TOTAL	556	3,958	419	257	1,706	15,872	16,843,000	16,813,000	5,266,636	3,361,743



POPULATION

Population for the SSCSMP is comprised of the City population within the study area. Three sources of information were utilized to determine existing and future population for the study area:

- 1. 2015 City of Salinas Housing Element
- 2. 2020 Census
- 3. Association of Monterey Bay Area Governments (AMBAG) Final 2020 Regional Growth Forecast Memorandum

Existing Population

The City's existing population and historic population growth are important factors to understand past trends and project future wastewater flows. Figure 2-7 shows the City's population growth forecast as shown in the City's Housing Element, with a projected 2021 population of 157,805.

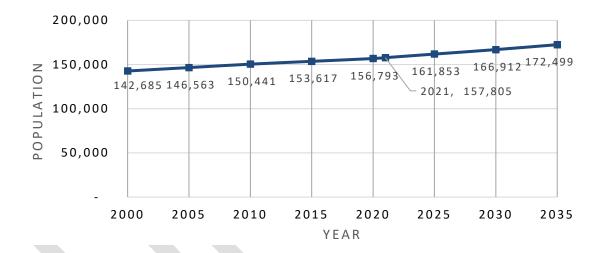


FIGURE 2-7: CITY POPULATION GROWTH

According to the 2020 Census, the total population for the City of Salinas is 163,542. For the purposes of this SSMPU, **163,542 persons** will be used for the current 2021 population.

Population Densities

The following Table 3 summarizes the average number of residential units per land use according to the 2014 Economic Development Element.

Table 2-5. RESIDENTIAL DENSITIES

	UNITS/ACRE
LOW DENSITY RESIDENTIAL	6.5
MEDIUM DENSITY RESIDENTIAL	11.75
HIGH DENSITY RESIDENTIAL	16.75



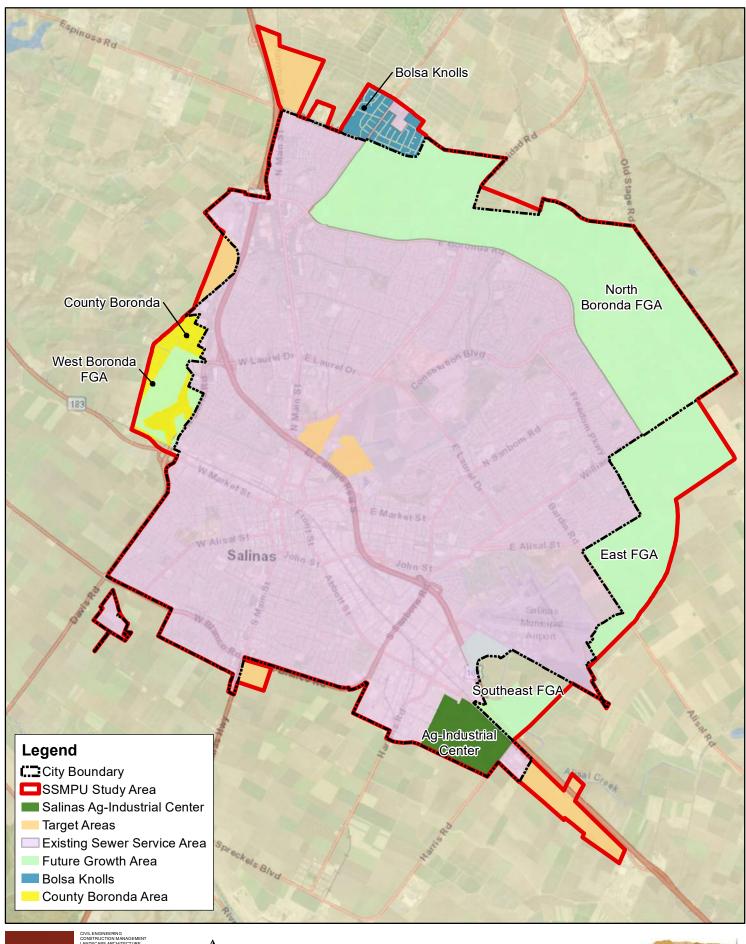
Future Population

In August 2019, AMBAG staff met with City staff to review the forecasts for future growth. Information collected from this meeting was presented to the AMBAG Board of Directors in the Final 2020 Regional Growth Forecast Memorandum. Based on the findings, 175,358 persons is projected to be the City's future population in the Year 2040.

According to the City's General Plan, the buildout population projected beyond 2035 for the City is 213,063 persons. This is based on the General Plan's Development Capacity table which considers projected populations for the City's focused growth and future growth areas. As part of the City's 2017 Economic Development Element, amendments to the General Plan were proposed; however, the projected buildout population remained the same. For the purposes of this SSMPU, **213,063 persons** will be used for the City's buildout population.









1 inch = 5,000 feet

SALINAS SEWER MASTER PLAN UPDATE SERI BASEMAP.

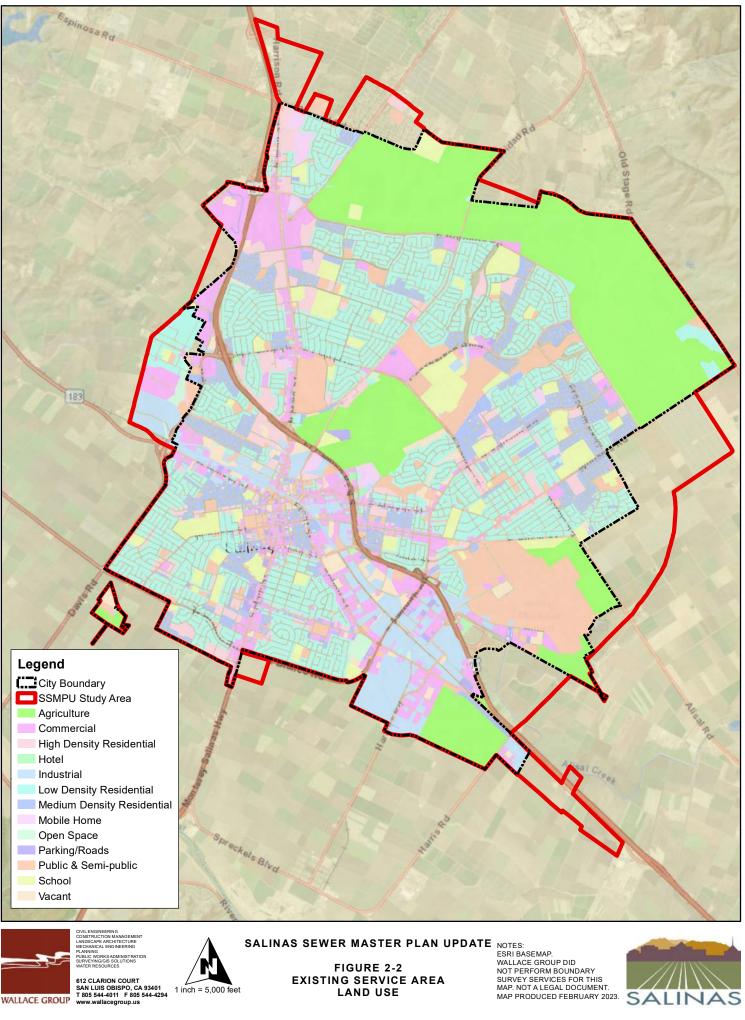
FIGURE 2-1

EXISTING SEWER SERVICE AREA

MOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP, NOT A LEGAL DOCUMENT.

MAP PRODUCED FEBRUARY 2023.



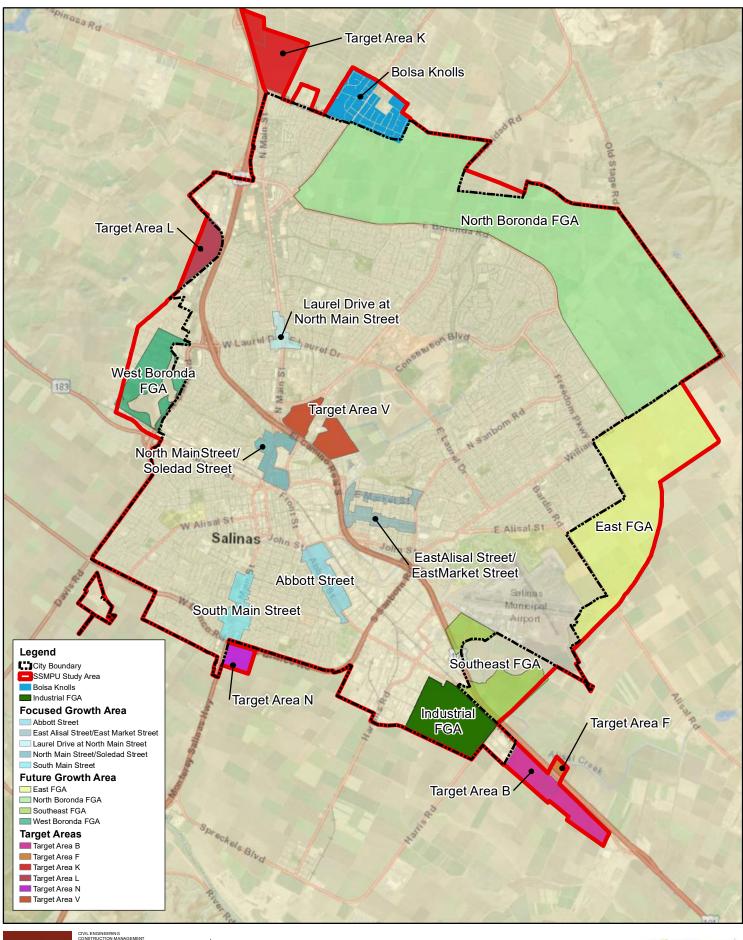




1 inch = 5,000 feet









ZIVIL ENGINEERING
DONSTRUCTION MANAGEMENT
ANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
LANNING
FUBLIC WORKS ADMINISTRATION
SURVEYING/GIS SOLUTIONS
WATER RESOURCES

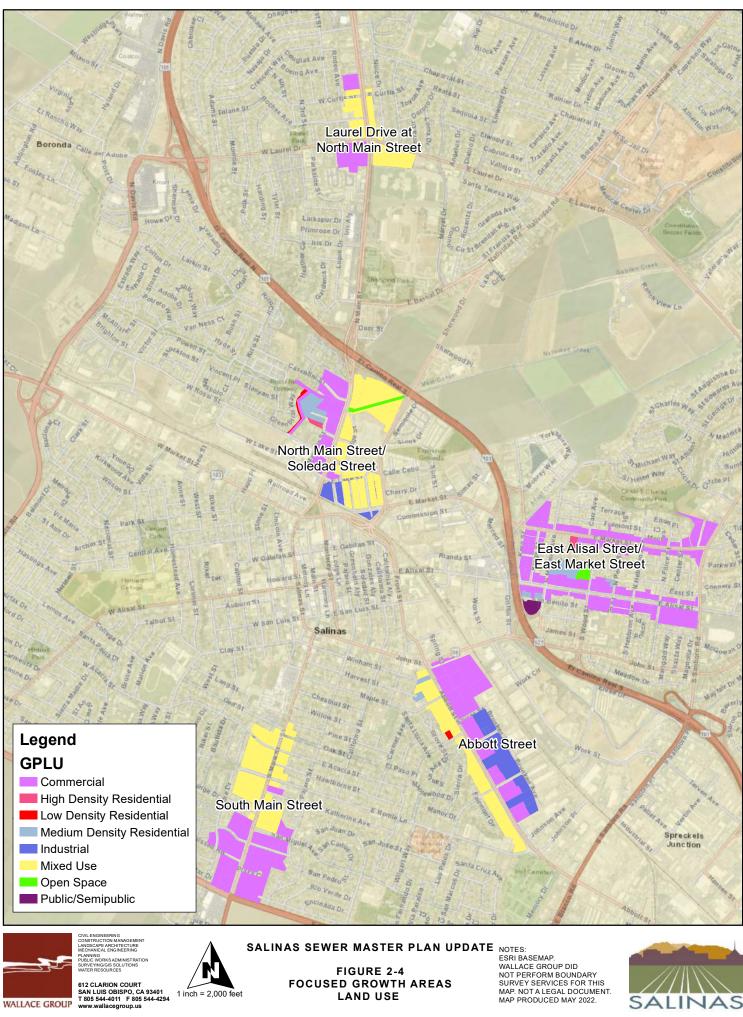
612 CLARION COURT SAN LUIS OBISPO, CA 93401 T 805 544-4011 F 805 544-4294 www.wallacegroup.us



SALINAS SEWER MASTER PLAN UPDATE $_{\scriptsize {\tt NOTES}:}$

FIGURE 2-3 CITY GROWTH AREAS NOTES: ESRI BASEMAP. WALLACE GROUP DID NOT PERFORM BOUNDARY SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED FEBRUARY 2023.

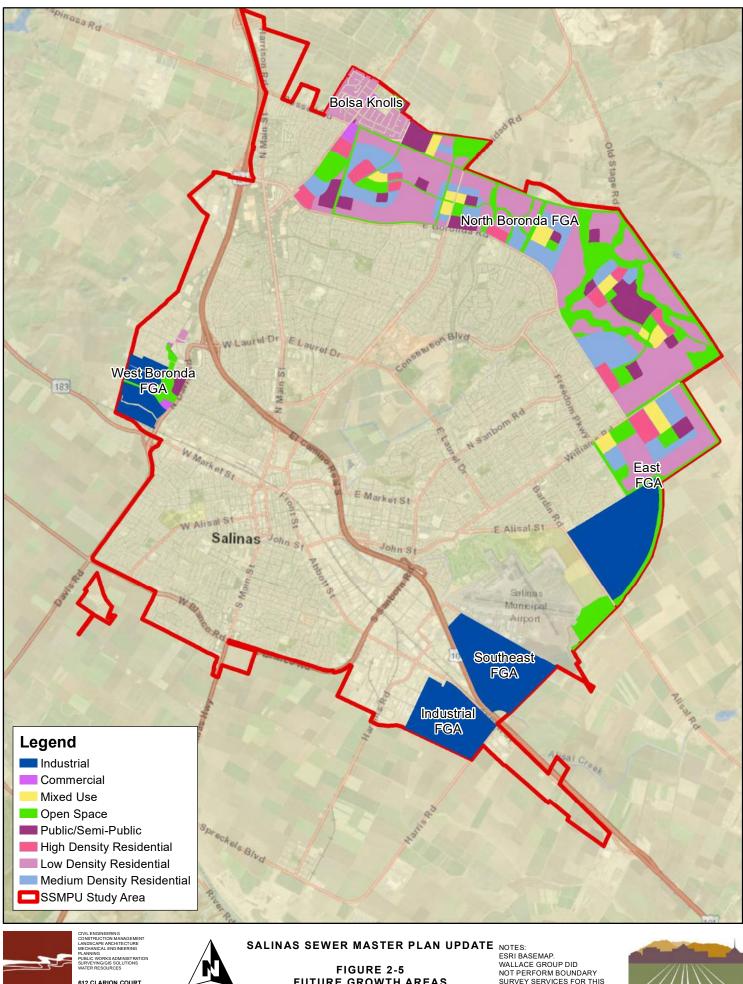






1 inch = 2,000 feet





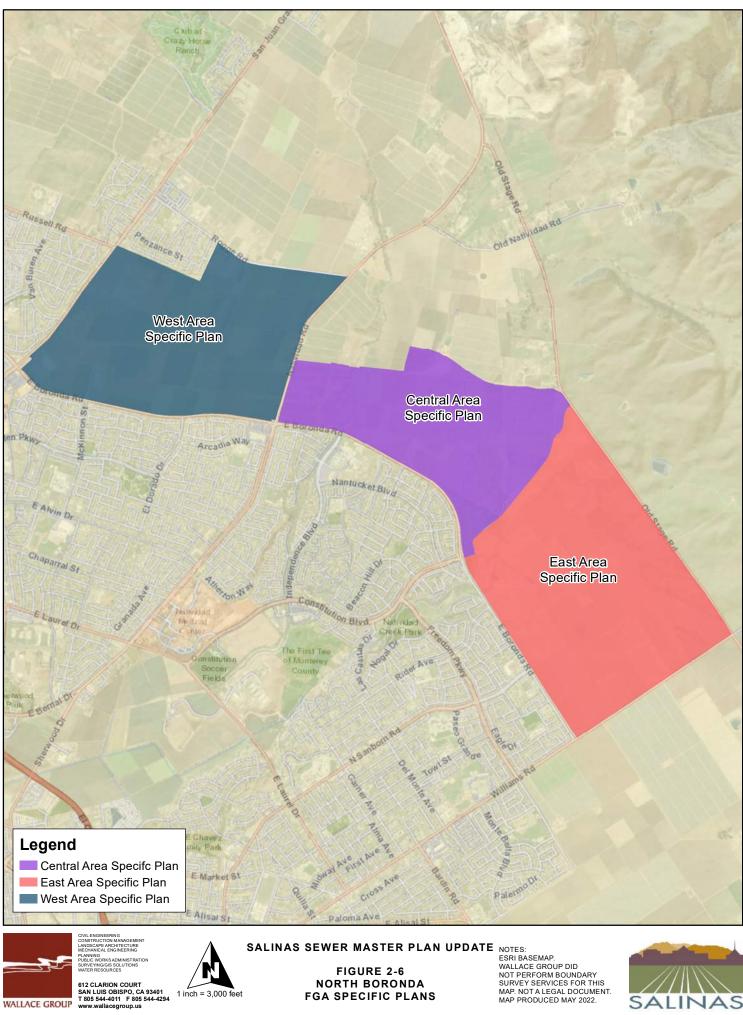


1 inch = 5,000 feet

FUTURE GROWTH AREAS LAND USE

SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT.







1 inch = 3,000 feet



CHAPTER 3 COLLECTION SYSTEM OVERVIEW

This Chapter provides an overview of the existing domestic wastewater collection system for the City. All figures are located at the end of this chapter.

COLLECTION SYSTEM OVERVIEW

The City operates two sewer collection systems, the municipal collection system, which collects wastewater from residential, commercial, institutional, and industrial users throughout the City; and the Industrial Wastewater Collection and Conveyance System (IWCCS), which collects wastewater from industrial users located mostly within the southeastern portion of the City. This report is for the municipal sewer collection system and does not consider the industrial system.

The City's municipal sewer collection system is comprised of approximately 292 miles of gravity pipes, which vary in diameter from 6-inch to 54-inches, ten (10) City-owned lift stations, one (1) City-maintained lift station, and two (2) miles of force mains. According to the California Integrated Water Quality System Project (CIWQS), 70% of the City's collection system was constructed before 1980, with 41% of the system constructed between 1960-1979. The remaining 30% of the system was constructed from 1980 to present.

The sewer collection system conveys the City's wastewater to the Salinas Area Pump Station (SAPS) located at the southwest corner of the City near Blanco Road and Davis Road. SAPS is owned and operated by Monterey One Water (M1W), formerly Monterey Regional Water Pollution Control Agency (MRWPCA).

Gravity Sewer Mains

Table 3-1 breaks down the City's gravity sewer inventory. According to the City's GIS database, 9.6% of the sewer collection system has an unknown diameter. Most of these unknown diameters are at upstream portions of the primary collection system and are assumed to be of smaller diameter (likely 6- or 8-inch) that will not significantly affect the sewer modeling of the main trunk lines. Figure 3-1 displays the City's gravity sewers by diameter.

Most of the existing collection system buried piping material is Vitrified Clay Pipe (VCP). Although Polyvinyl Chloride (PVC) pipe would have likely been installed with newer construction from 1980 to present. Hydraulic modeling of the sewer lines assumes that the pipe material is VCP unless the pipe material was visually verified by the survey work performed for this SSMPU.



TABLE 3-1. GRAVITY SEWER INVENTORY BY DIAMETER

DIAMETER (IN)	LENGTH (MILES)	% OF SEWER SYSTEM
UNKNOWN	27.5	9.6%
6-INCH	61.3	21.4%
8 - I N C H	124.0	43.2%
10-INCH	19.9	6.9%
12-INCH	14.2	5.0%
15-INCH	10.1	3.5%
18-INCH	9.2	3.2%
21-INCH	4.4	1.5%
2 4 - I N C H	3.8	1.3%
27-INCH	2.6	0.9%
30-INCH	2.6	0.9%
33-INCH	1.2	0.4%
36-INCH	0.5	0.2%
42-INCH	1.8	0.6%
48-INCH	1.2	0.4%
54-INCH	2.4	0.9%
TOTAL	286.7	100%

Manholes

Based on the City's GIS database, the existing wastewater collection system contains 3,462 sewer manholes. There are both concrete and brick manholes throughout the collection system. It is estimated that approximately 5-10% of the manholes are brick manholes, which no longer meets City standards. Brick manholes can be a source of infiltration of water and sand and can potentially fail if bricks are offset. Additionally, the City's collection system contains 1,403 flushing inlets/cleanouts. These can often limit access for operation and maintenance (O&M) staff to inspect and clean the sewer mains.

It is recommended to complete annual manhole inspections as part of the CCTV program to identify manholes in poor condition and replace or rehabilitate as required. This may include concrete manholes that have severe hydrogen sulfide corrosion, brick manholes that are cause of significant infiltration or are failing, and broken flushing inlets. As on-going improvements to extend the life of the sewer collection system are made, it is recommended that all brick manholes be either replaced with new manholes, or at minimum install a coating or lining. Flushing inlets should be replaced with 8-inch inspection ports or new manholes. These are low-priority upgrades, but should be considered as an on-going operations and maintenance project to continue improving operations and reducing infiltration of sand and water and potential for failures. Figure 3-2 shows the locations of brick manholes and corroded manholes (74 total) identified by field survey and all the City's flushing inlets.



Lift Stations

The City owns and operates ten (10) lift stations located throughout the collection system. The City also maintains the Vista Nueva Lift Station under an assessment district. Recently, tenants at Harris Place Industrial Park have requested that the City assume operations and maintenance of the privately-owned Harris Lift Station. The City is currently preparing a study to determine the feasibility of operating this lift station under separate cover and therefore, Harris Lift Station is not included in this report. Chapter 5 provides a detailed description of the lift stations and recommended improvements. The following is a list of the 11 City owned and/or operated lift stations:

- ❖ Airport (Moffett)
- Carpenter Hall
- De La Torre
- Harkins Road
- ❖ Lake Street
- Las Casitas

- Mill Lake
- Santa Rita
- Spicer
- ❖ TP2
- Vista Nueva

All lift station force mains tie into the City's gravity system for conveyance to SAPS. City staff conducts regular maintenance of the City's lift stations. In 2018, staff initiated a Supervisory Control and Data Acquisition (SCADA) program to monitor all lift stations. This SCADA program tracks flows and motor run times and offers an alarm system that calls staff directly if there are any operational issues at the lift stations.

In addition to the City-owned and operated lift stations, the City also receives wastewater flows from ten (10) private lift stations located throughout the City. These lift stations service commercial complexes and industrial facilities that discharge directly into the City's gravity system. The locations of these lift stations are listed below:

- Oregon and Sanborn Street
- 11 Harris Place
- 1121 Alamo Way
- 115 San Juan Grade Road
- 150 Sherwood Drive
- Natividad Hospital
- 58 Natividad Road
- Northridge Mall
- Salinas Adult School
- Sherwood Hall

All City-owned, County-owned, and private lift stations are shown on Figure 3-3.



Salinas Area Pump Station (SAPS)

As stated above, wastewater collected in the City's municipal sewer system flows to the Salinas Area Pump Station (SAPS), operated by Monterey One Water (M1W). SAPS feeds into a 36-inch forcemain from Salinas to the regional wastewater treatment plant operated by M1W near the City of Marina. Here the wastewater is treated and then used for beneficial re-use or discharged to the ocean via a 60-inch diameter outfall. SAPS is shown in the southwestern corner of the City on Figure 3-3.

Inverted Siphons

The City has four (4) known inverted siphon locations within the sewer collection system. These inverted siphons are used to carry wastewater flows under creeks and highways. Inverted siphons often present hydraulic issues and require periodic flushing during low flows. The known inverted siphon locations are shown on Figure 3-3 and are modeled according to record drawings provided by the City.

Industrial Wastewater Diversion

As stated above, the City owns and operates a separate collection system which receives only industrial wastewater that flows to the City owned Industrial Wastewater Treatment Facility (IWTF). Although the industrial wastewater collection system is not part of this SSMPU, it is important to note that a concrete shunt structure allows the diversion of produce wash water and winter stormwater discharges from this industrial wastewater conveyance system to enter the City's wastewater collection system at the SAPS location, just upstream of the flow totalizer. M1W monitors and operates this industrial wastewater diversion and has provided the daily diversion flows from May 5, 2016 to June 30, 2018. Since the SAPS location is the most downstream point in the City's collection system, these diverted flows do not affect the City's collection system and are not considered in the sewer model.

Reclamation Ditch Diversion

This diversion structure was recently constructed and brought on-line in 2018. It is located in the existing Reclamation Ditch near the intersection of Davis Road and West Market Street/Highway 183 in Salinas. According to the State Water Resources Control Board Permit 21377, this project allows for up to 6 cubic feet per second (cfs) by direct diversion from the Reclamation Ditch and pumped into the City's collection system. M1W owns and operates this reclamation ditch diversion. These reclamation ditch diversion flows were considered in the hydraulic model since they feed into the main 54-inch trunk line that conveys flow along Davis Road to SAPS.



HIGH PRIORITY AREAS

According to the City's 2019 Sanitary Sewer Collection System Annual Performance Report, City staff perform high-priority and routine line cleaning, manhole inspections, and lift station inspections each business day. In 2019, wastewater staff cleaned 116 miles of pipe, which is an increase of 93 miles from the year before. In the same year, approximately 48,075 linear feet of CCTV inspections were performed to identify damages or causes of blockages in City sewer lines. The City has not provided an inspection report for these videos; therefore, the results of this inspection are not included in this SSMPU.

City Manhole Monitors

The City installed fifty-six (56) manhole monitors at locations with either historical surcharging or sanitary sewer overflow (SSO) issues. In 2021, staff responded to eighteen (18) manhole monitoring alarms indicating sewer surcharging. This avoided potential SSOs from the sewer system and helped the Wastewater Division meet its goal of having five or less overflows on the City main line per year. Over the last few years, the City has met this goal with the following SSOs per year: four (4) in 2018, two (2) in 2019, two (2) in 2020, and five (5) in 2021. Table 3-2 summarizes the location of all the monitors and Figure 3-4 shows high priority sewer mains as identified by the City and past locations of SSO manholes.



TABLE 3-2. MANHOLE MONITORING LOCATIONS

MH-ID	LOCATION	MH-ID	LOCATION
M 5 - 0 2 0	JOHN ST. & GRIFFIN ST.	J8-004	1002 DEL MONTE AVE.
M 5 - 0 0 9	500 JOHN ST.	J7-041	1035 ATLANTIC ST.
M 5 - 0 1 2	599 JAMES ST.	K8-024	1116 CORTEZ ST.
M 5 - 0 1 3	105 NORTH WOOD ST.	H4-015	1020 E. LAUREL DR.
L5-033	481 E. MARKET ST.	L8-028	183 DENNIS AVE.
L5-020	127 CARR AVE.	L8-031	176 AFTON RD.
L6-016	700 ELTON PLACE	N7-014	1340 MERCER WAY
M 3 - 0 5 0	500 LINCOLN AVE.	G8-011	1166 ROCKHAVEN CT.
M 3 - 0 3 6	602 RIKER ST.	J9-014	1044 BISON WAY
L3-020	210 CAPITOL ST.	15-036	77 SAINT FRANCIS WAY
L3-013	142 W MARKET ST.	L3-029	26 STONE ST.
L2-014	33 VILLA ST.	G6-018	744 SAUCITO AVE
K4-052	177 SHERWOOD DR.	N6-013	9 MAYFAIR DR.
14-029	1149 SHERWOOD DR.	D4-028	18588 NORTHRIDGE DR.
G4-029	223 N FIRST ST.	D5-001	18807 LENNY ST.
13-056	119 SHERMAN DR.	M8-016	200 TAMPA ST.
G3-028	447 COMANCHE WAY	M7-016	15 PALOMA AVE.
G 4 - 0 3 4	1502 WHEELER DR.	03-011	321 WOODSIDE DR.
G4-023	44 JULIA AVE.	G6-009	1538 MARIN AVE.
G5-012	55 KIP DR.	14-001	939 HEATHER CIRCLE
F4-015	472 REGENCY CIRCLE	N 2 - 0 2 0	432 WOODSIDE DR.
D4-064	13278 JACKSON ST.	K 4 - 0 2 3	146 LAKE ST.
D4-001	13170 LOUISE ST	H3-043	805 W LAUREL DR.
D4-030	18601 COOLIDGE	H6-014	1515 LOS ALTOS WAY
H7-075	1619 MARSHFIELD CT.	H 3 - 0 4 3	805 W LAUREL DR.
18-039	1205 NOGAL DR.	L6-036	30 CENTER ST.



2017 Mark Thomas CCTV Evaluation

In 2017, Mark Thomas Engineering performed a CCTV sanitary sewer analysis of approximately 5,300 linear feet, or approximately 0.3%, of sanitary sewer mains and twenty-three (23) manhole structures in the southeast corner of the City. The report used the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) and Manhole Assessment and Certification Program (MACP). The condition of the pipes and manholes were graded based upon observed structural and operations and maintenance defects. Table 3-3 below summarizes this grading system used and Figure 3-5 displays the CCTV analysis findings with notes about each manhole and pipe condition. All recommended pipe and manhole repairs from this CCTV evaluation are listed and prioritized as existing CIPs and discussed further in Ch. 7 of this SSMPU. The full evaluation report can be found in Appendix B of this SSMPU.

TABLE 3-3. PACP AND MACP GRADING TABLE

GRADE	GRADE DESCRIPTION	STRUCTURAL AND O&M DEFINITION	GENERAL DETERIORATION DEFINITION
5	Immediate Action	Defects requiring immediate attention	Failed or will likely fail within the next 5 years
4	Poor	Sever defects that will become Grade 5 defects within the foreseeable future	Probably fail in 5-10 years
3	Fair	Moderate defects that will continue to deteriorate	May fail in 10-20 years
2	Good	Defects that have not begun to deteriorate	Unlikely to fail for at least 20 years
1	Excellent	Minor defects	Unlikely in the foreseeable future

O&M Repairs

The City has a list of known operations and maintenance (O&M) problem areas throughout the City. The nature of the problem areas ranges from pipe sags/joints and pipe damage to manhole repairs to hydrogen sulfide corrosion and fats, oils, and grease (FOG) build-up. Table 3-4 summarizes these City identified locations and groups repair projects together based on priority, repair type, and location. All City identified repairs are listed and prioritized as existing CIPs and discussed further in Ch. 7 of this SSMPU. All repair projects are detailed in the City's Sewer Repair Atlas Map in Appendix C.

Additionally, the City should prioritize their CCTV program to inspect the entire collection system every five years. This would mean the City should complete an average of 58 miles per year, a significant increase from the 14.7 miles inspected in 2021 and 8.1 miles inspected in 2020. Table 3-5 assumes the cost of cleaning and CCTV based on similar work performed in Monterey County. In order to account for a 3% inflation rate each year, Table 3-6 summarizes the cost per year that should be budgeted by the City. This ongoing CCTV program is included as an existing CIP in Ch. 7 of this SSMPU.



TABLE 3-4. O&M REPAIRS

COMBINED O&M PROJECT	CITY LOCATION	ATLAS ID
ACACIA, BAUTISTA, WOODSIDE REPAIRS	ACACIA CIRCLE NORTH WOODSIDE DR. BAUTISTA DR. WEST ACACIA ST.	N3
COMANCHE, POLK, AND NORTH FIRST REPAIRS	COMANCHE WAY POLK ST. NORTH 1 ST ST.	G3, I3, H4
DEL MONTE AND MAE REPAIRS	726 MAE AVE. AND C ST. DEL MONTE AVE. MAE AVE.	K8
DONNER WAY REPAIR	DONNER WAY	G6
E LAUREL AND WILLIAMS REPAIRS	E. LAUREL DR. WILLIAMS RD.	K7, L7
EAST MARKET AND UPSTREAM OF LAKE STREET REPAIRS	YORKSHIRE WAY LONGBOW WAY SUN ST. E MARKET ST. N MADEIRA AVE.	K5
HOOVER ST REPAIR	1885 HOOVER ST.	C5
JOHNSON PLACE REPAIRS	JOHNSON PLACE (FIRE STATION #3)	O5
KATHERINE AVE. & PAJARO ST. REPAIRS	KATHERINE AVE. PAJARO ST.	04
KING STREET REPAIRS	KING ST.	L5
LOUISE AND VAN BUREN STREET REPAIRS	LENNY ST. AND LOUISE ST. VAN BUREN AVE.	D4
MALARIN ST AND WILGART WAY REPAIRS	WILGART WAY WORK ST AND BRUNKEN AVE. LOS PALOS DR. AND FAIRMONT DR.	O4, N5
N MAIN ST HWY 101 UNDERPASS BUNKER REPAIR	N. MAIN ST. UNDERPASS BUNKER HWY 101	J4
RIKER STREET REPAIR	555 RIKER STREET	M3
ROMIE LANE REPAIRS & RECONFIGURATION ANALYSIS	ROMIE LANE BETWEEN LOS PALOS AND PAJARO	04
SAN MIGUEL AVE REPAIR	PAJARO ST./SAN MIGUEL AVE.	04
SHERWOOD DR REPAIRS	SHERWOOD DR.	К4



COMBINED O&M PROJECT	CITY LOCATION	ATLAS ID
UPPER CARR LAKE REPAIRS	LAUREL DR. BIKE TRAIL	J6
WEST MARKET AT DAVIS OVERCROSSING	W. MARKET ST. AND DAVIS OVERCROSSING	K2
WEST MARKET STREET REPAIRS	10 VILLA ST. W. MARKET ST. NEAR MARKET CAPITOL ST. TO 10 CAPITOL ST. CAPITOL ST.	L3
WOOD STREET RECONFIGURATION ANALYSIS	WOOD ST.	L5



TABLE 3-5. CCTV COSTS

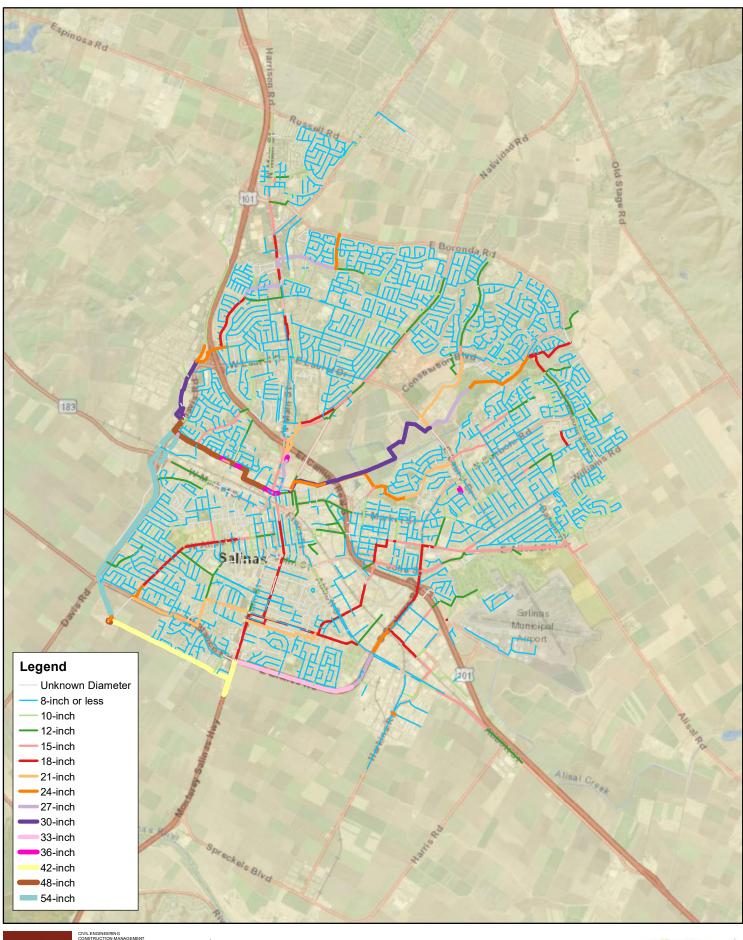
DIAMETER (IN)	LENGTH (FT)	CLEANING & CCTV COST (\$/LF)	TOTAL COST
6-12 INCHES	1,303,314	\$5.00	\$6,516,570
15-27 INCHES	158,931	\$10.00	\$1,589,310
30-54 INCHES	51,498	\$13.00	\$669,475
TOTAL	1,513,776		\$8,775,355

TABLE 3-6. ANNUAL CCTV PROGRAM

YEAR	B U D G E T ¹
YEAR 1	\$1,769,000
YEAR 2	\$1,822,000
YEAR 3	\$1,877,000
YEAR 4	\$1,933,000
YEAR 5	\$1,991,000
TOTAL	\$9,392,000

¹The annual budget includes a 3% escalation rate per year.







1 inch = 5,000 feet

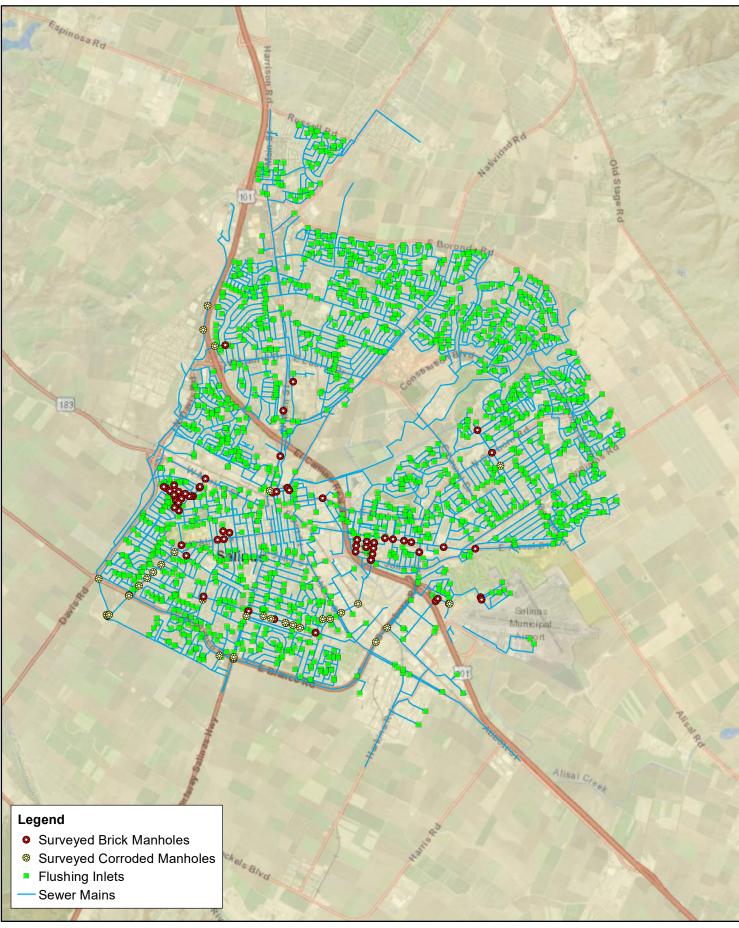
SALINAS SEWER MASTER PLAN UPDATE

FIGURE 3-1

EXISTING PIPE DIAMETER

NOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP. NOT A LEGAL DOCUMENT.
MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED MAY 2022.







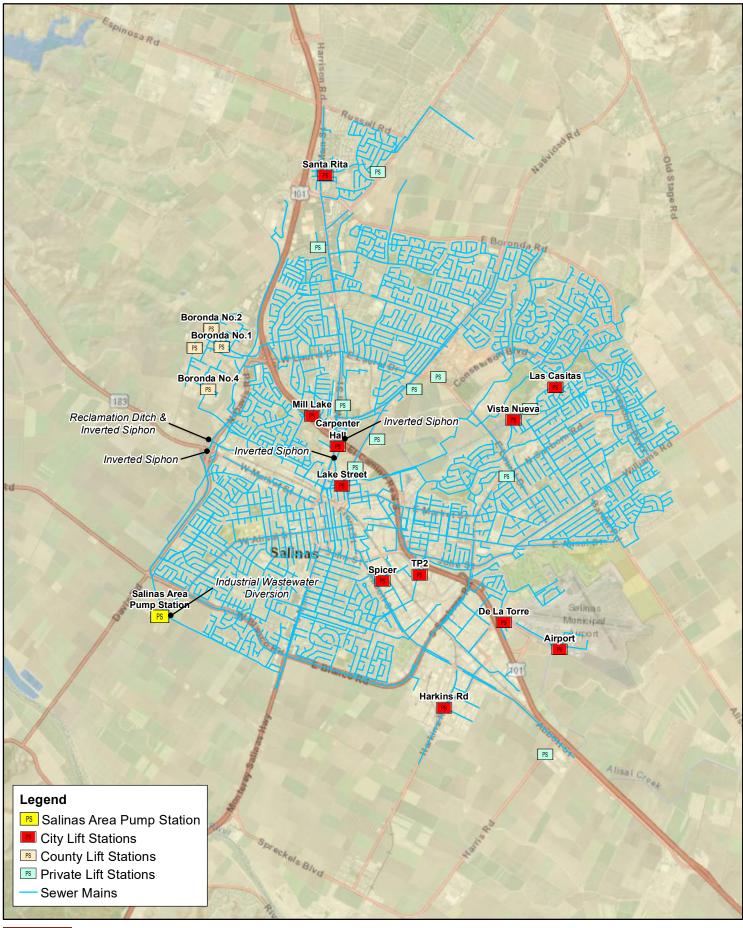


SALINAS SEWER MASTER PLAN UPDATE

FIGURE 3-2
LOW PRIORITY REPLACEMENTS

NOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP. NOT A LEGAL DOCUMENT.
MAP PRODUCED MAY 2022.

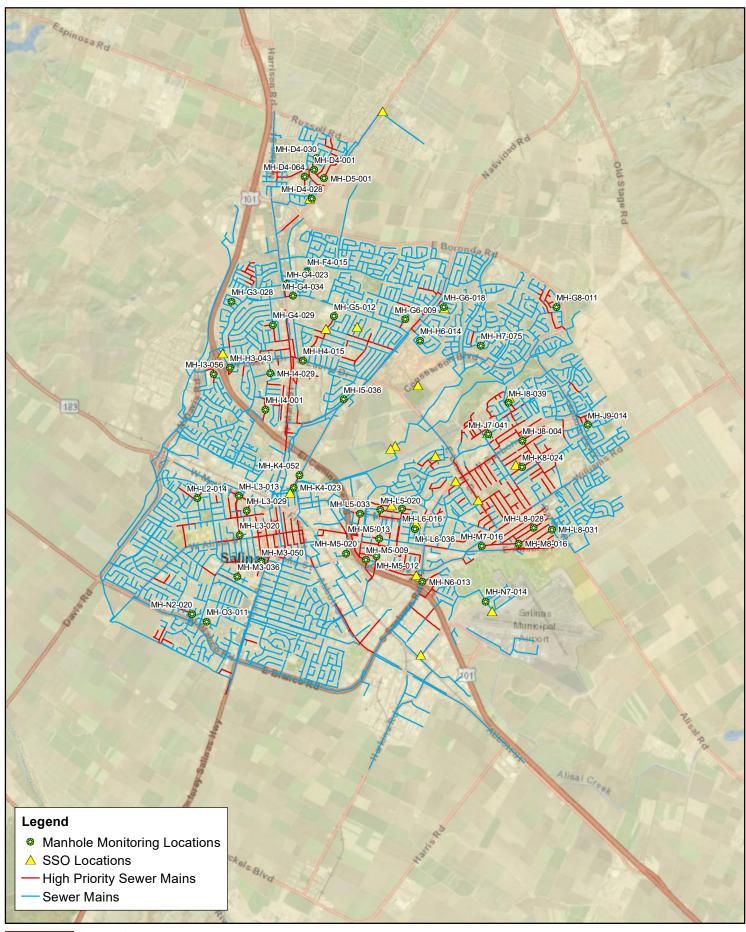






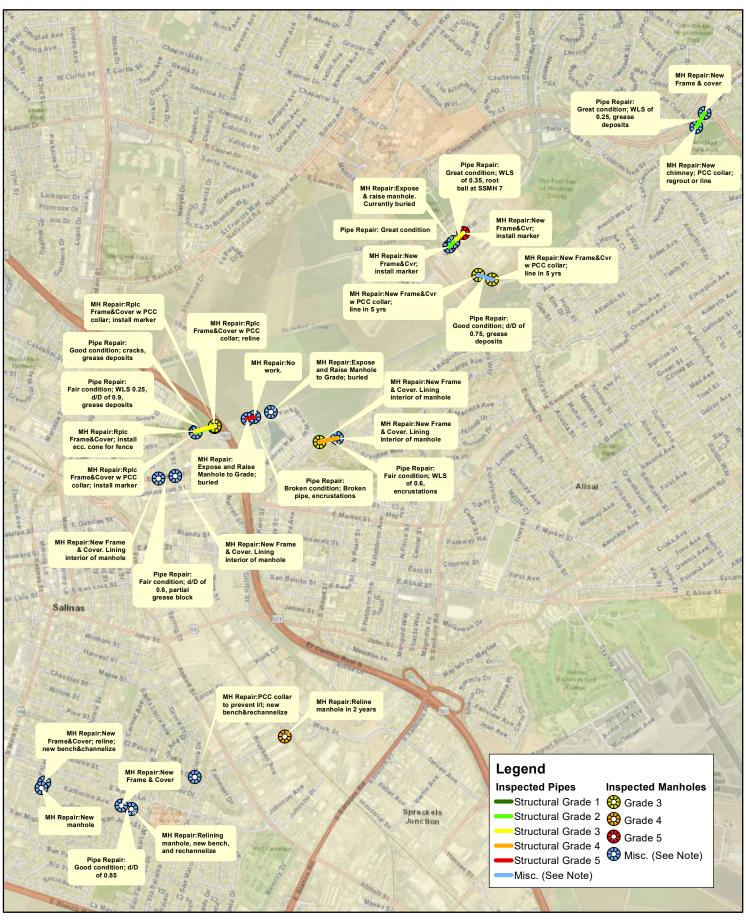














CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION

1 in = 2,000 Feet 612 CLARION COURT SAN LUIS OBISPO, CA 93401 T 805 544-4011 F 805 544-4294 www.wallacegroup.us

SALINAS SEWER MASTER PLAN UPDATE

FIGURE 3-5 MARK THOMAS CCTV FINDINGS NOTES: ESRI BASEMAP. WALLACE GROUP DID NOT PERFORM BOUNDARY MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED MAY 2022.



CHAPTER 4 WASTEWATER FLOWS

This Chapter presents the results of the sewer flow monitoring and the development of the wastewater flow characteristics used for the analysis of the collection system for the City. All figures are located at the end of this chapter.

INTRODUCTION

Wastewater flows were evaluated from three sources described in the following sections:

- Temporary flow meters installed in the City's sewer system
- Wastewater flow records provided by Monterey One Water
- Water use records provided by the City's water purveyors: California Water Service and Alco Water Service

WASTEWATER FLOW MONITORING

To develop a better understanding of the existing wastewater flows, in-line flow monitoring was conducted at eighteen (18) different locations on main trunk lines throughout the City. Temporary sewer flow monitoring locations were selected based upon downstream locations for sewersheds of similar land uses that could be calibrated for the proposed sewer model development. The locations of the flow meters and their corresponding tributary areas are depicted on Figure 4-1.

Flow meter locations 1-15 were installed by USCubed (US³) on March 5-6, 2021. For redundancy in calculating the total flow of the system, meter locations 16-18 just upstream of SAPS were installed by US³ on March 30, 2021. These three additional monitoring locations were selected after anomalies were discovered in the SAPS flow data. All meters were removed April 20-21, 2021. Locations 1-15 were monitored for a total of 45 days and locations 16-18 were monitored for a total of 21 days. After review of locations 16 and 17, it was discovered that the 54-inch line conveying most of the western portion of the City's flow was not monitored due to inaccurate GIS data; therefore, these flow monitoring results were not used as a check against the SAPS total flow data.

Flow Meters

FLO-DAR® flow meters were used for the wastewater flow monitoring. These flow meters are mounted to the manhole wall, above the flow where they should not encounter any potential debris or grease that would affect readings. A digital Doppler radar is used to measure the velocity and direction of flow every 15 minutes. Additionally, the flow level is measured by ultrasonic pulse echo and recorded as well.

Since sewer flow monitoring does not continuously record flow, it is unable to record transient events of very short duration, in this case of less than 15 minutes. The flow monitoring does, however, provide an estimate of the amount of wastewater generated by various sewersheds during the monitoring event. This provides useful information about the diurnal sewer flow patterns for each sewershed and can also potentially show the impacts of inflow and infiltration. The following provides a summary of the benefits and the potential problem with sewer flow monitoring:



Benefits

- Provides hourly and daily wastewater flow averages for various sewersheds within the community. This can be used to help differentiate between the amount of wastewater flow coming from residential versus commercial development.
- Evaluates diurnal trends within the community, which will help estimate the peaking factors that are required to size the collection system and evaluate the remaining capacity within the existing collection system
- May help evaluate the potential impacts of inflow and infiltration if the monitoring event spans both dry weather and wet weather events.

Potential Drawback

The flow meters read every 15 minutes, providing only an average of the flow over the 15-minute period. The averages are then totaled for the day to get total daily flows. There are possibilities that the flow meter could miss higher peaks that may come through the collection system between readings.

Flow Monitoring Summary

The goal of flow monitoring is to record wastewater flows and establish diurnal trends that will be used to calibrate the sewer model. The following Table 4-1 provides a summary of the results from each of the flow monitoring stations.



TABLE 4-1. FLOW MONITORING SUMMARY

AVERAGE PRIMARY DAILY FLOW MONITORING LOCATION LAND USE (GPD) NOTES Residential-65% Three lines entering from the east, Commercial-534,842 west, and south. Downstream 15-1 SUCRE 15% inch line was monitored. Residential-70% Three lines entering from the east, north, and south. Downstream 32-Commercial-190,354 2 HARDEN 22% inch line was monitored. Two lines entering from the east Residential-60% 198,404 and north. Downstream 8-inch line 3 LAUREL School-25% was monitored. No laterals. Upstream 24-inch line was monitored. Levels and velocities began dropping to zero Residential-73% during 4/8-4/13 of the study. No Public/Semi-414,180 issue was found with the CONSTITUTION Public-15% equipment, but those days were not included in the Average Daily Flow total. No laterals. Upstream 21-inch line was monitored. US3 notes levels and velocities began dropping to Residential-42% zero during the last three days of 386,611 5 RANCH VIEW School-40% the study. No issue was found with the equipment, but those days were not included in the Average Daily Flow total. Two lines entering from the Residential-74% northeast and southwest. 291,616 6 ALISAL School-40% Downstream 15-inch line was monitored. Two lines entering from the east Residential-71% and north. Downstream 18-inch 777,840 7 EUCALYPTUS School-14% line was monitored. Residential-52% Two lines entering from the north Commerical-1,715,731 and west. Downstream 24-inch line 8 DAVIS 29% was monitored.



TABLE 4-1. FLOW MONITORING SUMMARY (CONT.)

AVERAGE PRIMARY DAILY FLOW MONITORING LOCATION LAND USE NOTES (GPD) Residential-89% No laterals. Upstream 8-inch line 46,255 9 EL RANCHO Hotel-8% was monitored. Two lines entering from the east and Commercial-57% one line from the west. Downstream 291,616 10 MADISON Residential-33% 10-inch line was monitored. Two lines entering from the north and Residential-67% west. Downstream 18-inch line was 1,881,437 11 CHEROKEE Commercial-19% monitored. No laterals. Upstream 24-inch line was Residential-70% monitored. US3 notes this site had Public/Semi-583,734 sediment in the line and program 12 LAKE ST 24 Public -10% parameters were used to reduce issues due to the poor hydraulics. No laterals. Upstream 30-inch line was monitored. US3 notes levels and Residential-55% 1,884,712 velocities dropped to zero somewhere 13 LAKE ST 30 Commercial-21% between 3-8am almost every day during the study. No laterals. Upstream 36-inch line was Residential-58% monitored. US3 notes this site has Public/Semi-1,717,329 sediment in the line and program 14 BRIDGE Public-19% parameters were used to reduce issues due to the poor hydraulics. Two lines entering from the north and Residential-33% west. Downstream 24-inch line was 1,428,913 15 SANBORN Commercial-29% monitored. No laterals. Downstream 24-inch line was monitored. US3 notes that 16 & 17 Residential- 48% 1,364,436 program parameters were used at Site Commercial-18% HITCHCOCK 17 to reduce issues due to the poor hydraulics. No laterals. Downstream 36-inch line Residential-40% was monitored. US3 notes program 1,892,455 18 HITCHCOCK Industrial-26% parameters were used to reduce issues due to the poor hydraulics.



SALINAS AREA PUMP STATION AVERAGE DAILY FLOWS

Monterey One Water provided total daily flows at SAPS from January 20, 2015 to June 30, 2018 for historical use. They also provided January through May 2021 to compare total flows during the same time period as the flow monitoring. Flows in the latter half of 2018 through 2020 were not provided due to several anomalies such as large jumps and dips that are not typical to total sewer flows, thus the data was unreliable. M1W reports that anomalies may be due to the flow meter needing calibration, cleaning, or repairs.

Table 4-2 presents the average daily flow for the years 2015-2017. These values represent domestic wastewater in the City's system. Industrial wastewater flows that were diverted to SAPS during these years were subtracted from the total metered wastewater flow at SAPS to determine the actual flows from the domestic sewer collection system.

TABLE 4-2. SAPS DOMESTIC WASTEWATER FLOWS

YEAR	AVERAGE DAILY FLOW (MGD)
2015	11.32
2016	10.12
2017	9.94
AVERAGE	10.46

It should be noted that the City's 2011 Sanitary Sewer Master Plan notes an average daily flow of 12.5 MGD from 2002-2007. Although the population has increased since this time, the decrease in sewer flows can be attributed to significant water conservation efforts that occurred during the statewide drought water conservation mandates which included more water efficient water fixtures installed subsequent to 2007.

To further this point, a draft of the *West Area Specific Plan* states that conservation effort decreased M1W Plant flows from 21 MGD in 2014 to 16 MGD in 2016. Of the 16 MGD, the City of Salinas contributed 12 MGD. This number is the total flow from SAPS to M1W Regional Treatment Plant, including the industrial wastewater diversion flow. The average daily flow for 2016 in Table 4-2 subtracts this metered industrial wastewater diversion, which is approximately 2.7 MG for the months of May-October, to provide total domestic flows entering the SAPS.



WATER USE DATA

Wastewater flows were also calibrated by comparing the estimated wastewater flows to water use records. Water use records for the year 2020 were provided by the City's water purveyors: California Water Service and Alco Water Service. In order to compare water use records to wastewater flow, it is important to identify outdoor versus indoor water use that would contribute flow to the wastewater system. Known irrigation accounts were identified and removed from the data provided in order to estimate indoor water use. The 2011 Sanitary Sewer Master Plan estimates sewer flows as 85% of the lowest monthly average water consumption or as 75% of the annual average water consumption. Table 4-3 provides a summary of sewer flows using these ratios.

TABLE 4-3. WATER USE

	WATER USE (MGD)	RETURN TO SEWER RATIO	DOMESTIC WASTEWATER (MGD)
MARCH 2020 (LOWEST MONTH)	11.95	0.85	10.16
2020 ANNUAL AVERAGE	15.58	0.75	11.69

EXISTING WASTEWATER FLOWS

After analyzing the average daily sewer flows via flow monitoring results, the 2015-2017 SAPS influent flow data, and the City's domestic water use records, for the purposes of this report and model calibration, the average daily flow for the City of Salinas is 10,460,000 gallons. Based on the calculated average daily flow for various sewersheds and land uses, the wastewater flow factors for various existing land uses within the City were developed and are presented in Table 4-4.

TABLE 4-4. EXISTING FLOW FACTORS

			FLOW FACTOR	E X I S T I N G A V E R A G E					
	QUANTITY	UNIT	(GPD/UNIT)	FLOW (GPD)					
RESIDENTIAL	159,143	Persons	54.5	8,673,200					
MOBILE HOME	4,399	Persons	30	131,900					
HOTEL	649	Rooms	19.5	12,600					
COMMERCIAL	16,289,742	SF	0.08	1,221,700					
INDUSTRIAL	7,087,044	SF	0.04	248,000					
SCHOOL	38,365	Students	4.5	172,600					
EXISTING AVERAGE DAILY FLOWS 10,460,000									



The quantity of persons is based on the existing population of 163,542. The number of students was based on the City's GIS data, and the number of hotel rooms was based on the hotels within the existing service area. In order to compare hotel flows to flow monitoring that was performed during the COVID-19 California Stay Home Order, it was assumed that hotels were operating at half capacity. The City provided a dataset of the building footprints within the City, which was used to quantify the total area for both commercial and industrial facilities.

Table 4-5 summarizes the estimated flows for the sewersheds. These flows are estimates based on the wastewater flow factors shown in Table 4-4. Table 4-5 also summarizes the percent difference of the estimated flows to the flow monitoring average values. Population densities per household and number of units per acre were classified into three categories (low, average, and high) based on 2020 Census Tract data. Certain areas of the City have higher population densities per household than other areas of the City, as shown as a heatmap on Figure 4-2. Classifying the population densities into three categories allowed the flow projections for each sewershed to more accurately match what was measured during flow monitoring. Table 4-6 summarizes the breakdown of population and housing unit densities and the sewersheds where these densities were applied.

TABLE 4-6. EXISTING FLOW FACTORS

	LOW	AVERAGE	HIGH
LOW DENSITY	4.5 UNITS/ACRE	6.5 UNITS/ACRE	8.0 UNITS/ACRE
AVERAGE DENSITY	8.0 UNITS/ACRE	11.75 UNITS/ACRE	15 UNITS/ACRE
HIGH DENSITY	15 UNITS/ACRE	16.75 UNITS/ACRE	24 UNITS/ACRE
HOUSEHOLD SIZE	2.7 PERSONS/HOUSEHOLD	3.2 PERSONS/HOUSEHOLD	5.8 PERSONS/HOUSEHOLD
SEWERSHEDS	1, 2, 3, 4, 9, & 18	5, 7, 8, 10, 14, 15, 16, & 17	6, 11, 12, 13, & 14

For sewersheds that saw higher flow monitoring values than what was predicted, it is likely representative of groundwater infiltration or minimal amounts of rainfall dependent inflow or infiltration. Since the rainfall event during the flow monitoring period was not significant, it is likely that these higher values can be attributed to groundwater infiltration. Based on the City's observation, this is likely in Sewershed 12 & 13 since it is known that Carr Lake experiences inflow and infiltration. Sewersheds 14 and 15 may be seeing infiltration from upstream inverted siphons and crossings at the reclamation ditch.

Before review of the flow monitoring results, it was assumed that Sewershed 11 was upstream of Sewershed 8 based on the City's GIS data; however, the flow monitoring data was much higher than what was estimated for Sewershed 8. The survey data confirmed that flows from Sewershed 11, and upstream Sewersheds 1 and 2, are conveyed into the 24-inch line on Davis Road just upstream of the flow monitoring location 8. Therefore, the flows from Sewershed 8 include upstream Sewersheds 1, 2, and 11.

Sewersheds 16 & 17 were combined based on the two 24-inch parallel lines conveying flow through the agricultural fields south of Blanco Road and into SAPS. Additionally, Sewersheds 12 & 13 were combined since they are both upstream of Lake Street Lift Station.



Table 4-5. Existing Average Daily Flows By Sewershed

Tributary Area	Low Density Residential Housing (acres)	Medium Density Residential Housing (acres)	High Density Residential Housing (acres)	Number of Mobile Home Units	Housing Units	Estimated Residential Population Density	Estimated Residential Population Density (Mobile Homes)	Estimated Residential Population	gpd	Estimated # of Hotel Rooms	gpd	Estimated # of Students	gpd	Commercial Facilities (minus schools & hotels) (sq. ft)	gpd	Industrial Facilities (sq. ft)	gpd	SubTotal Average Estimated Flow (gpd)	Average Flow Monitoring (gpd)		
Site 01: Sucre	66	19	92	454	2,643	6,929	1,243	8,172	414,835	23	449	2,621	11,795	255,160	19,137	42,762	1,497	447,712	534,842	-16%	-16%
Site 02: Harden	136	20	17	0	1,002	2,667	0	2,667	145,299	0	0	550	2,475	515,409	38,656	0	0	186,430	190,354	-2%	-2%
Site 03: Laurel	134	0	26	0	973	2,591	0	2,591	141,180	0	0	3,097	13,937	155,585	11,669	770	27	166,812	198,404	-16%	-16%
Site 04: Constitution	193	139	16	0	2,133	5,679	0	5,679	309,448	0	0	2,586	11,637	148,599	11,145	570	20	332,250	414,180	-20%	-20%
Site 05: Ranch View	112	38	23	0	1,554	4,918	0	4,918	267,958	0	0	5,237	23,567	186,581	13,994	0	0	305,518	368,611	-17%	-17%
Site 06: Alisal	77	50	0	0	1,303	7,555	0	7,555	411,614	0	0	1,647	7,412	16,359	1,227	785	27	420,280	291,616	44%	44%
Site 07: Eucalyptus	269	23	45	0	2,759	8,731	0	8,731	475,735	0	0	2,863	12,884	386,979	29,023	8,507	298	517,939	486,224	7%	21%
Site 08 Davis	42	4	8	0	452	1,430	0	1,430	77,919	0	0	250	1,125	1,270,016	95,251	573	20	174,315	369,136	-53%	9%
Site 09: El Rancho	76	0	0	0	338	900	0	900	49,057	56	1,092	0	0	11,288	847	0	0	50,995	46,255	10%	10%
Site 10: Madison	35	0	0	0	226	714	0	714	38,930	0	0	0	0	323,801	24,285	0	0	63,215	67,699	-7%	-7%
Site 11: Cherokee	42	72	70	113	3,117	17,423	655	18,079	968,982	0	0	0	0	1,253,670	94,025	10,655	373	1,063,381	1,156,241	-8%	-10%
Site 12+13: Lake St 24 + Lake St 30	322	178	62	320	6,773	37,427	1,856	39,283	2,094,949	146	2,837	5,487	24,692	407,446	30,558	116,108	4,064	2,157,100	2,468,446	-13%	13%
Site 14: Bridge	401	31	30	0	4,162	24,140	0	24,140	1,315,270	0	0	3,265	14,693	670,740	50,306	11,116	389	1,380,657	1,518,925	-9%	-10%
Site 15: Sanborn	121	42	12	0	1,475	4,667	0	4,667	254,306	134	2,603	595	2,678	2,835,674	212,676	4,166,874	145,841	618,103	651,073	-5%	9%
Site 16 + Site 17: Hitchcock	372	145	54	0	5,007	15,846	0	15,846	863,389	138	2,691	6,731	30,290	3,910,339	293,275	887,713	31,070	1,220,714	1,364,436	-11%	-11%
Site 18: Hitchcock	220	54	57	0	2,211	5,885	0	5,885	320,639	14	273	1,190	5,355	1,344,877	100,866	1,237,867	43,325	470,458	463,542	1%	7%
Not Monitored	385	115	123	255	4,614	11,605	679	12,284	652,687	139	2,711	2,923	13,154	2,597,219	194,791	602,744	21,096	884,438	Not Monitored	N/A	N/A
System Total	3,003	930	635	1,142	44,153	159,109	4,433	163,542	8,802,197	649	12,656	39,042	175,689	16,289,742	1,221,731	7,087,044	248,047	10,460,000			



PEAKING FACTOR ANALYSIS

The following section defines some of the terminology commonly used to describe and analyze wastewater flows.

Average Daily Flow (ADF)

ADF is the average daily wastewater flow in a collection system. For this study, the ADF is based on the mean of the daily flows to the Salinas Area Pump Station (SAPS) for the years 2015-2017, as shown in Table 4-2. Based on this data, the ADF for the City is 10.46 MGD.

Maximum Day Dry Weather Flow (MDDWF)

MDDWF reflects the maximum day flow rate typically seen during the peak summer months. The City of Salinas peak flows in the summer are likely influenced due to the increase in population of farm workers in the area. According to the *Draft April 2018 Farmworker Housing Study and Action Plan for Salinas Valley and Pajaro Valley*, agricultural employment increases over an eight-month period of April through November. This same study found that approximately 20% of the total population for the Salinas and Pajaro Valleys are migrant, non-permanent residents. Assuming the City's population increases by 20% during these peak harvesting months would mean an increase of approximately 31,600 people. Using a flow factor of 54.5 gallons per person per day (see Table 4-4), wastewater flows would increase by approximately 1,722,200 GPD, for a total domestic average flow during these peak months of 12.2 MGD. The historical MDDWF recorded in the SAPS data provided was 13.9 MGD on April 24, 2015. This results in a multiplier to increase the ADF, or peaking factor, of 1.33.

The 2011 Sanitary Sewer Master plan also used historical SAPS data to calculate a dry weather peaking factor of 1.6, with the assumption that the peaking factor would approach 1.5 as flows increase in the future. For the purposes of this study, a peaking factor of 1.5 will be used to calculate MDDWF. This is also consistent with California Title 22 Drinking Water Regulations recommendation of using 1.5 as a multiplier to average daily water usage to calculate the maximum day demand. The MDDWF for the City is 15.69 MGD.

Peak Hour Dry Weather Flow (PHDWF)

An important design consideration for wastewater collection system facilities is the PHDWF. PHDWF is important to understand as it may govern the design of pump stations and sewer mains. Hourly measurements at SAPS were unavailable for this peak flow analysis; therefore, peak flow was estimated based on flow monitoring that was conducted March 5-6, 2021 to April 20-21, 2021. Since there was little to no rain during this time, the PHDWF would not include rainfall dependent inflow and infiltration flow contributions to the collection system. Figure 4-3 shows the relative residential and commercial hourly flows, or diurnal curves, for the collection system during the flow monitoring period described above. The diurnal curves in Figure 4-3 show the average dry weather peaking factor is 2.0 and 1.9 for collection systems serving residential and commercial areas, respectively. The PHDWF factor during max day, dry weather flow is equal to the diurnal peaking factor multiplied by the MDDWF factor, which equates to 3.0 for residential and 2.9 for commercial.

Peak Hour Wet Weather Flow (PHWWF)

PHWWF is the maximum flow rate that occurs in a single hour during wet weather, which is defined as a significant rain event. Similar to PHDWF, PHWWF can also govern the design of the sewage collection system as it may represent the maximum flow rate that the collection system must convey. PHWWF is calculated by multiplying the ADF by the diurnal peaking factor and adding the wet weather flow component typically found during flow monitoring conducted during one or more significant rainfall events. Since the flow monitoring conducted for this study did not occur during any significant rain events, the PHWWF cannot be accurately calculated. The following section summarizes the peak unit rainfall dependent infiltration and inflow (RDII) flow factors that were analyzed to approximate the peak wet weather flow for this study.



INFILTRATION AND INFLOW

Infiltration and Inflow (I/I) can cause significant issues in collection systems and wastewater treatment plants. The I/I of surface and ground water into a sewer system can result in peak flows that exceed dry weather flow conditions. For the purposes of this study, these terms are defined as follows:

Infiltration is the water entering a sewer system and service connections from groundwater, through such means as defective pipes, pipe joints, connections, or manhole walls. Infiltration does not include inflow and is relatively constant over a period of days, weeks, or even months as high groundwater conditions persist.

Inflow is the water discharged into a sewer system and service connections from such sources as roof drains, cellars, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers, catch basins, storm water, surface water runoff, or drainage. Inflow does not include infiltration. Inflow occurs and may vary more rapidly than infiltration with rainfall conditions. Sewer collection flows rising and falling within minutes or hours of a severe storm events are typically associated to the occurrence of inflow.

In order to check for rainfall-dependent I/I (RDII) during the flow monitoring period, rain data was obtained through weather stations monitored by the California Irrigation Management Information System (CIMIS). CIMIS Station 116 Salinas North was identified as the closest rain gauge to the City. Over the entire duration of the flow monitoring performed for this study (48 days), a total of 1.17 inches were recorded in the first 14 days with a maximum of less than 0.3 inches per day at Station 116. This is considered to be less than the one-year recurrence interval storm event. Graphs of the daily flow at each monitoring location versus daily rain totals are also provided on Figures 4-4 to 4-21.

The rainfall recorded during the sewer flow monitoring does not provide enough information to determine wet weather peaking factors from the flow monitoring period. Therefore, historical rainfall events and the wet weather peaking factors from the City's 2011 Sanitary Sewer Master Plan were reviewed and summarized in the following sections.

Historical Rainfall Dependent Infiltration and Inflow

M1W provided instantaneous flow at SAPS for February 2017. Data for this month is valuable because a total of 2.15 inches fell over a 24-hour period on February 20, 2017 and several rainfall events occurred on the days prior, increasing the potential for infiltration into the sewer based on the rain saturating the ground. The instantaneous flow at SAPS showed a max reading of 31.5 MGD on February 20, 2017. Figure 4-22 graphs the instantaneous reading at SAPS for the wet weather day (February 20, 2017), the hourly precipitation on the wet weather day, and the instantaneous readings on February 27, a similar weekday with no rainfall events on or leading up to the day.

By comparing the maximum recorded flow at SAPS, 31.5 MGD, to the average daily flow of 10.46 MGD, a PHWWF peaking factor of 3.0 was determined for this storm event. Although this information confirms the City's collection system does experience RDII, it does not provide insight into where RDII is occurring because the monitoring location at SAPS is at the most downstream point of the collection system. Additionally, this data does not provide the extent to which RDII may be occurring because it is only one data point. Therefore, this study will also use the wet weather flow parameters described in the City's 2011 Sanitary Sewer Master Plan.



2011 Sanitary Sewer Master Plan RDII Peak Unit Flow Rates

The 2011 Sanitary Sewer Master Plan used the flow monitoring data and measured rainfall events occurring during January to February 2007 and 2008 to develop wet weather parameters for different sewersheds. As described above, the portion of the sewer flow attributed to each rainfall event was calculated as the measured sewer flow minus the dry weather base flow. With this data, linear regression equations were used to determine; (1) the percentage of storm volume that reaches the sewer collection system; (2) the RDII peak flow to RDII volume ratio; and (3) the runoff coefficient for RDII in each sewershed. These wet weather parameters were applied to the 5-year, 6-hour storm and 10-year, 6-hour storm to calculate peak RDII factors. Discussion of the methods used are available in Appendix B of the City's 2011 Sanitary Sewer Master Plan.

These three wet weather parameters were not verified since the sewer flow monitoring was not provided during the 2007-2008 monitoring period; however, the peak RDII unit flows from these parameters were correlated to the sewersheds in this study and used to determine the peak wet weather flow.

Table 4-7 provides the peak RDII unit flow rates and total flow estimates for the 10-year, 6-hour design storm. Sewersheds that were not part of the 2007 and 2008 metered data were assigned an RDII unit flow of 2,000 gpapd for the 10-year, 6-hour storm, based on the 2011 Sanitary Sewer Master Plan recommendations.

Since these values were developed in 2007-2008, it is still recommended that the City complete an in-depth I/I evaluation of the entire collection system. Unfortunately, it is difficult to determine the best time to complete this evaluation as most California counties, including Monterey County, are experiencing extreme drought conditions. The I/I evaluation would also include an update to the wet weather flow scenarios used in the hydraulic model and an evaluation of any additional CIPs. This recommended I/I evaluation is included as an existing CIP in Ch. 7 of this report and the timing of the project will be dependent on a significant wet weather year.



TABLE 4-7. PEAK WET WEATHER FLOW FOR 10-YEAR, 6-HOUR STORM

SEWERSHED	CONTRIBUTING SEWER AREA	PEAK RDII UNIT FLOW (GPAPD)	PEAK RDII FLOW (GPD)	PEAK WET WEATHER FLOW (GPD)	
1	373	1,200	447,600	895,320	
2	224	2,000	448,500	634,930	
3	245	2,000	490,600	657,420	
4	453	2,000	905,600	1,237,850	
5	274	2,000	547,500	853,020	
6	151	2,000	301,200	721,490	
7	440	2,100	923,500	1,441,440	
8	195	1,200	234,400	408,720	
9	85	2,000	170,800	221,800	
10	101	2,000	201,400	264,620	
11	329	1,200	394,400	1,457,790	
12&13	840	2,900	1,427,300	3,584,410	
14	590	3,000	1,770,600	3,151,260	
15	870	2,100	1,826,000	2,444,110	
16&17	1,037	2,000	2,074,500	3,295,220	
18	591	2,000	1,181,700	1,652,160	
Not Monitored	975	2,000	1,949,500	2,833,940	
TOTAL	7,773		15,295,100	25,755,500	



FUTURE WASTEWATER FLOWS

Projection of wastewater flow is tied closely to population projections and anticipated development discussed in Chapter 2. Table 4-8 provides a summary of the future flows for each growth area. Although it is assumed that water conservation measures will be taken, such as low flow plumbing fixtures for future developments, the future flows are determined by using the existing flow factors identified in Table 4-4. The total additional future flow to the system is estimated to be 7.3 MGD.

Since there are large industrial areas projected for the City, a conservative value of 0.10 gallons/day/square feet is used to account for future industrial flows. This unit is based on historical water use data seen for high industrial users. Note, the industrial flows are for the domestic flows from industrial facilities, not industrial wastewater from industrial facilities, such as wash water. The industrial wastewater is anticipated to flow to the industrial wastewater treatment facility via the industrial sewer collection system.

As discussed in Chapter 2, Ruggeri-Jensen-Azar and Associates prepared the Sanitary Sewer System Analysis Report & Calculations for the planned Salinas-Ag Industrial Center. The sewer flow calculations for this analysis used the conservative value of 2,000 gpapd, identified in the City's 2011 Sanitary Sewer Master Plan for future industrial developments. Based on discussions with the City, the sewer flows modeled for the Salinas-Ag Industrial Center in this SSMPU are based on the above value of 0.10 gallons/day/building square feet.

The peaking factors noted in this chapter were used to estimate future maximum day and peak hour wet weather flows for the future condition. City standards recommend a peak Rainfall-Dependent Infiltration and Inflow (RDII) unit flow of 500 gallons per acre per day (gpapd), based on new plastic sewer pipes. This RDII unit flow was applied to the total growth area of 4,960 acres to calculate the additional peak wet weather flow from future conditions. Table 4-9 provides a summary of the collection system's existing and future flows.

TABLE 4-9. EXISTING AND FUTURE FLOW SUMMARY

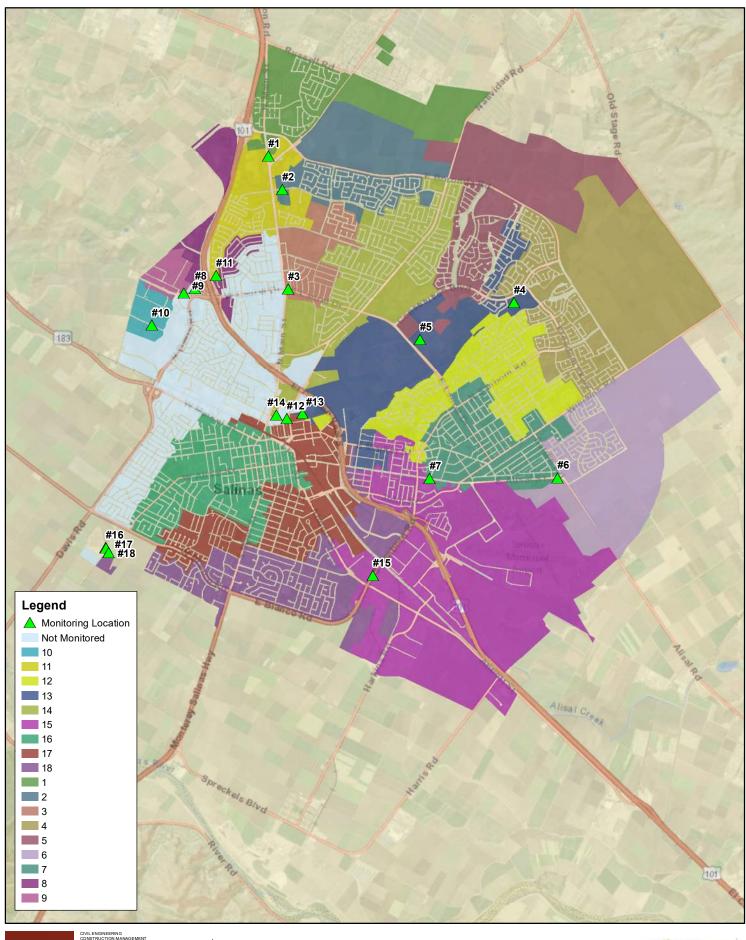
FLOW CONDITION	EXISTING FLOW (GPD)	FUTURE FLOW (GPD)	NOTES
AVERAGE DAILY FLOW (ADF)	10,460,000	17,715,200	Additional Future Flow=7,255,160 gpd (see Table 4-8)
MAXIMUM DAY DRY WEATHER FLOW (MDDWF)	15,690,000	26,572,800	Based on MDDWF peaking factor of 1.5
PEAK HOUR WET WEATHER FLOW (PHWWF) 10-YR, 6-HR STORM	25,755,500	35,605,300	Based on peak RDII unit factors for the 10 year, 6- hour storm event for existing; Based on 500 gpapd for future areas



Table 4-8. Additional Future Average Daily Flows By Growth Area

City Growth Area	Low Density Residential Dwelling Units	Medium Density Residential Dwelling Units	High Density Residential Dwelling Units	Mixed Use Residential Dwelling Units	gpd	Commercial & Mixed Use Facilities (sq. ft)	gpd	Industrial Facilities (sq. ft)	gpd	Estimated # of Students	gpd	SubTotal Estimated Future Flow (gpd)
Focused Growth: Abbott Street	24	109		242	74,791	3,425,027	256,877	819,724	81,972		0	413,640
Focused Growth: East Alisal Street/East Market Street		227	91	-	63,518	2,327,648	174,574		0		0	238,090
Focused Growth: Laurel Drive at North Main Street		-		262	52,336	3,212,100	240,907		0		0	293,240
Focused Growth: North Main Street/Soledad Street	33	171	62	202	93,130	2,554,430	191,582	130,276	13,028		0	297,740
Focused Growth: South Main Street		_		283	56,434	4,373,795	328,035		0		0	384,470
Focused Growth Subtotal	57	507	153	989	340,208	15,893,000	1,191,975	950,000	95,000	0	0	1,627,180
Future Growth: Central Area Specific Plan	1,367	1,359	1,185		779,927	489,700	36,728		0	4,033	18,149	834,800
Future Growth: West Area Specific Plan	1361	1,803	1,085	91	865,477	571,500	42,863		0	2,354	10,593	918,930
Future Growth: East Area Specific Plan	2,699	1,669	263	121	947,786	2,898,291	217,372		0		0	1,165,160
Future Growth: East Area	1,305	1,221	147	157	564,215	1,493,396	112,005	4,997,912	499,791		0	1,176,010
Future Growth: Southeast Area					0	-	0	4,672,741	467,274		0	467,270
Future Growth: West Boronda FGA	39				7,770	587,113	44,033	1,102,347	110,235		0	162,040
Future Growth Subtotal	6,771	6,052	2,680	369	3,165,175	6,040,000	453,000	10,773,000	1,077,300	6,387	28,742	4,724,210
Target Area B					0	87,120	6,534	1,502,820	150,282		0	156,820
Target Area F					0	87,120	6,534		0		0	6,530
Target Area K					0	250,470	18,790	1,570,338	157,030		0	175,820
Target Area L					0	620,730	46,550		0		0	46,550
Target Area N					0	337,590	25,320		0		0	25,320
Target Area V		-	-	-	0	810,448	60,780		0		0	60,780
Target Area Subtotal	0	0	0	0	0	2,193,478	164,508	3,073,158	307,312	0	0	471,820
Bolsa Knolls	625	-	-	_	90,651	68,418	5,130	-	0		0	95,780
Salinas Ag-Industrial Center		-	-	_	0	-	0	3,361,743	336,174		0	336,170
System Total	7,453	6,559	2,833	1,358	3,596,034	24,194,896	1,814,613	18,157,901	1,815,786	6,387	28,742	7,255,160







1 inch = 5,000 feet

SALINAS SEWER MASTER PLAN UPDATE

FIGURE 4-1

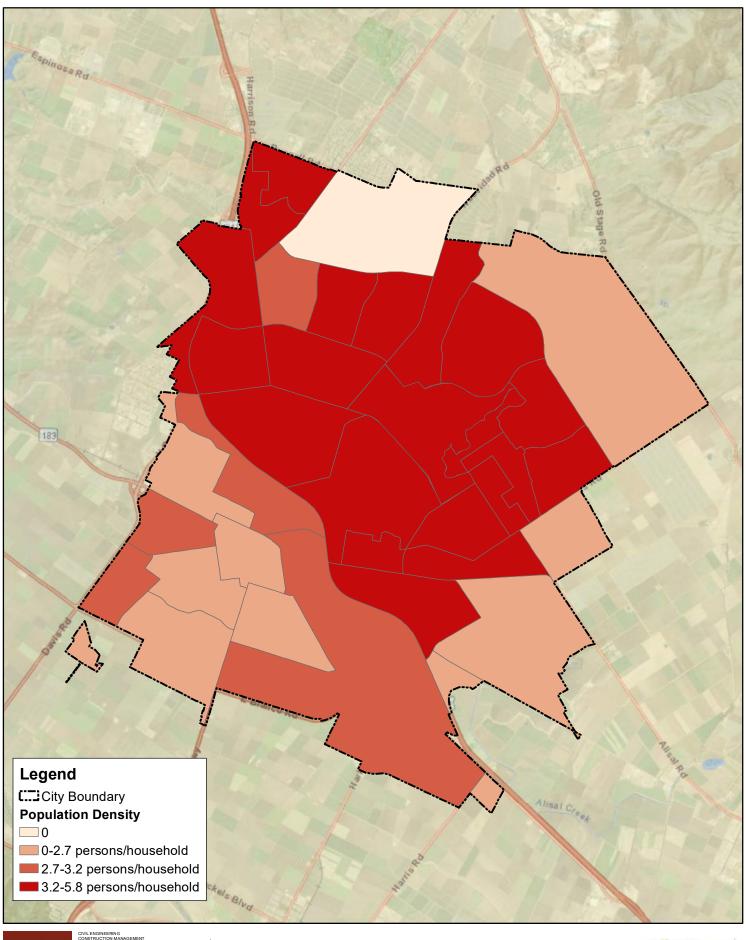
FLOW MONITORING

SURVEY SERVICES FOR THIS

MAP, NOT A LEGAL DOCUMENT.

MAP PRODUCED FEBRUARY 20:







NSTRUCTION MANAGEMENT INDECAPE ARCHITECTURE CHANICAL ENGINEERING MINING BLIC WORKS ADMINIST RATION REVENINGS SOLUTIONS TER RESOURCES

EMBIGIS SOLUTIONS
RESOURCES

LUIS OBISPO, CA 93401
5 544-4011 F 805 544-4294

1 inch = 5,000 feet

SALINAS SEWER MASTER PLAN UPDATE

FIGURE 4-2 POPULATION DENSITY HEATMAP NOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP. NOT A LEGAL DOCUMENT.
MAP PRODUCED MAY 2022.





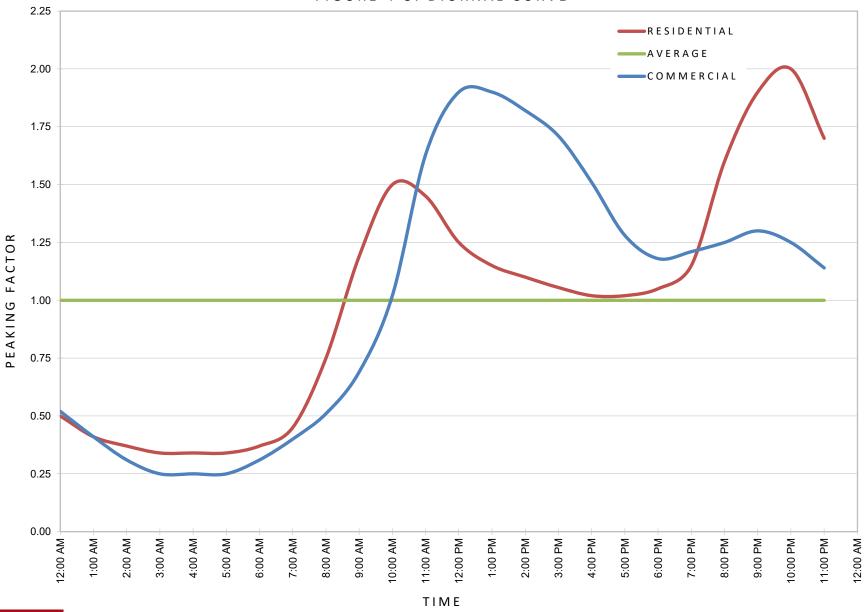




FIGURE 4-4. SEWERSHED 1 AVERAGE DAILY MONITORED FLOW

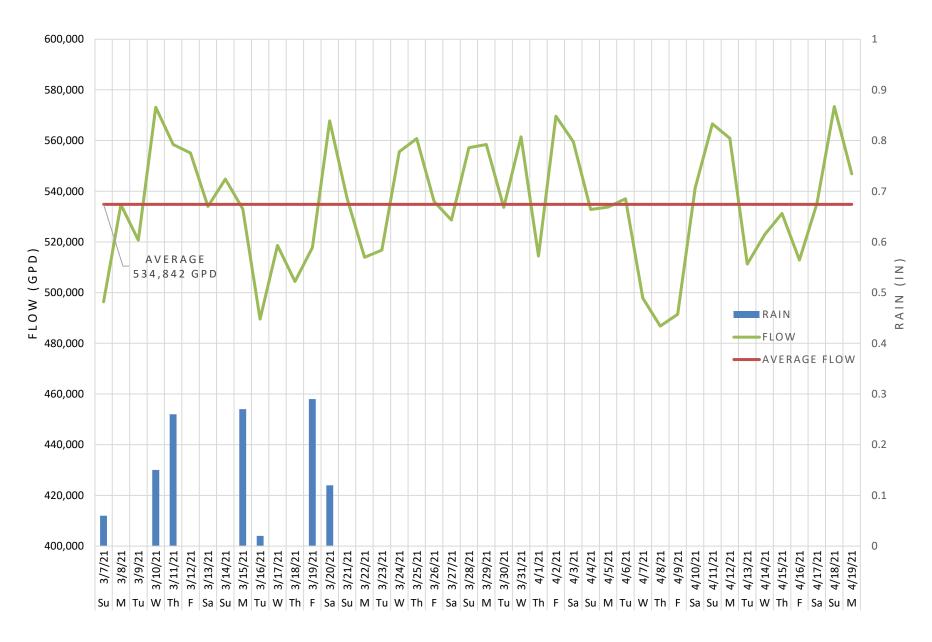




FIGURE 4-5. SEWERSHED 2 AVERAGE DAILY MONITORED FLOW

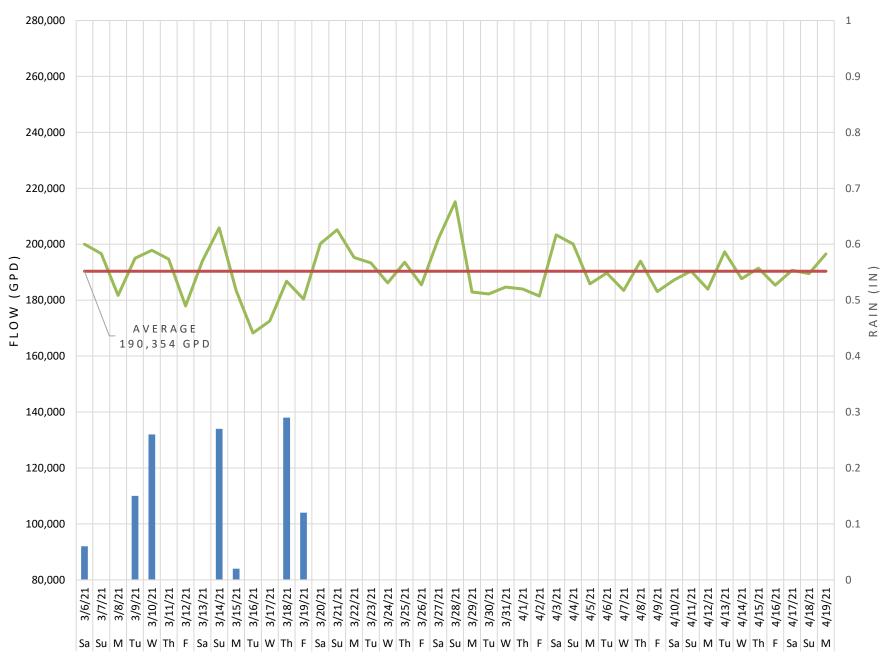




FIGURE 4-6. SEWERSHED 3 AVERAGE DAILY MONITORED FLOW

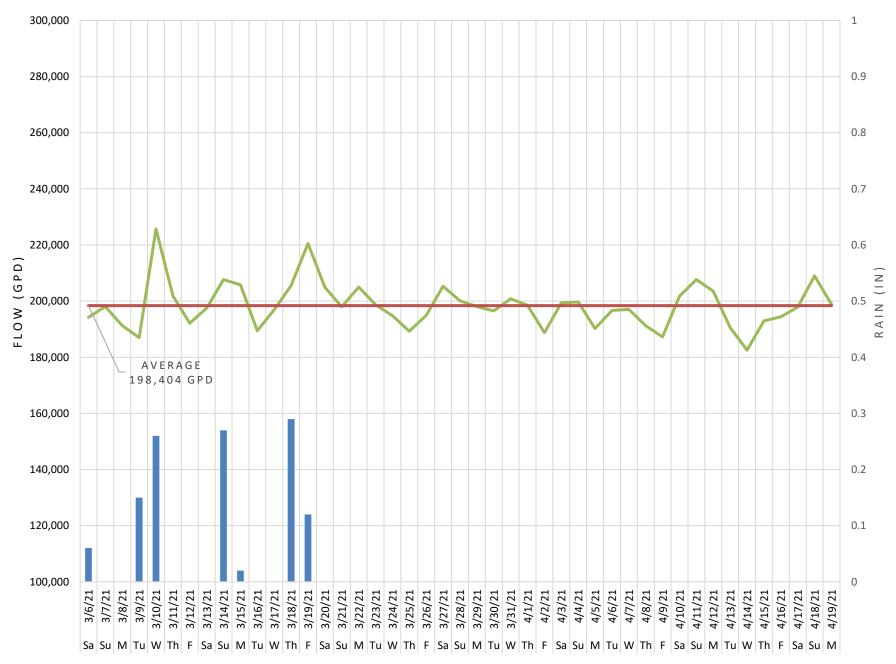




FIGURE 4-7. SEWERSHED 4 AVERAGE DAILY MONITORED FLOW

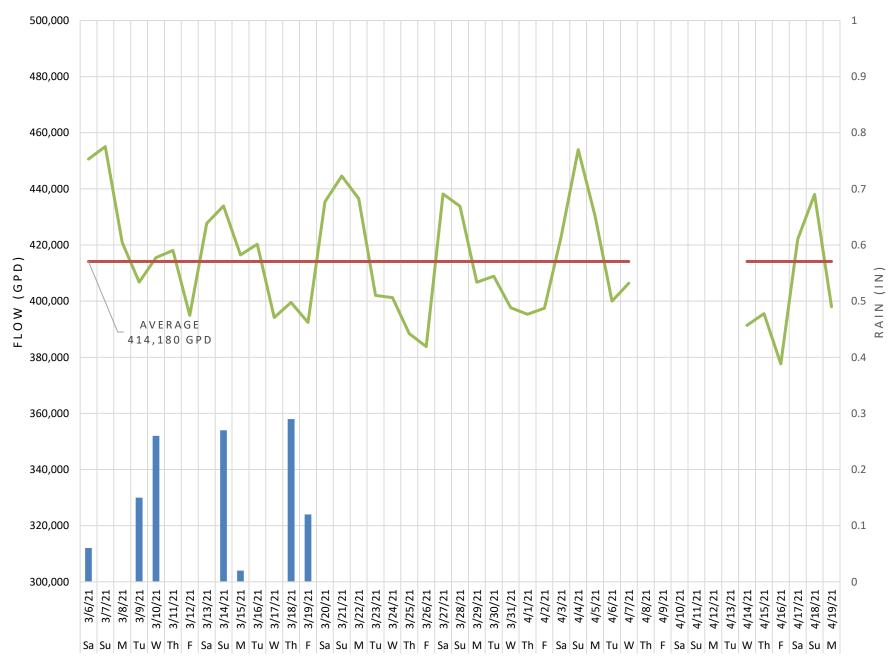




FIGURE 4-8. SEWERSHED 5 AVERAGE DAILY MONITORED FLOW

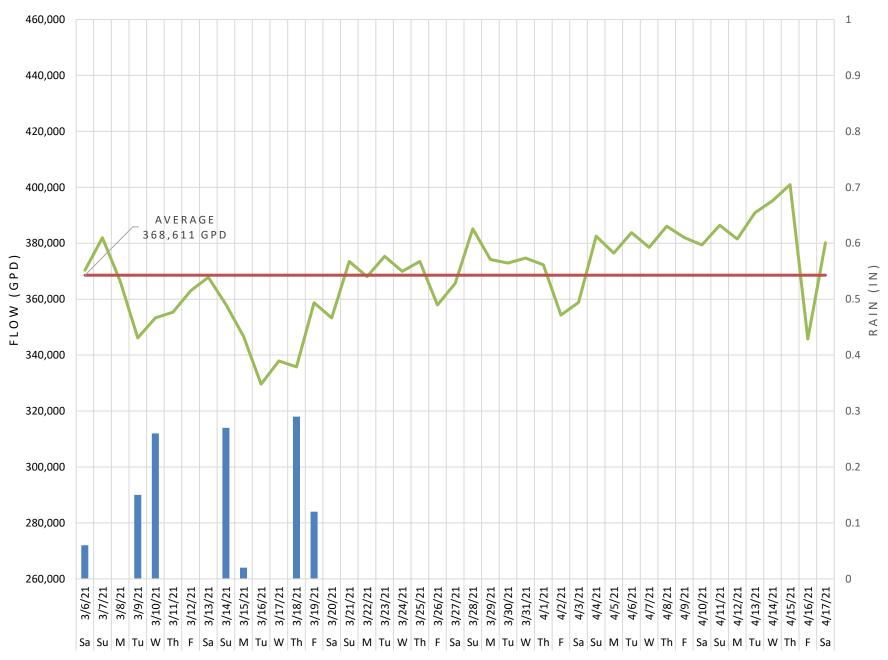




FIGURE 4-9. SEWERSHED 6 AVERAGE DAILY MONITORED FLOW

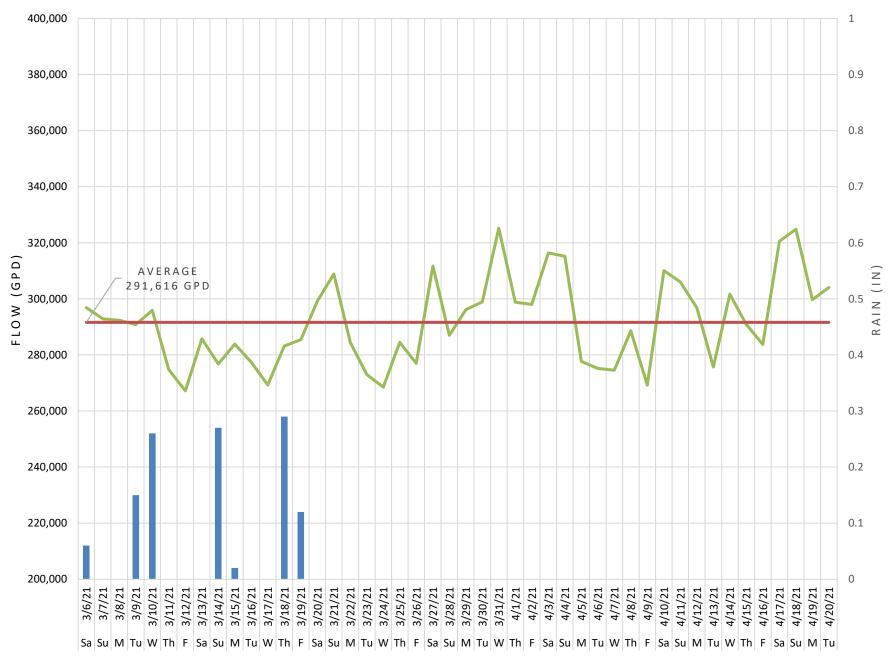




FIGURE 4-10. SEWERSHED 7 AVERAGE DAILY MONITORED FLOW

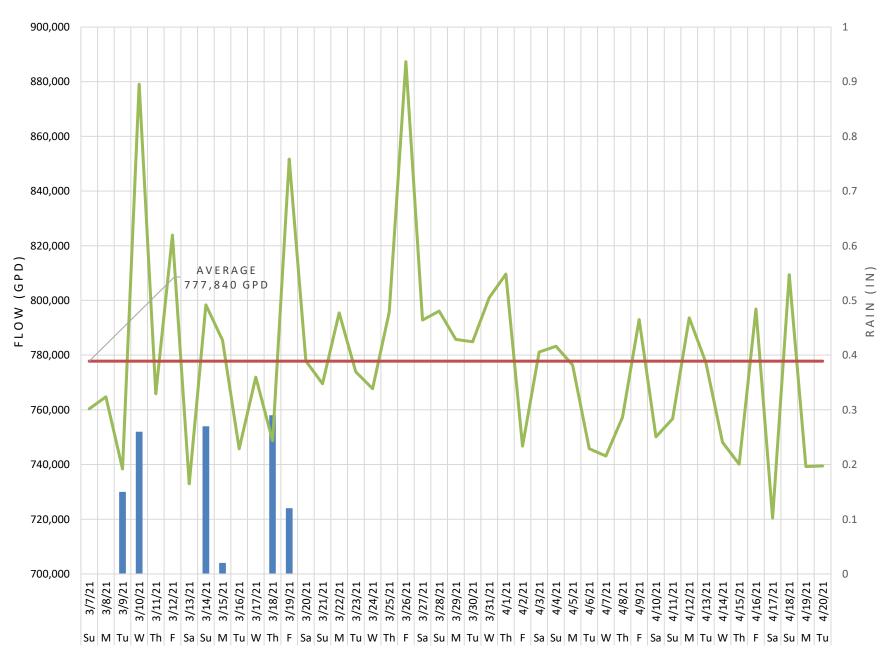




FIGURE 4-11. SEWERSHED 8 AVERAGE DAILY MONITORED FLOW

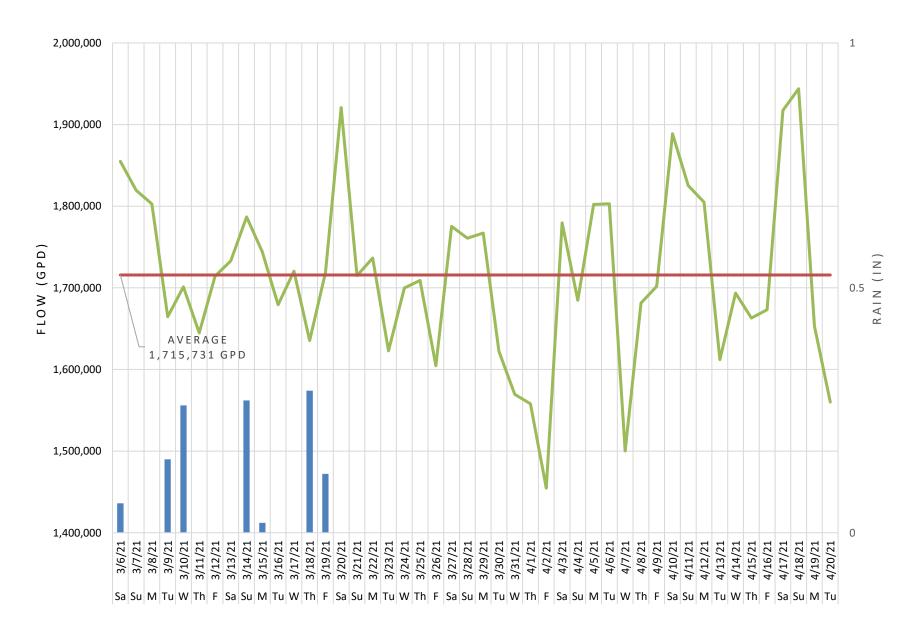




FIGURE 4-12. SEWERSHED 9 AVERAGE DAILY MONITORED FLOW

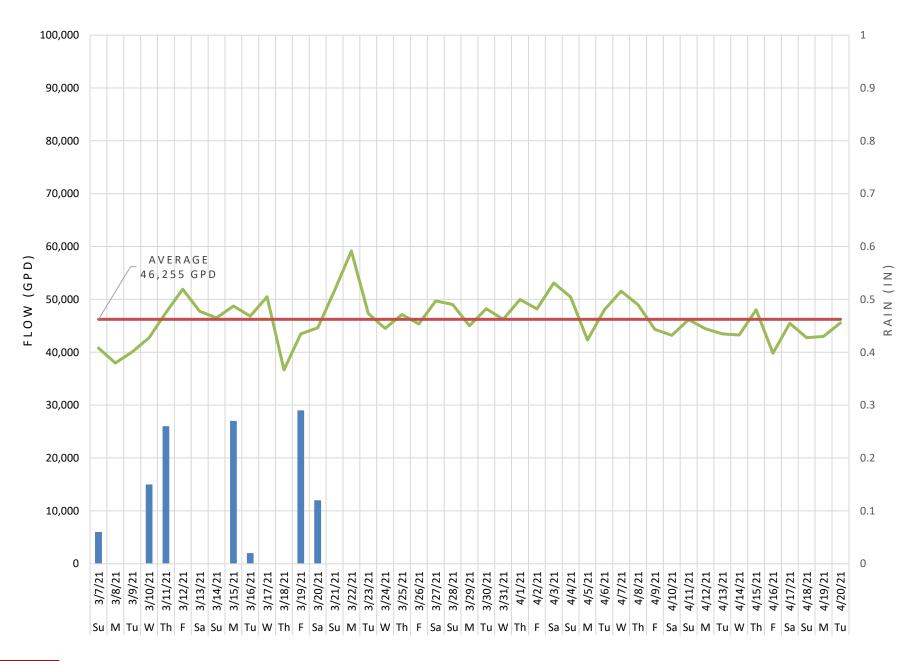




FIGURE 4-13. SEWERSHED 10 AVERAGE DAILY MONITORED FLOW

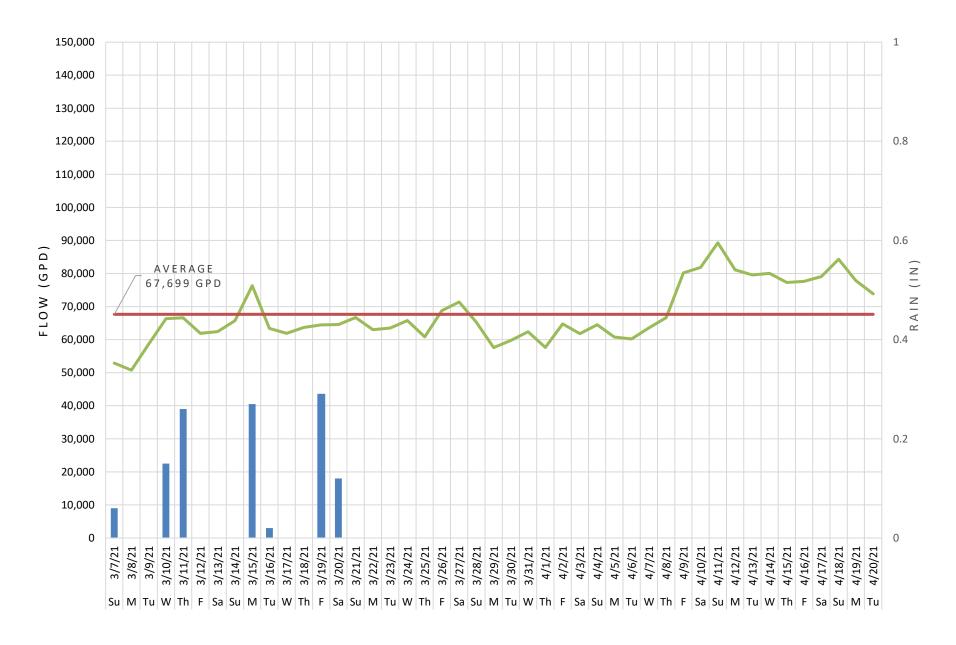




FIGURE 4-14. SEWERSHED 11 AVERAGE DAILY MONITORED FLOW

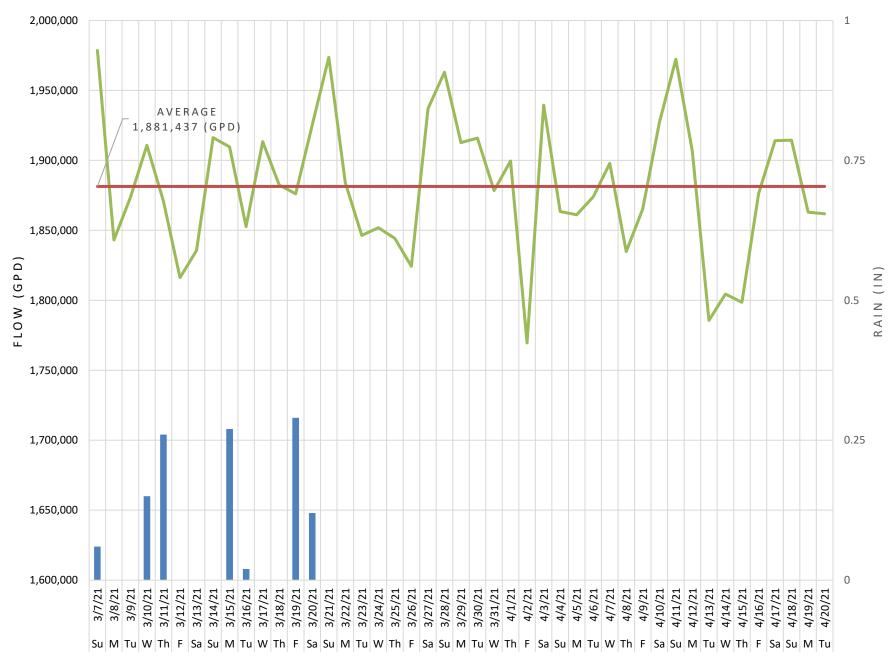




FIGURE 4-15. SEWERSHED 12 AVERAGE DAILY MONITORED FLOW

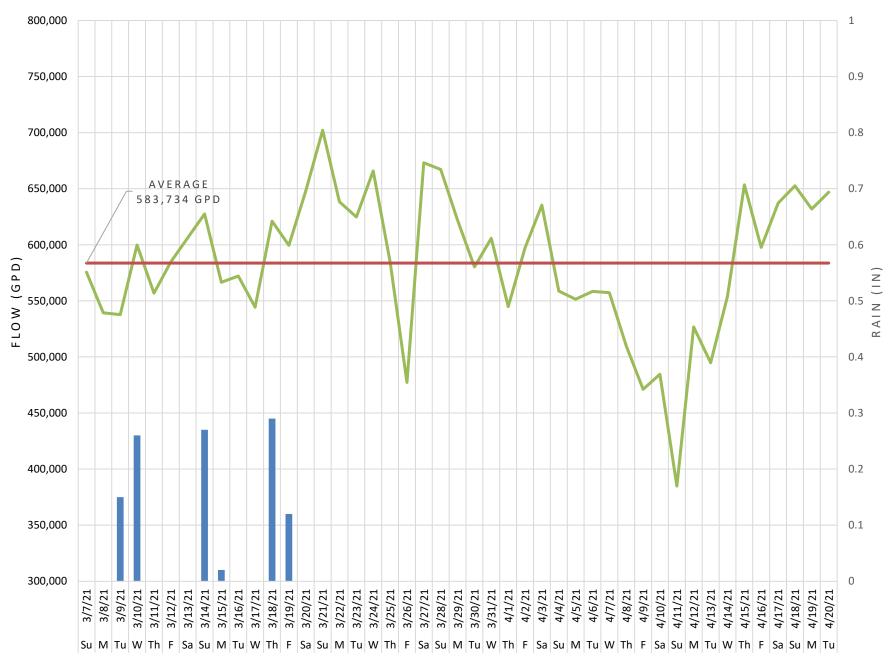




FIGURE 4-16. SEWERSHED 13 AVERAGE DAILY MONITORED FLOW

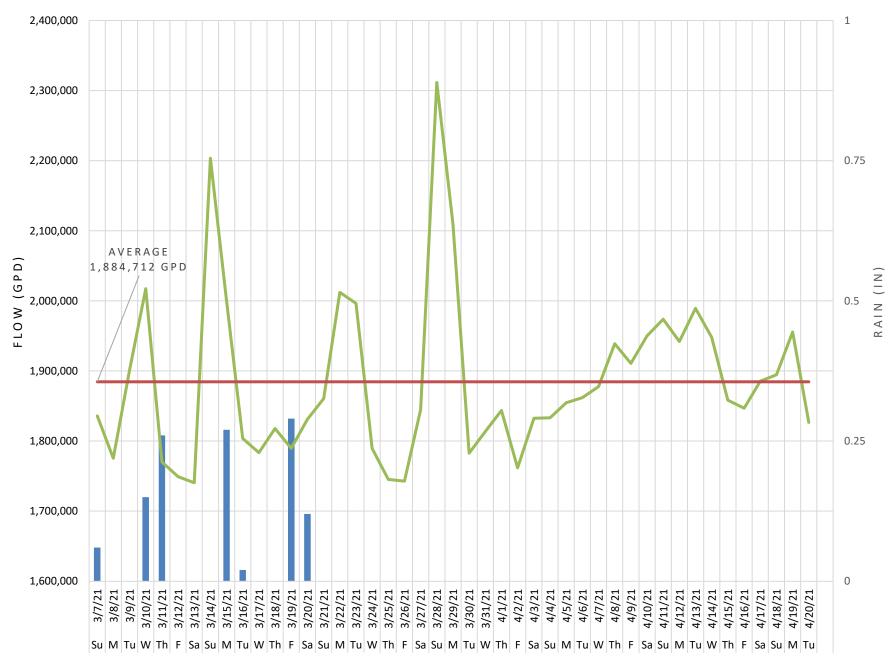




FIGURE 4-17. SEWERSHED 14 AVERAGE DAILY MONITORED FLOW

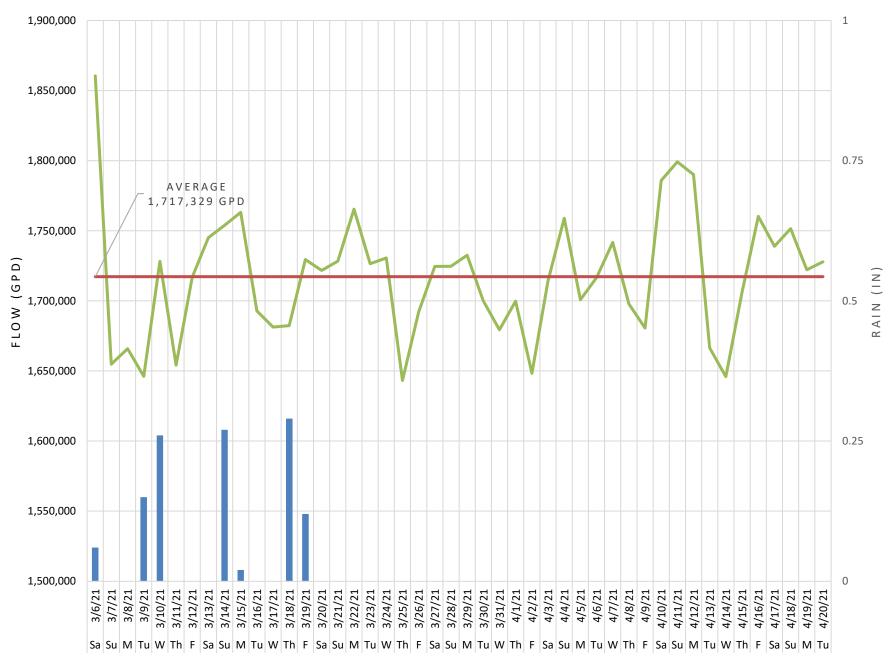




FIGURE 4-18. SEWERSHED 15 AVERAGE DAILY MONITORED FLOW

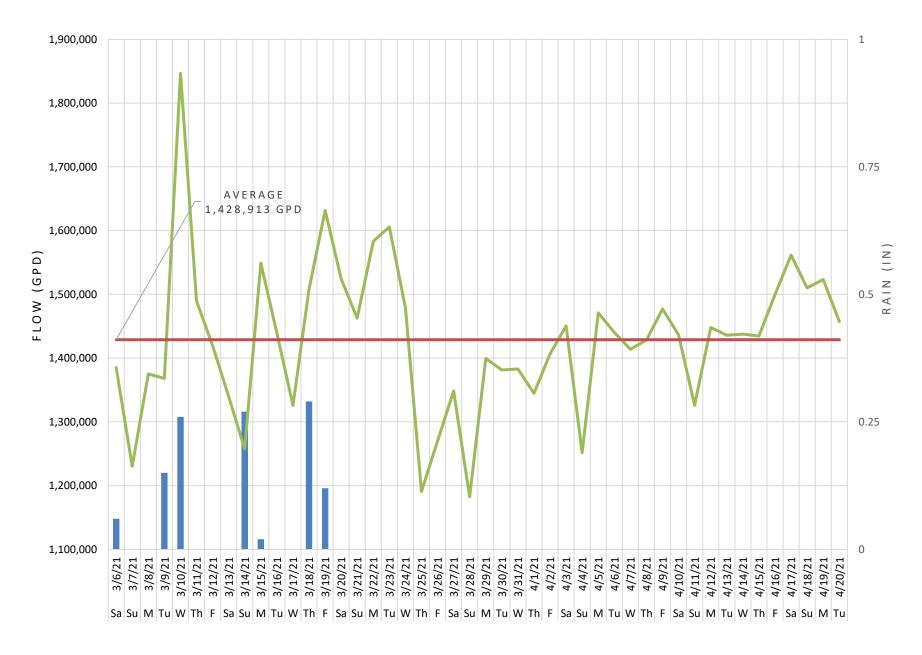




FIGURE 4-19. SEWERSHED 16 AVERAGE DAILY MONITORED FLOW

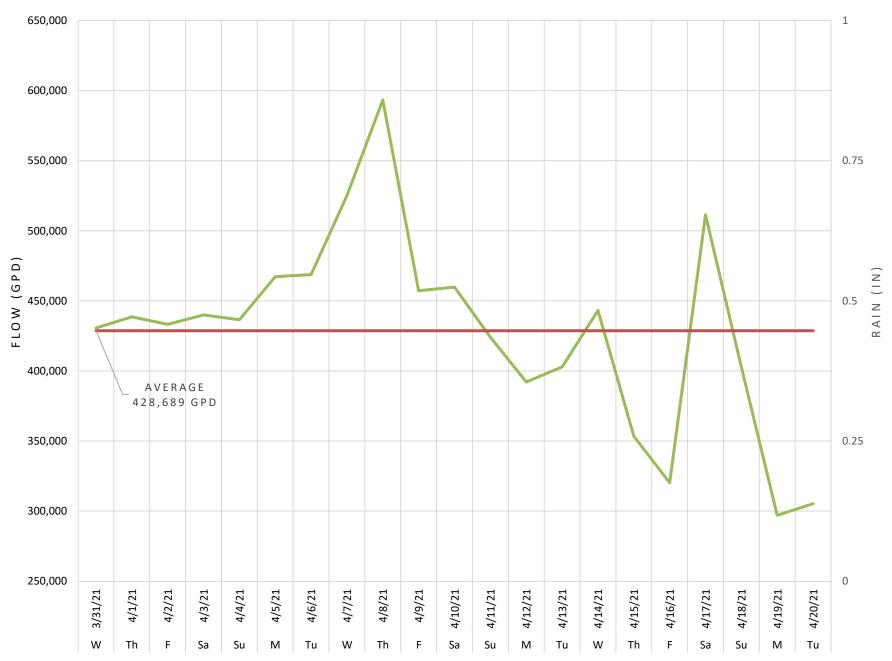




FIGURE 4-20. SEWERSHED 17 AVERAGE DAILY MONITORED FLOW

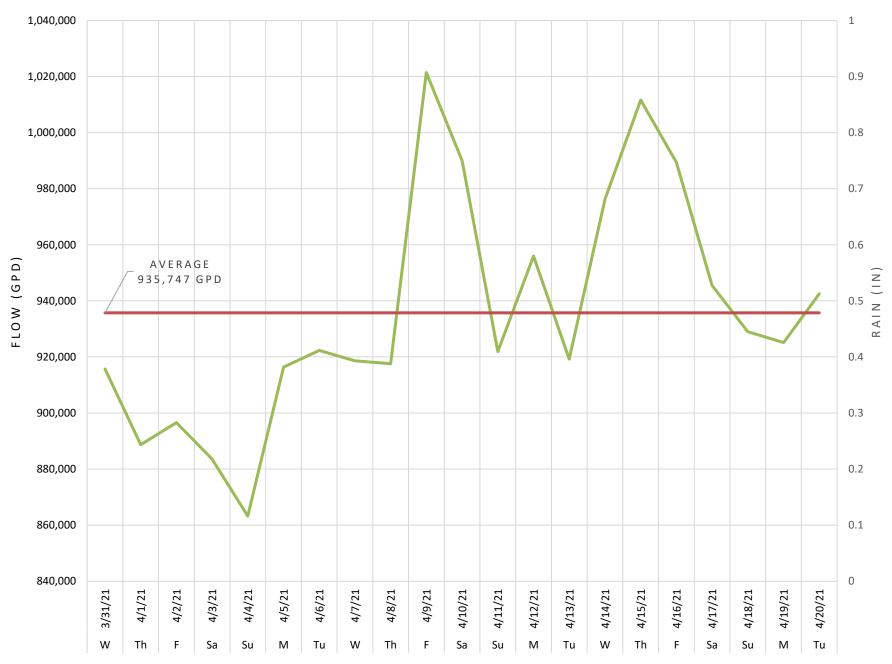




FIGURE 4-21. SEWERSHED 18 AVERAGE DAILY MONITORED FLOW

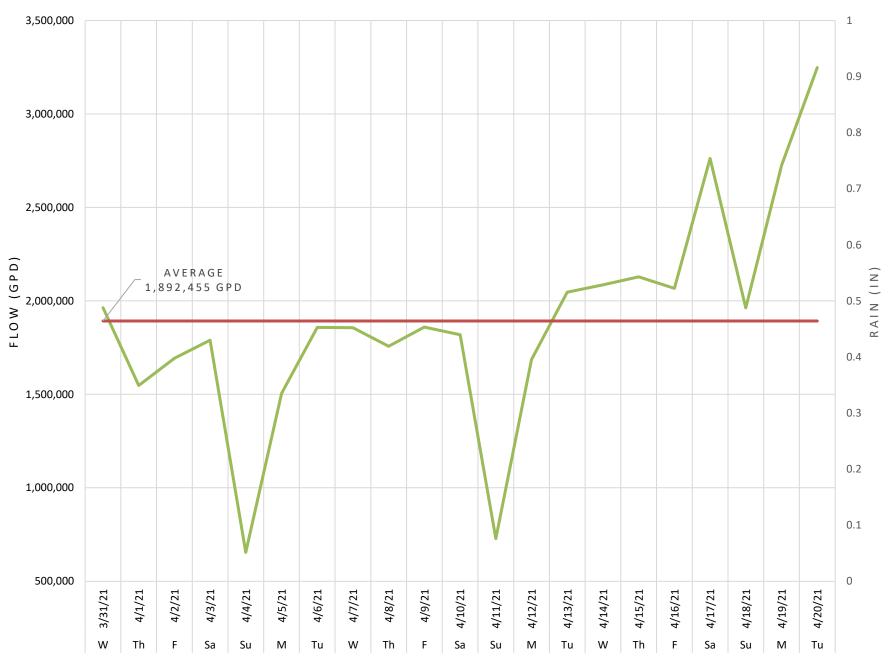
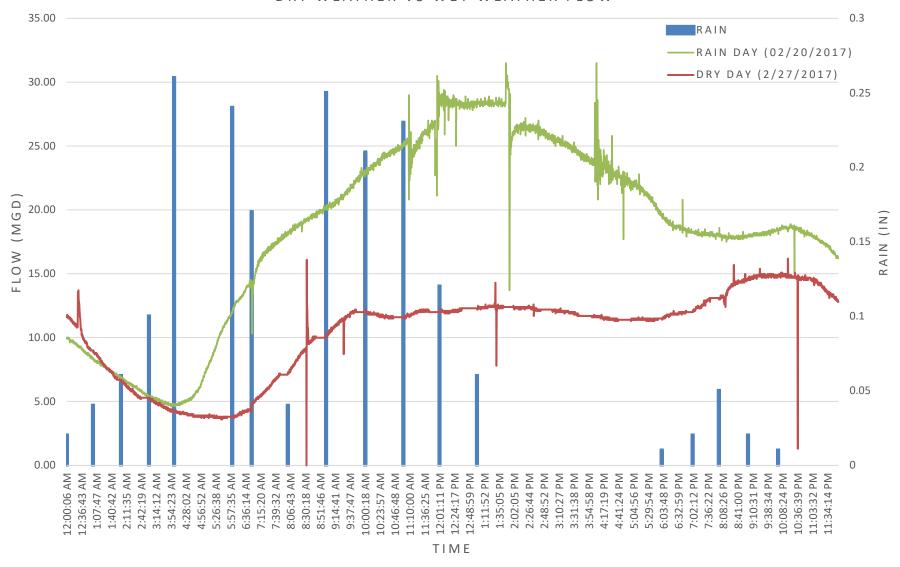




FIGURE 4-22. FEBRUARY 2017 DRY WEATHER VS WET WEATHER FLOW





CHAPTER 5 LIFT STATION EVALUATION

This Chapter presents the evaluation of the City's lift stations for their ability to meet existing and future wastewater flow demands. All figures are located at the end of this chapter.

LIFT STATION BACKGROUND

The City owns and operates ten (10) lift stations located throughout the collection system. The City also maintains the Vista Nueva Lift Station under an assessment district. All lift station force mains tie into the City's gravity system for conveyance to SAPS. City staff conducts regular maintenance of the City's lift stations. In 2018, staff initiated a Supervisory Control and Data Acquisition (SCADA) program to monitor all lift stations. This SCADA program monitors motor run times and sends an alarm to staff directly if there are any operational issues at the lift stations. City staff are unable to operate the lift stations from the SCADA system, only monitor.

The tenants at Harris Place Industrial Park have requested that the City assume operations and maintenance of the privately-owned lift station. The City is currently preparing a separate study to determine the feasibility of operating the Harris Place Lift Station. The review of this lift station is being completed under a separate report.

Fluid Resource Management (FRM), a sub-consultant to Wallace Group, conducted evaluations of the City's eleven lift stations and the lift station at Harris Place. Very little information is available or was able to be collected by FRM during their site inspection of the Harris Place Lift Station. Table 5-1 provides a summary of each lift station. Additional information for each lift station is discussed below. All lift stations are shown on Figure 5-1.

As discussed in Ch. 3, the City also receives wastewater flows from ten (10) private lift stations located throughout the City and shown on Figure 3-3. These private lift stations are not part of this lift station evaluation.



Table 5-1. Lift Station Summary

		Lift Station											
		Airport (Moffett)	Carpenter Hall	De La Torre	Harkins Road	Lake Street ^{4.}	Las Casitas ^{5.}	Mill Lake	Santa Rita	Spicer	TP2	Vista Nueva ^{5.}	
Туре		Submersible	Dry Pit	Dry Pit	Dry Pit	Dry Pit	Dry Pit	Dry Pit	Dry Pit	Dry Pit	Dry Pit	Submersible	
Pump Manufacturer		Flygt	Smith/Loveless	Smith/Loveless	Smith/Loveless	ITT Flygt	Smith/Loveless	Smith/Loveless	Smith/Loveless	Smith/Loveless	Smith/Loveless	ITT Flygt	
Number of Pumps		2	2	2	2	3	2	2	2	2	2	2	
Horsepower (HP), each		10	30	5	5	30	10	15	30	7.5	10	3	
Date Constructed		1981	Unknown	1964	Unknown	1967	1971	1964	Unknown	1967	Unknown	1990	
Pump Model #		3127.090-181044, 3127.090-5766	MU237600-03/10- 01, MU237600- 03/10-02	6412746, 6412763	66N40657, 66N40658	9080091, 980150	122190009, 122190011	3Y6579005A13 DQ	7907700L-1, 791170C-1	67541123, 67541125	99-1024B-2, 99- 1024B-1	9640005, 9640095	
Phase		3	3	3	3	3	3	3	3	3	3	3	
Voltage		208	230	240	240	240	240	240	240	240	240	240	
Speed (rpm)		1740	1175	1165	870	860	1200	1760	1200	1155	1300	1740	
Motor Controller/VFD		Across the line contactor	VFD Altivar 660	Across the line contactor	Across the line contactor	VFD 1Y1261	Soft Start	Soft Start	Across the line contactor	Across the line contactor	VFD, hand mode uses contactor	Across the line contactor	
Pump Design Point	gpm	550	2,250	200	350	2,600	150	500	1,530	400	400	175	
Fullip Design Folia	TDH (ft)			37	18		50	58	433	32	50	54	
Flow (pump1) (GPM)	Rated	550	2,250	200	350	2,400	150	500	1,530	400	400	175	
	Measured	467	1,600	342	228	2,400	357		1,489	195	564	220	
Flow (pump2) (GPM)	Rated	550	2,250	200	350	2,600	150	500	1,530	400	400	175	
(- - - - - - - - - - - - -	Measured	448	1,600	354	281	2,600	345		1,661	218	491	79	
Flow (pump3) (GPM)	Rated Measured					2,800 2,800							
Permanent Standby Generator		yes	yes	no	no	yes	yes	yes	yes	no	yes	no	
Portable Generator Power Receptacle		yes	no	yes	unsafe	yes	yes	yes	yes	unsafe	yes	yes	
Bypass Capabilities		yes	no	no	no	yes	no	no	no	no	no	yes, 4"	
Wet Pit Coating		no	peeling	no	no	yes	no	no	yes	no	yes	no	
Wet Well Diameter or Le	ength (ft)	6	7	4	4	5.25	4	4	8	4	6	6	
Wet Well Width (ft)						25							
Wet Well Surface Eleva	tion (ft)	63.3	50.8	55.8	61.4	54.8	53.2	42.0	78.8	55.4	56.1	51.0	
Wet Well Bottom Elevat	ion (ft)	48.30	20.8	41.3	43.42	14.75	32.2	20	59.3	30.4	21.57	35	
Wet Well Depth (ft)		15	30	14.5	18	40.00	21	22	19.5	25	34.5	16	
Est. Wet Well Capacity	(gallons) ^{6.}	3,170	10,898	1,372	1,692	26,247	1,410	1,879	6,388	2,350	5,285	3,382	
	Low Alarm	Not listed	1.0	0.8	1.0	1.1	Not listed	0.4	1.5	0.1	0.2	Not listed	
	Off	3.0	2.0	1.7	2.0	1.8	1.6	1.5	3.5	1.8	1.3	1.0	
Wet Well Set Points	Lead On	4.0	5.6	3.5	4.0	2.5	3.5	3.0	6.5	4.5	3.3	5.0	
(feet) ¹	Lag On	4.5	6.0	3.8	4.3	3.2	4.1	3.5	7.0	5.0	3.5	7.0	
	Last On	 40.5				4.2		4.0			4.5	7.0	
\\\-\\\-\\\-\\\\-\\\\-\\\\-\\\\-\\\\-\\\\	High Alarm	13.5	8.0	5.5	5.0	6.0	5.8	4.0	8.5	6.0	4.5	7.0	
Wet Well Operating Volume (gal) ²		211	1,036	169	188	687	179	141	1,128	254	423	846	
Wet Well Maximum Volume (gal) ³		3,170	2,015	442	376	4,811	1,410	338	2,632	555	909	#VALUE!	
Force Main Diameter (inches)		8	12	6	6	12	8	6	10	6	6	4	
Force Main Material		PVC	DI	DI	DI	DI	AC	DI	DI	DI	DI	PVC	
Force Main Length (feet		3,706	47	588	300	167	1,035	920	1,128	386	82	378	
Force Main Start Elevat		55.2	25.8	49.3	48.4	37.08	36.49	27.50	71.80	45.00	26.57	48.80	
Force Main End Elevation		59.3	40.3	58.4	56.9	41.00	88.23	49.07	88.19	54.78	46.73	62.00	
Force Main Total Static Head (feet)		8.0	17.5	15.4	11.5	24.5	54.4	27.6	25.4	22.6	23.9	26.0	

Table Notes:

NA - Not Available

- 1. Information provided by FRM site visit conducted 4/9/2021.
- 2. Wet well operating volume calculated based on operating range from Pump Off to Lead On.
- 3. Wet well maximum volume calculated based on maximum desired operating range (Low Alarm to High Alarm).
- 4. Lake Street has two discharge force mains. Pump #1 is connected to 12" dia. FM. Pumps #2 and #3 discharge to 14" dia. FM. All three pumps have same sized motors and pumps even though they all have different serial/model numbers (Personal Communication Doyle McFarland 5/5/2022).
- 5. Wet well high level alarm setting provided by Gary Gabriel email 5/12/2022 for Las Casitas and Vista Nueva.
- 6. Wet well estimated capacity from station-specific ERP.



PHYSICAL DESCRIPTION

Information regarding the physical characteristics of the eleven lift stations was provided by FRM and City staff, and some of the above ground features were visually reviewed by Wallace Group during site visits.

Airport (Moffett) Lift Station

Airport Lift Station is located in the northwest corner of the property at 730 La Guardia Street near the Municipal Airport and serves approximately 584 acres. This lift station collects flow from the commercial and industrial area south of the airport. This is a duplex lift station with submersible Flygt pumps each rated at 550 gpm. At over 3,700 lineal feet, the force main for this station has the longest run of the stations in the Salinas collection system. This lift station has a dedicated backup generator on an automatic transfer switch and bypass capabilities.





Carpenter Hall Lift Station

Carpenter Hall Lift Station is located near the center of the sewer collection system behind the building at 512 North Main Street. There is an access road off North Main Street near 422 North Main Street that leads to the lift station. This lift station collects flow from approximately 508 acres of residential, commercial, industrial properties, and schools in the area. This is a duplex lift station with Smith & Loveless pumps each rated at 2,250 gpm located in a dry pit. The pumps are controlled by VFDs. This lift station has a dedicated backup generator on an automatic transfer switch but no power receptacle or bypass capabilities. This is the City's second largest lift station.



De La Torre Lift Station

De La Torre Lift Station is located in the southwest corner of the property adjacent to 1222 De La Torre Street near the Municipal Airport. This lift station collects flow from approximately 10 acres of commercial properties and hotels in the area west of the airport. This is a duplex lift station with Smith & Loveless pumps each rated at 200 gpm located in a dry pit. This lift station has facilities to connect a portable backup generator but has no permanent electrical generator or bypass capabilities.





Harkins Road Lift Station

Harkins Road Lift Station is located near the southern boundary of the sewer collection system between Harkins Road and the railroad tracks. This lift station collects flow from approximately 146 acres of commercial and industrial properties in the area. This is a duplex lift station with Smith & Loveless pumps each rated at 350 gpm located in a dry pit. This lift station has no permanent electrical generator and an unsafe or transfer switch to connect a portable backup generator. It also has no bypass capabilities.



Lake Street Lift Station

Lake Street Lift Station is located near the center of the sewer collection system near Carr Lake at 146 East Rossi Street. This lift station collects flow from residential, commercial, industrial, hotels, and schools from a large upstream area of approximately 4,108 acres. This is a triplex lift station with Flygt pumps each rated at approximately 2,800 gpm located in a dry pit. The pumps are controlled by VFDs. This lift station has a dedicated backup generator on an automatic transfer switch and bypass capabilities. This is the City's largest lift station.





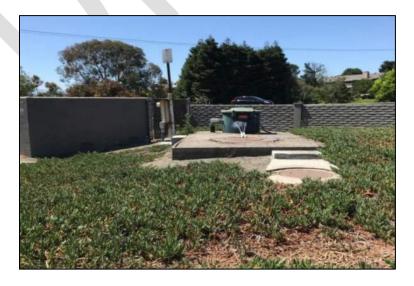
Las Casitas Lift Station

Las Casitas Lift Station is located near the eastern edge of the sewer collection system in a residential area at 721 Las Casitas Drive. This lift station collects flow from approximately 38 acres of residential properties and schools in the area. This is a duplex lift station with Smith & Loveless pumps each rated at 150 gpm located in a dry pit. This lift station has a dedicated backup generator on an automatic transfer switch but does not have bypass capabilities.



Mill Lake Lift Station

Mill Lake Lift Station is located near the western edge of the sewer collection system in a residential area at 81 Gardenia Drive. This lift station collects flow from approximately 43 acres of residential and commercial properties in the area. This is a duplex lift station with Smith & Loveless pumps each rated at 500 gpm located in a dry pit. This lift station has a dedicated backup generator on an automatic transfer switch but does not have bypass capabilities.





Santa Rita Lift Station

Santa Rita Lift Station is located near the northern edge of the sewer collection system in a commercial and residential area at 2021 Sucre Court. This lift station collects flow from residential, commercial, industrial, hotels, and schools from the upstream area of approximately 348 acres, including a small portion of flows through the Bolsa Knolls special assessment district. This is a duplex lift station with Smith & Loveless pumps each rated at 1,530 gpm located in a dry pit. This lift station has a dedicated backup generator on an automatic transfer switch but does not have bypass capabilities. This is the City's third largest lift station.



Spicer Lift Station

Spicer Lift Station is located in a commercial and industrial area at 59 Spicer Street. This lift station collects flow from approximately 79 acres of residential, commercial, industrial properties, and hotels in the area. This is a duplex lift station with Smith & Loveless pumps each rated at 400 gpm located in a dry pit. This lift station cannot have a dedicated backup generator and currently does not have a safe receptacle for a transfer switch and no bypass capabilities.





TP2 Lift Station

TP2 Lift Station is located near Spicer Lift Station in a commercial and industrial area at 650 Elvee Drive. This lift station collects flow from residential, commercial, industrial, hotels, and schools from the upstream area of approximately 136 acres. This is a duplex lift station with Smith & Loveless pumps each rated at 400 gpm located in a dry pit. The pumps are controlled by VFDs set at 48 Hertz maximum output to control vibration. This lift station has a dedicated backup generator on an automatic transfer switch but no bypass capabilities.



Vista Nueva Lift Station

Vista Nueva Lift Station is located near the western edge of the collection system in a residential area at 704 Garner Avenue. This lift station collects flow from the approximately 6 acres of residential properties in the area. This is a duplex lift station with submersible Flygt pumps each rated at 175 gpm. This lift station does not have a dedicated backup generator but does have receptacle and transfer switch for a portable generator and bypass capabilities.





Harris Road Lift Station

Harris Lift Station is a private lift station located in the industrial area south of the sewer collection system at 1 Harris Place. This lift station collects flow from the industrial in the area. This is a duplex lift station with submersible pumps (manufacturer unknown) rated at approximately 100 to 140 gpm. This lift station does not have a dedicated backup generator or bypass capabilities, but does have a receptacle and transfer switch for a portable generator..





HYDRAULIC PERFORMANCE EVALUATION - EXISTING CONDITIONS

The hydraulic characteristics of each lift station and deficiencies are noted below. Design criteria that apply to the lift stations and force mains are summarized as follows:

- 1. Force main velocities should be greater than 2 feet per second to maintain self-cleansing properties but less than 5 feet per second to minimize head loss and potential for water hammer.
- 2. Lift stations should be sized to convey peak flows with the largest pump out of service. Station "capacity" is therefore calculated with the largest pump out of service. This means that the lift station should be capable of operating with only one pump for a duplex station or two pumps for a triplex station.
- 3. Lift station wet wells should be sized to have adequate emergency storage.
- 4. Control settings within the wet well should be set to limit the number of pump starts per hour to acceptable limits as defined by the pump manufacturer. Larger lift stations may require a variable frequency drive to meet this requirement, especially those that receive direct discharge from other lift stations.
- 5. Lift stations should have a means of conveying peak flow during a power outage.

Force Main Hydraulic Evaluation

Force main friction loss was calculated to estimate total pump head and identify pump operating points based on manufacturer's pump curves, data provided by City staff, and observed pumping rates. Pump curves for those lift stations which the City had available are included in Appendix D. The following items are of interest:

- ❖ Airport LS is based on manufacturer's pump curves because the flow was measured when there were potential problems with the pump motors. However, the measured flow rate is approximated by derating the pump to 52% design rpm which could be caused by the worn motors.
- Carpenter Hall LS is based on manufacturer's pump curves. However, the measured flow rate is approximated by derating the pump to 62% design rpm which could be caused by the VFD.
- ❖ Pump curve for De La Torre is assumed similar to Harkins Rd. pump since manufacturer's data is unavailable and are adjusted to 125% to match the measured flows.
- Pump curve for Harkins Road is based on manufacturer's pump curves because the flow was measured when there were noted problems with the check valves.
- TP2 based upon VFD set at 48 Hz maximum by City staff to prevent excessive vibration in the pumps. Operating the pumps at full capacity would result in higher force main flow velocities and system losses.
- Pump curve for Vista Nueva is extrapolated from calibration data from City staff since manufacturer's data is unavailable.

The force mains and pumps were evaluated for hydraulic capacity. The physical condition of the lift station pumps and appurtenances was visually inspected by FRM with recommendations for follow up actions, which are provided in Appendix E.



Force main velocities were calculated based on estimated operating point of the lift station pumps. Calculated velocities are summarized in Table 5-2. As noted above, force main velocities should be greater than 2 feet per second to maintain self-cleansing properties but less than 5 feet per second to minimize head loss and the potential for water hammer. It is recommended that lift stations with force main velocities greater than 5 feet per second should be evaluated further as part of any lift station upgrades. Based on the calculated velocities identified in Table 5-2, the velocities within the force mains for about half of the lift station are within acceptable ranges. However, the calculated velocities in the force mains for the following lift stations is of concern:

- Carpenter Hall Lift Station operating in simplex and duplex modes without speed reduction from the VFDs causes the force main velocity to be 8.5 and 14.8 feet per second, respectively. Reducing the pump output to 62% approximates the measured flow but still causes excessive force main velocity of 8.2 feet per second in duplex mode
- Harkins Road Lift Station operating in duplex mode causes the force main velocity to be 5.2 feet per second, the upper limit of recommended maximum velocity.
- ❖ Lake Street Lift Station is the only triplex lift station in the system. Lake Street Pump #1 is connected to 12" dia. force main. Pumps #2 and #3 discharge to 14" dia. force main. Operating the lift station in simplex, duplex, and triplex modes without speed reduction from the VFDs causes the force main velocities to be 7.4 feet per second for the 12" dia. force main, and 6.1 and 9.7 feet per second, respectively, for the 14" dia. force main.
- ❖ Las Casitas Lift Station pumps have a design rating of 150 gpm at 50 feet Total Dynamic Head (TDH). However, the calculated and measured pumping rates are 395 gpm and 350 gpm, respectively. The force main flow velocity at the design pumping rate of 150 gpm is 1.5 fps. Although this is lower than the recommended minimum flow rate of 2 fps, the flow rate at 395 gpm is 2.5 fps, which is acceptable.
- Mill Lake Lift Station operating in simplex and duplex modes causes the force main velocity to be 5.8 and 7.1 feet per second, respectively.
- Santa Rita Lift Station operating in simplex and duplex modes causes the force main velocity to be 5.8 and 7.1 feet per second, respectively.
- ❖ TP2 Lift Station operating in simplex and duplex modes without speed reduction from the VFDs causes the force main velocity to be 8.4 and 11.9 feet per second, respectively. Reducing the pump output to 80% approximates the measured flow but still causes excessive force main velocity of 6.3 and 9.2 feet per second in simplex and duplex modes, respectively.
- Vista Nueva Lift Station operating in simplex and duplex modes causes the force main velocity to be 5.4 and 6.4 feet per second, respectively.



Table 5-2 Force Main Evaluation

			Lift Station											
		Airport (Moffett) ^{2.}	Carpenter Hall ^{3.}	De La Torre ^{4.}	Harkins Road ^{5.}	Lake Street Simplex ^{6.}	Lake Street Duplex ^{6.}	Las Casitas	Mill Lake	Santa Rita	Spicer	TP2 ^{7.}	Vista Nueva ^{8.}	
							Force Main	Properties						
Force Main Diameter	inches	8	12	6	6	12	14	8	6	10	6	6	4	
Hazen Williams C		140	110	110	110	110	110	130	110	110	110	110	140	
Force Main Length ^{1.}	feet	3,821	163	703	415	282	282	1,150	1,035	1,243	501	197	493	
Elevation Head	feet	8.0	17.5	15.4	11.5	24.5	24.5	54.4	27.6	25.4	22.6	23.9	26.0	
							Desigr	Flows					•	
Simplex Flow	gpm	550	2,250	200	350	2,600	2,600	150	500	1,530	400	400	175	
Velocity	ft/sec	3.5	6.4	2.3	4.0	7.4	5.4	1.0	5.7	6.2	4.5	4.5	4.5	
							Estimated Pu	ımp Capacity						
Simplex Flow	gpm	640	1,600	345	370	2,600		395	510	1,420	205	555	210	
Velocity	ft/sec	4.1	4.5	3.9	4.2	7.4		2.5	5.8	5.8	2.3	6.3	5.4	
Friction Loss ¹	ft	26.7	1.3	9.9	6.7	5.7		3.8	30.1	20.0	2.7	6.7	12.8	
Total Pump Head	ft	34.7	18.8	25.3	18.2	30.2		58.2	57.7	45.4	25.3	30.6	38.8	
Duplex Flow	gpm	780	2,900	395	455		2,950	560	630	1,740	260	810	250	
Velocity	ft/sec	5.0	8.2	4.5	5.2		6.1	3.6	7.1	7.1	3.0	9.2	6.4	
Friction Loss ¹	ft	38.5	4.0	12.8	9.8		3.4	7.2	44.6	29.1	4.2	13.5	17.7	
Total Pump Head	ft	46.5	21.5	28.1	21.3		27.9	61.6	72.1	54.6	26.8	37.4	43.7	
Triplex Flow	gpm						4,650							
Velocity	ft/sec						9.7							
Friction Loss ¹	ft						7.9							
Total Pump Head	ft						32.4							

Table Notes

- na Not Available
- 1. Minor losses are included in the friction loss calculations for all lift stations as an assumed equivalent length of 115 LF. This approximates losses for 1 check valve, 3 elbows, 2 tees, and 1 gate valve in the force main.
- 2. Airport LS is based on manufacturer's pump curves because the flow was measured when there were potential problems with the pump motors. However, the measured flow rate is approximated by derating the pump to 52% design rpm which could be caused by the worn motors.
- 3. Carpenter Hall LS is based on manufacturer's pump curves. However, the measured flow rate is approximated by derating the pump to 62% design rpm which could be caused by the VFD.
- 4. Pump curve for De La Torre is assumed similar to Harkins Rd. Pump since manufacturer's data is unavailable and are adjusted to 125% to match the measured flows.
- 5. Pump curve for Harkins Road is based on manufacturer's pump curves because the flow was measured when there were noted problems with the check valves.
- 6. Lake Street Pump #1 is connected to 12" dia. FM. Pumps #2 and #3 discharge to 14" dia. FM. All three pumps have same sized motors and pumps even though they all have different serial/model numbers (Personal Communication Doyle McFarland 5/5/2022).
- 7. TP2 based upon VFD set at 48 Hz maximum by city staff to prevent excessive vibration in the pumps.
- 8. Pump curve for Vista Nueva is from calibration data from city staff since manufacturer's data is unavailable.



Existing Lift Station Inflow

Table 5-3 provides a summary of existing flows for each lift station based on the unit flow factors for contributing land uses as described in Chapter 4. The calculated flows for each lift station represent gravity flow to the lift station from its tributary area. Lake Street Lift Station also receives flow from the Las Casitas and Vista Nueva Lift Stations. These flows are added to the calculated land-based gravity flows in Table 5-3 in the row labeled "w/ Simplex Flow."

Pumping Capacity Evaluation

Lift stations should be sized to convey peak hour dry weather (PHDW) flows with the largest pump out of service. Station "firm capacity" is therefore calculated with the largest pump out of service. This means that the lift station should be capable of operating with only one pump for a duplex station or two pumps for a triplex station.

Table 5-4 provides a comparison of lift station flows with the largest pump not operating, that is simplex operation for all lift stations except Lake Street Lift Station which is shown for duplex operation since this is the only triplex lift station in the system. The middle row in Table 5-4 shows how well the lift stations are matched to the existing PHDW inflow. It shows that many of the lift stations are oversized. Lake Street will require the third pump to assist under existing PHDW conditions, which is a deficiency.

Lift stations should also be sized to convey peak hour wet weather (PHWW) flows with all the pumps operating. Table 5-4 provides a comparison with all the pumps operating for all lift stations. The bottom row in Table 5-4 shows how well the lift stations can handle PHWW flow. All of the lift stations have adequate excess capacity, except Lake Street which shows marginal excess capacity under PHWW flow conditions. The capacity of Lake Street Lift Station during rain events could be adversely affected by RDII due to the submerged manholes at Carr Lake.



Table 5-3 Existing Lift Station Inflow by Land Use

		Lift Station Existing Flow Rates (gpd)										
		Airport (Moffett)	Carpenter Hall	De La Torre	Harkins Road	Lake Street	Las Casitas	Mill Lake	Santa Rita	Spicer	TP2	Vista Nueva
Residential (g	pd)	0	563,915	0	0	2,562,149	64,040	59,173	306,498	0	97,621	19,830
Commercial (g	3. ,	25,570 4,936	21,816	1,139	43,425	142,320	0	4,330	5,048	37,051	35,858	0
	Industrial (gpd)		195	0	24,548	14,869	91	0	1,500	12,260	75	0
Hotel Rooms	10. /	0	0	2,386	0	2,781	0	0	358	652	113	0
Schools (gpd)		0	3,832	0	0	58,479	1,562	0	8,762	0	2,195	0
11	Otatian	NIA.	NIA.	NI A	NIA	Las Casitas	NIA	NIA	NIA	NIA	NIA	N.A.
Upstream Lift		NA 20 FOG	NA 589,757	NA 2.525	NA 67.072	Vista Nueva	NA 65,693	NA 62.502	NA	NA 40.063	NA	NA 40.830
Total Average	gpd	30,506 21	410	3,525 2	67,973 47	2,780,598 1,931	46	63,503 44	322,166 224	49,963 35	135,862 94	19,830 14
Daily Flow	gpm			+		· · · · · · · · · · · · · · · · · · ·						_
	w/ Simplex LS ^{1.}	NA 4.50	NA 4.50	NA 1.50	NA 1.50	2,536	NA 1.50	NA 1.50	NA 1.50	NA 4.50	299	NA 4.50
Maximum	Peaking Factor	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Day Dry	gpd	45,759	884,636	5,288	101,960	4,170,897	98,539 68	95,255	483,248	74,945	203,793	29,745
Weather Flow	gpm	32	614	4	71	2,896		66	336	52	142	21
	w/ Simplex LS ¹	NA	NA	NA	NA	3,501	NA	NA	NA	NA	347	NA
	Residential Diurnal Factor	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Residential											
	Peaking Factor	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Peak Hour Dry Weather	Commercial Diurnal Factor	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Flow	Commercial Peaking Factor	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	gpd	86,942	1,765,395	10,046	193,723	8,309,027	196,830	189,860	964,146	142,395	401,850	59,490
	gpm	60	1,226	7	135	5,770	137	132	670	99	279	41
	w/ Simplex LS ^{1.}	NA NA	NA	NA	NA	6,375	NA	NA	NA	NA	484	NA
Peak Hour Wet Weather Flow		192	2,000	19	90	6,109	107	312	975	156	775	32

Table Notes:



^{1.} Flow is calculated with upstream lift station(s) operating in simplex mode.

Table 5-4 Lift Station Flow Comparison Summary

	Lift Station											
	Airport (Moffett)	Carpenter Hall	De La Torre	Harkins Road	Lake Street ^{1.2.}	Las Casitas	Mill Lake	Santa Rita	Spicer	TP2	Vista Nueva	
Operating Mode	Across the line contactor	VFD Altivar 660	Across the line contactor	Across the line contactor	VFD 1Y1261	Soft Start	Soft Start	Across the line contactor	Across the line contactor	VFD, hand mode uses contactor	Across the line contactor	
Existing Peak Hour Dry Weather Flow by Land Use (gpm)	60	1,226	7	135	6,375	137	132	670	99	279	41	
Average Flow by Simplex Pump ^{1.}	640	1,600	345	370	5,550	395	510	1,420	205	555	210	
Percent Difference	960%	31%	4845%	175%	-13%	189%	287%	112%	107%	99%	408%	
Existing Peak Hour Wet Weather Flow by Land Use (gpm)	192	2,000	19	90	6,109	107	312	975	156	775	32	
Average Flow by Duplex Pumping ^{2.}	780	2,900	395	455	7,250	560	630	1,740	260	1,050	250	
Percent Difference	306%	45%	1979%	406%	19%	423%	102%	78%	67%	35%	681%	

Flow at Lake Street Lift Station is for duplex operation since this is the only triplex lift station in the system.
 Flow at Lake Street Lift Station is for triplex operation.



Wet Well Capacity Evaluation

To determine the adequacy of the wet well capacity under existing conditions, each lift station was evaluated under three different operating conditions, as follows:

- 1. Worst Case Scenario this is when the flow coming into the lift station is exactly half of the flow rate of the pump
- 2. Average Daily Flows
- 3. Peak Hour Dry Weather Flows

Pump run times were calculated based on the lift station operating volumes and estimated pump flows. Lift station pumps should typically cycle not more than 10 times per hour to limit pump starts. Smaller horsepower pumps may be able to cycle up to 25 times per hour. This recommendation, however, should be based on actual pump manufacturer's recommendations. It is recommended that lift stations should cycle at minimum once per day and preferably two to three times per day to minimize potential for odor. Table 5-5 summarizes the wet well cycle time calculations without the VFD operational. As Table 5-5 notes, Carpenter Hall, Lake Street, and TP2 have VFDs that could greatly limit the amount of pump cycling on and off.

Table 5-5 shows that most of the lift stations wet well operating volumes are undersized. Increasing the operating volumes for Harkins Road, Lake Street, Las Casitas, Mill Lake, Santa Rita and TP2 could improve pump performance, reduce the need for VFDs, and as shown below, increase the amount of time available for potential pumping failures.

Airport Lift Station

The Airport Lift station receives approximately 21 gpm under average daily flow conditions, and 60 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately 6 times per hour under average flow conditions and approximately 15 times per hour under peak hour dry weather flow. Based on these pump cycling times the wet well has adequate capacity for existing flows and therefore, this lift station is not required to be upgraded due to hydraulic constraints.

Carpenter Hall Lift Station

The Carpenter Hall Lift Station receives approximately 410 gpm under average daily flow conditions, and 1,226 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station pumps are controlled by VFDs. In the event that the VFDs were disengaged, the pumps would cycle approximately 18 times per hour under average flow conditions and approximately 17 times per hour under peak hour dry weather flow. Although not required, the wet well operating volume, estimated as 1,000 gallons, could be increased in the event that the VFDs are disengaged.

De La Torre Lift Station

This lift station receives approximately 2 gpm under average daily flow conditions, and 7 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately once per hour under average flow conditions and approximately 2 times per hour under peak hour dry weather flow. Based on these pump cycling times, the wet well operating volume is adequate for existing flows and therefore, this lift station is not required to be upgraded due to hydraulic constraints. However, the lift station appears to be cycling infrequently, with average residence time approximately 70



minutes, which may lead to odor issues during the hot summer months. The lift station pump appears to be substantially oversized with the pump on cycle time lasting for only about 30 seconds during average daily flow. Reducing the pump flow rate could help reduce operating costs and potential issues with extended wet well residence times. However, the force main size would also need to be decreased to ensure minimum velocities in the main.

Harkins Road Lift Station

This lift station receives approximately 47 gpm under average daily flow conditions, and 135 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately 13 times per hour under average flow conditions and approximately 27 times per hour under peak hour dry weather flow. Based on these pump cycling times, the wet well operating volume is marginal for existing flows. The wet well operating volume is estimated at 190 gallons. Depending upon the configuration of the influent piping, this could be increased since the estimated total wet well volume is 1,700 gallons.

This lift station is not required to be upgraded due to existing hydraulic constraints. The lift station pump appears to be substantially oversized for existing conditions, with the pump on cycle lasting for only about 30 seconds during average daily flow. However, Harkins Road is expected to receive future flows, discussed later in this chapter.

Lake Street Lift Station

This lift station receives approximately 1,930 gpm under average daily flow conditions, and 6,375 gpm under peak flow conditions. Based on these inflows it is anticipated that this station operates in simplex or triplex mode under average and peak flows, respectively. The lift station pumps are controlled by VFDs. In the event that the VFDs were disengaged, the pumps would cycle approximately 100 times per hour under average flow and peak hour dry weather flow. Although not required, the wet well operating volume, estimated as 690 gallons, could be increased in the event that the VFDs are disengaged. This is based on estimated pump cycling times without VFDs and the estimated total wet well volume of 26,000 gallons. Also, the pumps and force mains appear to be undersized based upon the high pumping times, high sewage inflow rate, and high velocities in the force mains.



Las Casitas Lift Station

This lift station receives approximately 46 gpm under average daily flow conditions, and 137 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately 14 times per hour under average flow conditions and approximately 30 times per hour under peak hour dry weather flow. Based on these pump cycling times, the wet well operating volume is marginal for existing flows. The lift station pump appears to be oversized with the pump on cycle lasting for only about 30 seconds during average daily flow. The wet well operating volume is estimated at 180 gallons. Depending upon the configuration of the influent piping, this could be increased because the estimated total wet well volume is 1,400 gallons.

Mill Lake Lift Station

This lift station receives approximately 44 gpm under average daily flow conditions, and 132 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately 17 times per hour under average flow conditions and approximately 40 times per hour under peak hour dry weather flow. Based on these pump cycling times, the wet well operating volume is inadequate for existing flows. The lift station pump appears to be oversized with the pump on cycle lasting for only about 18 seconds during average daily flow. The wet well operating volume is estimated at 140 gallons. Depending upon the configuration of the influent piping, this could be increased because the estimated total wet well volume is 1,900 gallons and the pumping rate could be decreased thereby reducing pumping cycling and operating costs.

Santa Rita Lift Station

This lift station receives approximately 224 gpm under average daily flow conditions, and 670 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately 10 times per hour under average flow conditions and approximately 19 times per hour under peak hour dry weather flow. Under average flow conditions, this lift station is right at the recommended 10 cycles per hour. The lift station pump appears to be oversized for existing conditions with the pump on cycle lasting for only about 1 minute during average daily flow. However, Santa Rita Lift Station is expected to receive future flows, discussed later in this chapter.

Spicer Lift Station

This lift station receives approximately 35 gpm under average daily flow conditions, and 100 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately 7 times per hour under average flow conditions and approximately 12 times per hour under peak hour dry weather flow. Based on these pump cycling times, the wet well operating volume is adequate for existing flows and no upgrades are recommended based upon hydraulic considerations.



TP2 Lift Station

This lift station receives approximately 94 gpm under average daily flow conditions, and 280 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station pumps are controlled by VFDs. In the event that the VFDs were disengaged, the pumps would cycle more than 11 times per hour under average flow conditions and more than 20 times per hour under peak hour dry weather flow1. Although not required, the wet well operating volume, estimated at 420 gallons, could be increased in the event that the VFDs are set at 60 Hz maximum. This is based on estimated pump cycling times without VFDs and the estimated total wet well volume of 5,290 gallons. Also, the pumping rate could be decreased thereby reducing pumping cycling and operating costs. Reducing the pumping rate would also reduce the high velocities in the force main.

Vista Nueva Lift Station

This lift station receives approximately 14 gpm under average daily flow conditions, and 41 gpm under peak flow conditions. Based on these inflows it is anticipated that this station always operates in simplex mode. The lift station is cycling approximately once per hour under average flow conditions and approximately 2 times per hour under peak hour dry weather flow. Based on these pump cycling times, the wet well operating volume is adequate for existing flows and therefore, this lift station is not required to be upgraded due to hydraulic constraints. However, the lift station appears to be cycling infrequently, with average residence time approximately 60 minutes, which may lead to odor issues during the hot summer months.

¹ TP2 cycle times in Table 5-5 are based upon VFD set at 48 Hz maximum by city staff to prevent excessive vibration in the pumps. Allowing the pumps to run without VFDs at 60 Hz would increase the simplex flow rate from 555 gpm to 740 gpm.



Table 5-5 Lift Station Cycle Times

		Lift Station										
		Airport (Moffett)	Carpenter Hall	De La Torre	Harkins Road	Lake Street ^{1,2}	Las Casitas	Mill Lake	Santa Rita	Spicer	TP2	Vista Nueva
Operating Mode		Across the line contactor	VFD Altivar 660	Across the line contactor	Across the line contactor	VFD 1Y1261	Soft Start	Soft Start	Across the line contactor	Across the line contactor	VFD, hand mode uses contactor	Across the line contactor
Wetwell Operating												
Volume	gallons	211	1,036	169	188	687	179	141	1,128	254	423	846
Estimated Simplex												
Pump Operation ¹	gpm	640	1,600	345	370	5,550	395	510	1,420	205	555	210
Estimated Duplex												
Pump Operation ²	gpm	780	2,900	395	455	7,250	560	630	1,740	260	810	250
Design Simplex			,			,			ĺ			
Pump Operation	gpm	550	2,250	200	350	5,200	150	500	1,530	400	400	175
	Worst Case Number of Pump Cycles per Hour (Flow In = One-half Pump Rate)											
Estimated Simplex	minutes	1.3	2.6	2.0	2.0	0.5	1.8	1.1	3.2	5.0	3.0	16.1
Pump Operation	Cycles per Hour	45.4	23.2	30.6	29.5	121.1	33.2	54.3	18.9	12.1	19.7	3.7
Design Simplex	minutes	1.5	1.8	3.4	2.1	0.5	4.8	1.1	2.9	2.5	4.2	19.3
Pump Operation	Cycles per Hour	39.0	32.6	17.7	27.9	113.5	12.6	53.2	20.3	23.6	14.2	3.1
					Existing Ave	rage Daily Flow	N					
Estimated Simplex	minutes	10.3	3.4	69.6	4.6	0.5	4.4	3.5	6.0	8.8	5.4	65.7
Pump Operation	Cycles per Hour	5.8	17.6	0.9	13.1	109.9	13.6	17.1	10.0	6.8	11.1	0.9
Design Simplex	minutes	10.4	3.1	70.0	4.6	0.6	5.6	3.5	5.9	8.0	5.9	66.7
Pump Operation	Cycles per Hour	5.8	19.4	0.9	13.0	106.0	10.7	17.1	10.2	7.5	10.2	0.9
					Peak Hour D	ry Weather Flo						
Estimated Simplex	minutes	3.9	3.6	24.8	2.2	0.6	2.0	1.4	3.2	5.0	3.0	25.5
Pump Operation	Cycles per Hour	15.5	16.6	2.4	27.3	102.8	30.0	41.6	18.8	12.1	19.7	2.4
Design Simplex	minutes	3.9	1.9	25.1	2.3	0.6	14.7	1.5	3.0	3.4	5.0	26.8
Pump Operation	Cycles per Hour	15.2	32.3	2.4	26.4	102.8	4.1	41.3	20.0	17.6	12.0	2.2
Estimated Simplex	Pump On (min)	0.3	0.9	0.5	0.6	0.1	0.5	0.3	0.9	1.5	0.9	4.3
Pump Operation	D 05.7 1 1											
Average Daily Flow	Pump Off (min)	10.0	2.5	69.1	4.0	0.4	3.9	3.2	5.0	7.3	4.5	61.4
Estimated Triplex	Pump On (min)	-	-	-	-	0.5	-	-	-	-	-	-
Pump Operation												
Peak Hour Dry		-	-	-	-		-	-	-	-	-	-
Weather Flow	Pump Off (min)					0.1						

Table Notes:

- 1. Simplex flow at Lake Street Lift Station is for duplex operation.
- 2. Duplex flow at Lake Street Lift Station is for triplex operation.



Emergency Response Time Evaluation

Another critical factor for lift station design is the emergency response time that is available to an operator before a sanitary sewer overflow (SSO) occurs in the event of total pump failure, such as due to power outage or other anomaly. Standby generators are on site at many of the City's lift stations, including Airport, Carpenter Hall, Lake Street, Las Casitas, Mill Lake, Santa Rita, and TP2 which will reduce the risk of a SSO due to a power failure. Of those stations not provided with a standby generator, Harkins Road and Spicer, have emergency power receptacles for portable generators that are unsafe to use. Carpenter Hall has a permanent standby generator but is the only lift station without a power receptacle for a portable generator. It is recommended that all lift stations, at a minimum, have an emergency power receptacle with transfer switch to connect a portable generator in the event of a power outage. Power failures are not the only cause of emergencies, total pump failure can occur and therefore, having adequate emergency response time for operators to respond prior to a sanitary sewer overflow is critical.

Emergency response time was evaluated for each lift station, as summarized in Table 5-6. Per discussions with City Operation's Staff, a minimum of 30-minute response time is desired. Response time was calculated based on the amount of time between high water alarm and overflow. None of the lift stations appear to have a dedicated overflow line that gravity flows into the collection system. The overflow location is based on upstream topography and is shown in the station-specific emergency response plans (ERPs). Additional storage capacity was calculated using the volume of the upstream manholes that did not exceed the hydraulic grade line of the ERP-identified overflow location. Additional storage in upstream manholes was not calculated for Carpenter Hall, De La Torre, Las Casitas, Mill Lake, and Vista Nueva lift stations. These locations did not have sufficient as-built or survey of the upstream manholes to determine additional storage.

The response time for a lift station can be increased by increasing available storage in the wet well or providing an overflow to additional emergency storage. Alternatively, the need for immediate response can be eliminated by installing permanent stand-by generators. Results for each lift station are provided as follows:

Airport Lift Station

The Airport Lift station receives approximately 21 gpm under average daily flow conditions, and 60 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 2,115 gallons. Additional storage was estimated in the manholes between the lift station and the low point manhole noted in the lift station-specific ERPs. The available storage including these manholes is estimated at 3,220 gallons with emergency response times of 152 minutes and 53 minutes for ADF and PHDW flows, respectively. Since these response times are greater than 30 minutes, there are no modifications recommended to increase response times under existing conditions.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in La Guardia Street approximately 320 feet away. From there the SSO would travel approximately 1,200 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch that is 50 feet away.

Carpenter Hall Lift Station

The Carpenter Hall Lift Station receives approximately 410 gpm under average daily flow conditions, and 1,226 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 6,334 gallons. Based on these inflows and the available volume, response times from high-level alarm is 15 minutes to 5 minutes for ADF and PHDW flows,



respectively. The emergency response times could be increased by installing an emergency overflow tank.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole immediately adjacent to the lift station. From there the SSO would travel approximately 800 LF in a surface ditch prior to entering a drainage ditch.

De La Torre Lift Station

This lift station receives approximately 2 gpm under average daily flow conditions, and 7 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 846 gallons. Based on these inflows and the available volume, response times from high-level alarm is 346 minutes to 121 minutes for ADF and PHDW flows, respectively. Since these response times are greater than 30 minutes, there are no modifications recommended to increase response times under existing conditions.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in De La Torre Street approximately 1,000 feet from the lift station. From there the SSO would travel approximately 300 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch approximately 30 feet away.

Harkins Road Lift Station

This lift station receives approximately 47 gpm under average daily flow conditions, and 135 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 1,222 gallons. Based on these inflows and the available volume, response times from high-level alarm is 26 minutes to 9 minutes for ADF and PHDW flows, respectively. Since these response times did not meet the minimum time criteria, additional storage was estimated in the manholes between the lift station and the low point manhole noted in the lift station-specific ERPs. The available storage including these manholes is estimated at 6,514 gallons with emergency response times of 138 minutes and 48 minutes for ADF and PHDW flows, respectively. Since these response times are greater than 30 minutes, there are no modifications recommended to increase response times under existing conditions.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in Dayton Street approximately 1,600 feet from the lift station. From there the SSO would travel less than 20 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch approximately 5,000 feet away.

Lake Street Lift Station

This lift station receives approximately 1,900 gpm under average daily flow conditions, and 5,800 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 5,506 gallons. Based on these inflows and the available volume, response times from high-level alarm is 3 minutes to 1 minutes for ADF and PHDW flows, respectively. Since these response times did not meet the minimum time criteria, additional storage was estimated in the manholes between the lift station and the low point manhole noted in the lift station-specific ERPs. The available storage including these manholes is estimated at 45,077 gallons with emergency response times of 23 minutes and 8 minutes for ADF and PHDW flows, respectively. The emergency response times could be increased by installing an emergency overflow tank.



The ERP for this lift station notes that the SSO locations during lift station failure would be a manhole in Carr Lake approximately 6,300 feet from the lift station and a manhole on N Madeira across from Chavez Park. From the Carr Lake location the SSO would travel less than 20 LF to a drainage ditch. At the other location the SSO would travel less than 100 LF to a drainage ditch.

Las Casitas Lift Station

This lift station receives approximately 46 gpm under average daily flow conditions, and 137 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 1,426 gallons. Based on these inflows and the available volume, response times from high-level alarm is 31 minutes to 10 minutes for ADF and PHDW flows, respectively. The emergency response times could be increased further by installing an emergency overflow tank.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in Ranchero Road located approximately 300 feet away. From there the SSO would travel approximately 600 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch located less than 20 feet away.

Mill Lake Lift Station

This lift station receives approximately 44 gpm under average daily flow conditions, and 132 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 1,692 gallons. Based on these inflows and the available volume, response times from high-level alarm is 38 minutes to 13 minutes for ADF and PHDW flows, respectively. The emergency response times could be increased by installing an emergency overflow tank.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in Heather Circle located 300 feet away. From there the SSO would travel less than 50 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch located approximately 600 feet away.

Santa Rita Lift Station

This lift station receives approximately 224 gpm under average daily flow conditions, and 670 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 4,136 gallons. Based on these inflows and the available volume, response times from high-level alarm is 15 minutes to 5 minutes for ADF and PHDW flows, respectively. Since these response times did not meet the minimum time criteria, additional storage was estimated in the manholes between the lift station and the low point manhole noted in the lift station-specific ERPs. The available storage including these manholes is estimated at 7,533 gallons with emergency response times of 34 minutes and 11 minutes for ADF and PHDW flows, respectively. The emergency response times could be increased by installing an emergency overflow tank.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in North Main Street near Massa Street approximately 760 feet away. From there the SSO would travel approximately 60 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch located approximately 600 feet away.



Spicer Lift Station

This lift station receives approximately 35 gpm under average daily flow conditions, and 100 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 1,786 gallons. Based on these inflows and the available volume, response times from high-level alarm is 51 minutes to 18 minutes for ADF and PHDW flows, respectively. Since these response times did not meet the minimum time criteria, additional storage was estimated in the manholes between the lift station and the low point manhole noted in the lift station-specific ERPs. The available storage including these manholes is estimated at 3,691 gallons with emergency response times of 106 minutes and 37 minutes for ADF and PHDW flows, respectively. Since these response times are greater than 30 minutes, there are no modifications recommended to increase response times under existing conditions.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in Brunken Avenue approximately 850 feet from the lift station. From there the SSO would travel approximately 600 LF in the street prior to entering a storm drain inlet that leads to a drainage ditch located 300 ft away.

TP2 Lift Station

This lift station receives approximately 94 gpm under average daily flow conditions, and 280 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 6,346 gallons. Based on these inflows and the available volume, response times from high-level alarm is 67 minutes to 23 minutes for ADF and PHDW flows, respectively. Since these response times did not meet the minimum time criteria, additional storage was estimated in the manholes between the lift station and the low point manhole noted in the lift station-specific ERPs. The available storage including these manholes is estimated at 11,246 gallons with emergency response times of 119 minutes and 40 minutes for ADF and PHDW flows, respectively. Since these response times are greater than 30 minutes, there are no modifications recommended to increase response times under existing conditions.

The ERP for this lift station notes that the SSO location during lift station failure would be a remote manhole in a field approximately 750 feet from the lift station. From there the SSO could travel approximately 90 LF across the field prior to entering a drainage ditch. It is recommended to install a manhole monitor upstream of the lift station to increase awareness of potential SSOs.

Vista Nueva Lift Station

This lift station receives approximately 14 gpm under average daily flow conditions, and 41 gpm under peak flow conditions. The available volume between the high-level alarm and overflow is estimated at 1,904 gallons. Based on these inflows and the available volume, response times from high-level alarm is 138 minutes to 46 minutes for ADF and PHDW flows, respectively. Since these response times are greater than 30 minutes, there are no modifications recommended to increase response times under existing conditions.

The ERP for this lift station notes that the SSO location during lift station failure would be a manhole in Garner Avenue approximately 750 feet from the lift station. From there the SSO would travel less than 50 LF in the street prior to entering a drain inlet that would flow to a water body at Carr Lake located less than 100 feet away.



Table 5-6 Lift Station Emergency Response Time

	Lift Station										
	Airport (Moffett)	Carpenter Hall	De La Torre	Harkins Road	Lake Street	Las Casitas	Mill Lake	Santa Rita	Spicer	TP2	Vista Nueva
High Water Alarm (ft)	5	8	5.5	5	6	5.83	4	8.5	6	4.5	7
Overflow (ft)	15	30	15	18	40	21	22	20	25	35	16
Overflow Location/ MH	O8-003	Wet well	No GIS ID	Q6-005	K5-003, J6-016	I7-019	J4-020	D4-026	N5-014	M5-034	J7-038
Storage Volume (gal)	3,220	6,334	846	6,514	5,506	1,426	1,692	7,533	3,691	11,246	1,904
ADF Inflow without Upstream LS (gpm)	21	410	2	47	1,931	46	44	224	35	94	14
ADF Response Time (min)	152	15	346	138	3	31	38	34	106	119	138
ADF Inflow with Upstream LS (gpm)	NA	NA	NA	NA	2,326	NA	NA	NA	NA	NA	NA
ADF Response Time (min)	NA	NA	NA	NA	2	NA	NA	NA	NA	NA	NA
PHDWF Inflow without Upstream LS (gpm)	60	1,226	7	135	5,770	137	132	670	99	279	41
PHDWF Response Time (min)	53	5	121	48	1	10	13	11	37	40	46
PHDWF Inflow with Upstream LS (gpm)	NA	NA	NA	NA	6,165	NA	NA	NA	NA	NA	NA
PHDWF Response Time (min)	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA

NA= Not Applicable



HYDRAULIC PERFORMANCE EVALUATION - FUTURE CONDITIONS

It is critical to understand what upgrades are required to meet estimated future flows in addition to correcting existing deficiencies. The following sections analyze each lift station for future wastewater flows under the same criteria as existing wastewater flows.

Future Wastewater Flows and Recommendations

Future flow for each lift station was calculated based on planned developments and future development in accordance with the City's General Plan land use, as described in detail in Chapters 2 and 4. Due to variability in wastewater generation from different industrial and commercial users, it is difficult to accurately predict future flow conditions for this type of development. As development occurs, flow contributions will need to be addressed on a case-by-case basis and additional modeling may be required. Note, the future flow estimates are based on the wastewater flowing to each lift station by gravity. If the proposed future development includes any lift stations, this will increase the point flow to the downstream collection system and existing lift stations that may impact the recommendations noted in this chapter and the collection system chapter.

The following summarizes anticipated future flow contribution to each lift station and are shown in Table 5-7. Future lift station tributary area boundaries are depicted on Figure 5-2.

Airport (Moffett) Lift Station

This lift station collects flow from the commercial and industrial area south of the airport. Future flows to the domestic wastewater collection system from expansion of commercial development in the Southeast FGA is estimated to be minimal and the lift station would have sufficient capacity for anticipated future flows. This is contrary to the findings reported in the previous master plan. Based on ground level topography in the future expansion area for commercial development near De La Torre Lift Station, it is anticipated that only minimal future flows would be routed to this lift station. As commercial development is proposed in this region, this will need to be verified.

Carpenter Hall Lift Station

This lift station collects flow from residential, commercial, industrial, and schools in the area. Future flows to this lift station from the proposed developments in North Boronda FGA and Target Growth Areas K and V are estimated to increase by 5 percent. Since the future PHDW flow of 1,286 gpm is less than the simplex pumping capacity of 1,600 gpm, the existing lift station has sufficient excess capacity to manage future flows.

De La Torre Lift Station

This lift station collects flow from the commercial and hotels in the area west of the airport. Future flows to the domestic wastewater collection system from expansion of commercial development in a portion of Southeast FGA is estimated to be more than 6,000 percent increase.

The existing average daily flow and peak hour dry weather flow are estimated to be 2 gpm and 7 gpm, respectively. Assuming future flows from expansion of commercial development in the Southeast FGA is routed to this lift station, flows are estimated to increase average daily flow and peak hour dry weather flow to 165 gpm and 469 gpm, respectively. The lift station should be upgraded before the peak hour dry weather flow exceeds the estimated simplex flow of approximately 350 gpm.



Harkins Road Lift Station

This lift station collects flow from the commercial and industrial areas in the area. Future flows to the domestic wastewater collection system from the Salinas Ag-Industrial Center is estimated to be more than 118 percent increase.

The existing average daily flow and peak hour dry weather flow are estimated to be 47 gpm and 135 gpm, respectively. Based on the Salinas Ag-Industrial Center sewer connections per the Ruggeri-Jensen-Azar and Associates Sanitary Sewer System Analysis Report, future flows to Harkins Road Lift Station are estimated to increase average daily flow and peak hour dry weather flow to 103 gpm and 563 gpm, respectively. This report did identify that a localized sanitary sewer pump station will be needed to connect sewer flows from the development to the City's existing system at Dayton Street. The report did not size this pump station, so an assumed 270 gpm point flow was included in the model based on the peaking factors identified in this SSMPU. This assumption will need to be verified once the sizing of this localized lift station is complete.

Based on the above assumptions, Harkins Road lift station should be upgraded before the peak hour dry weather flow exceeds the estimated simplex flow of approximately 370 gpm.

Lake Street Lift Station

This lift station collects flow from residential, commercial, industrial, hotels, and schools from a large upstream area. Future flows to this lift station from the proposed developments in North Boronda FGA and Target Growth Area V are estimated to increase by 96 percent. Since this lift station is undersized for existing conditions, it should be upgraded as soon as possible.

This lift station is undersized for existing conditions and should be upgraded prior to any future development in North Boronda FGA and Target Growth Areas K and V. The existing average daily flow and peak hour dry weather flow are 1,931 gpm and 6,375 gpm, respectively. The future average daily flow and peak hour dry weather flow are 3,777 gpm and 11,847 gpm, respectively. The maximum duplex and triplex pumping rates are 5,550 gpm and 7,250 gpm, respectively. Since the duplex pumping rate is less than PHDW for both existing and future conditions, this lift station should be upgraded to meet both existing and future needs.

Las Casitas Lift Station

This lift station collects flow from the residential properties in the area with no anticipated significant development proposed. Future flows to the domestic wastewater collection system from expansion of residential development is expected to be minimal and the lift station would have sufficient capacity for anticipated future flows.

Mill Lake Lift Station

This lift station collects flow from the residential and commercial in the area with no anticipated significant development proposed. Future flows to the domestic wastewater collection system from expansion of residential development is expected to be minimal and the lift station would have sufficient capacity for anticipated future flows.

Santa Rita Lift Station

This lift station collects flow from residential, commercial, industrial, hotels, and schools from the upstream area. Future flows to this lift station from the proposed developments in Target Growth Areas K and the septic conversion from Bolsa Knolls are estimated to increase by 81 percent. Since the future PHDW flow of 1,198 gpm



is less than the simplex pumping capacity of 1,575 gpm, the existing lift station has sufficient excess capacity to manage future flows.

Spicer Lift Station

This lift station collects flow from residential, commercial, industrial, and hotels in the area with no anticipated significant development proposed. Future flows to the domestic wastewater collection system from expansion of commercial and industrial development is minimal and the lift station would have sufficient capacity for anticipated future flows.



TP2 Lift Station

This lift station collects flow from residential, commercial, industrial, hotels, and schools from the upstream area. Future flows to this lift station from the proposed developments in the upstream Focused Growth Area and East FGA are estimated to increase by approximately 110 percent. The lift station would need to be upgraded to accommodate the expected increase in future flows.

The existing average daily flow and peak hour dry weather flow are 94 gpm and 484 gpm, respectively. Future flows to this lift station from the proposed developments in the upstream Focused Growth Area and East FGA are estimated to increase the ADF and PHDW flows from 94 gpm to 198 gpm and from 279 gpm to 580 gpm, respectively. The estimated future flows are based upon implementing the proposed CIP upgrade at SSMH M6-012 at East Alisal and South Sanborn that addresses an existing deficiency and reroutes flow away from TP2 to South Sanborn. Therefore, only 12 percent of the flow from potential future development in East FGA would contribute to TP2. The lift station should be upgraded before the peak hour dry weather flow exceeds the estimated simplex flow of approximately 550 gpm.

Vista Nueva Lift Station

This lift station collects flow from the residential in the area with no anticipated significant development proposed. Future flows to the domestic wastewater collection system from expansion of residential development is minimal and the lift station would have sufficient capacity for anticipated future flows.



Table 5-7 Summary of Future Lift Station Wastewater Flows

		Lift Station Future Flow Rates (gpd)										
		Airport (Moffett)	Carpenter Hall	De La Torre	Harkins Road	Lake Street	Las Casitas	Mill Lake	Santa Rita	Spicer	TP2 ^{1.}	Vista Nueva
Residential (gpd)		0	563,915	0	0	4,583,023	64,040	59,173	392,939	0	152,462	19,830
Commercial (gp	d)	25,570	52,207	234,779	43,425	779,671	0	4,330	180,872	37,051	130,195	0
Industrial (gpd)		4,936	195	0	104,694	14,869	91	0	1,500	12,260	75	0
Hotel Rooms		0	0	2,386	0	2,781	0	0	358	652	113	0
Schools		0	3,832	0	0	58,479	1,562	0	8,762	0	2,195	0
						Las Casitas						
Upstream Lift St		NA	NA	NA	NA 110,110	Vista Nueva	NA	NA	NA 504.404	NA 12.222	NA	NA 12.222
	gpd	30,506	620,148	237,165	148,119	5,438,824	65,693	63,503	584,431	49,963	285,040	19,830
Total Average	Percent Increase ^{2.}	0%	5%	6628%	118%	96%	0%	0%	81%	0%	110%	0%
Daily Flow	gpm	21	431	165	103	3,777	46	44	406	35	198	14
	w/ Simplex LS ¹	NA	NA	NA	NA	4,382	NA	NA	NA	NA	NA	NA
Maximum Day	Peaking Factor	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Maximum Day Dry Weather	gpd	45,759	930,222	355,748	222,179	8,158,235	98,539	95,255	876,647	74,945	427,559	29,745
	gpm	32	646	247	154	5,665	68	66	609	52	297	21
Flow	w/ Simplex LS ¹	NA	NA	NA	NA	5,820	NA	NA	NA	NA	NA	NA
	Residential Diurnal Factor	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Residential Peaking Factor	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Peak Hour Dry	Commercial Diurnal Factor	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	Commercial Peaking Factor	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	gpd	86,942	1,852,010	675,920	422,139	16,188,101	196,830	189,860	1,724,569	142,395	835,232	59,490
	gpm	60	1,286	469	563	11,242	137	132	1,198	99	580	41
	w/ Simplex LS ^{2.}	NA	NA	NA	NA	11,847	NA	NA	NA	NA	NA	NA
Weather Flow	gpm	192	2,045	313	398	9,498	107	312	1,430	156	913	32
	Percent Increase ^{3.}	0%	2%	1547%	342%	55%	0%	0%	47%	0%	18%	0%

Table Notes:

- 1. For TP2, only 12% of the future flows from East FGA is contributing to TP2 with a proposed weir constructed at SSMH M6-012 at East Alisal and South Sanborn (see CIP for existing deficiencies).
- 2. Flow is calculated with upstream lift station(s) operating in simplex mode.
- 3. Percent increase in future flow rate versus existing flow rate.



SITE INVESTIGATION SUMMARY & OVERALL RECOMMENDATIONS

Based on the hydraulic analysis and discussion provided, the following is a summary of recommendations for the City's eleven lift stations. The following table provides an overview of the recommendations for upgrades based upon the visual inspection of the lift stations. All of the lift stations should be upgraded such that a spare pump (motor and pump) is available for each lift station. Many of the lift stations, except Airport, Lake Street, and Vista Nueva, should be upgraded with emergency bypass piping systems and receptacles and/or transfer switches for a portable generator. The discussion below gives detailed recommendations for each lift station.

TABLE 5-8. SUMMARY OF LIFT STATION UPGRADES BASED UPON VISUAL INSPECTION

Recommended Lift Station Capital Improvements Location	Repair/Replace Pump/Motor	Replace Control Panel/MCC	Repair Control Panel Disconnects	Install/Upgrade Generator Receptacle & Transfer Switch	Move Control Panel to Above Grade	Evaluate Generator Upgrade	Upgrade Level Controller/SCADA	Coat Wet Well / Dry Well	Install Emergency Bypass	Install Emergency Overflow	Provide Washdown Water	Address Safety/Falling Hazard Concerns
Airport	X		Χ				Χ	Χ		Χ	Χ	
Carpenter	Х		Х	Χ		Χ	Χ		X	Х	Х	
De La Torre	Χ		Х	Χ	Χ		Χ	Χ	Χ	Х	Х	
Harkins Rd	Х		Х	Χ	Χ		Χ		Х	Х	Х	
Lake Street	Х	Χ	Χ			Χ	Χ			Х	Х	Х
Las Casitas	Χ		Χ		Χ		Χ	Χ	Χ	Х	Х	
Mill Lake			Х		Χ		Χ		Χ	Х	Х	
Santa Rita			Х		Χ	Χ	Χ	Χ	Χ	Х	Х	
Spicer			Х	Х	Χ		Χ		Χ	Х	Х	
TP2	Χ		Х			Χ	Χ		Χ	Х	Х	Х
Vista Nueva	Х						Χ	Χ		Х	Х	Χ



Airport (Moffett)

Airport is a duplex lift station with 10 hp submersible Flygt pumps with an estimated simplex flow rate of 640 gpm which is more than the rated and measured flow of approximately 550 gpm and 470 gpm, respectively. Inspection of the pumps revealed that the motors need to be rebuilt which could restore pump performance to its rated capacity. This lift station has a dedicated backup generator on an automatic transfer switch, a receptacle for a portable generator, and bypass capabilities.

Existing and future PHDW flows into this lift station are estimated at only 60 gpm. Therefore, the pumps could be downsized instead of rebuilt. However, to maintain self-cleaning velocities in the forcemain, the wastewater flows must be at least 320 gpm. It is recommended to evaluate the condition of force main and determine if the main could be downsized by lining or other means. This would only be recommended if the forcemain needs to be replaced. Otherwise, it would be cost prohibitive.

The overall condition of this lift station is mixed. That is, some of the equipment is working, but the site inspection was unable to determine if it is working as engineered. The two pump motors are rated as good and poor, respectively. The wet well is rated as operational. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Install overloads on load side of contactors for motor protection
 - Replace breaker disconnect handles for pumps 1 and 2 and install proper disconnect hardware
 - c. Proper labeling for the line voltage on the cabinet and the back-up manual transfer switch lever positions
 - d. Provide wiring diagram at station
 - e. Replace Sch 40 pipe with proper electrical conduit
 - f. Install XP fittings/seals on conduits
 - g. Upgrade to standardized SCADA
- 2) Mechanical Upgrades
 - a. Replace pumps and motors
 - b. Move check valves into a vault located outside of the wet well
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Replace wet well coating
 - c. Relocate wet well vent
 - d. Provide on-site water for wash down
 - e. Determine extent of corrosion on discharge piping and rehabilitate as needed
- 4) Additional Studies
 - a. N/A
- 5) Maintenance Upgrades
 - a. Replace LCD screen for the automatic transfer switch
 - b. Paint the generator enclosure
 - c. Replace the handle to wet well



Carpenter Hall

Carpenter Hall is a duplex lift station with 30 hp dry-pit Smith & Loveless pumps. This lift station has a dedicated backup generator but no receptacle for a portable generator or bypass capabilities. The generator should be evaluated for replacement since the generator has required extensive repairs. The pumps' estimated simplex flow rate is 3,000 gpm which is more than the measured flow of about 1,600 gpm due to the pumps operating on VFDs. Existing and future PHDW flows into this lift station are estimated at less than 1,300 gpm. The existing pumps are oversized to meet existing and future flows. In addition, the pumps are not operating at their best efficiency point at the reduced flow rate. It is recommended that the City replace the pumps, when needed, with pumps that better fit the needs of the existing and future demands. Note, the force main velocities should be considered if the pump flows are reduced to ensure 2 fps cleaning velocity is maintained.

The overall condition of this lift station is operational because the equipment is working, but unable to determine if it is working as engineered. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Label electrical cabinets with line voltage
 - b. Repair or replace motor to pump #1
 - c. Install disconnect switches for each pump at the bottom of the dry pit.
 - d. Install receptacle and transfer switch for portable generator
- 2) Mechanical Upgrades
 - a. Replace flow meter
 - b. Install emergency bypass system
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Repair or replace wet well access lid
 - c. Repair piping/penetration from dry well to wet well
 - d. Provide on-site water for wash down
- 4) Additional Studies
 - a. Evaluate generator for replacement
- 5) Maintenance Upgrades
 - a. Grease seal for Pump #1
 - b. Grease mechanical seal for Pump #2



De La Torre

De La Torre is a duplex lift station with 5 hp dry-pit Smith & Loveless pumps. This lift station does not have a dedicated backup generator or bypass capabilities but does have a receptacle for portable generator. The pumps' estimated simplex flow rate is 345 gpm which is more than the pumps' rated performance but approximates the measured flows of 342 gpm and 354 gpm, respectively. The pumps are over-sized to manage the existing flows and undersized for the anticipated future flows of 469 gpm. Therefore, the pumps and possibly the force main would need to be upsized sometime in the future to accommodate development. It is recommended that this be re-evaluated when the future development is in the planning stages.

The overall condition of this lift station, including both pumps, are currently in poor condition. This lift station is undersized to meet future development needs and will require an upgrade. It is unknown if the existing dry well is capable of housing upsized pumps and electrical. It is recommended that a study be completed to determine if the lift station should be completely replaced or can simply be upgraded.

In addition to this study, the proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Install a receptacle and transfer switch for portable electrical generator
 - b. Replace the control panel breaker disconnects
 - c. Replace the overload reset buttons for the contactors
 - d. Install new control panel above ground
 - e. Upgrade Level Controller system
- 2) Mechanical Upgrades
 - a. Repair motors or replace complete pump and motor
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Install fencing around lift station
 - c. Provide on-site water for wash down
 - d. Install emergency bypass system
 - e. Coat wet well and recoat the dry well floor
- 4) Additional Studies
 - a. Perform study to determine if lift station is required to be replaced or is capable of being upsized to meet future demands
- 5) Maintenance Upgrades
 - a. Replace the isolation valves and check valves
 - b. Remove the debris in discharge pipe wye



Harkins Road

Harkins is a duplex lift station with 5 hp dry-pit Smith & Loveless pumps. This lift station does not have a dedicated backup generator or bypass capabilities. The receptacle for a portable generator is unsafe and should be upgraded as soon as possible. The pumps' estimated simplex flow rate is 370 gpm which is comparable to the pumps' rated performance and greater than the measured flows of 228 gpm and 281 gpm, respectively. Inspection of the pumps revealed that they are in poor condition and the check valves may be faulty. Repairing the pumps and check valves could restore pump performance to their rated capacities.

The pumps are over-sized to manage the existing flows and undersized for the anticipated future flows of 563 gpm. Therefore, the pumps and possibly the force main would need to be upsized sometime in the future to accommodate development. It is recommended that this be re-evaluated when the future development is in the planning stages. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Install receptacle and transfer switch for portable generator
 - b. Replace the control panel breaker disconnects
 - c. Replace the overload reset buttons for the contactors
 - d. Label control panel with line voltage
 - e. Install new control panel above ground
 - f. Upgrade Level Controller system
- 2) Mechanical Upgrades
 - a. Repair motors or replace complete pump and motor
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Install fencing around lift station
 - c. Provide on-site water for wash down
 - d. Install improved emergency bypass system
 - e. Repair leak in the 6" force main downstream of the wye
- 4) Additional Studies
 - a. N/A
- 5) Maintenance Upgrades
 - a. Replace or repairing the isolation valves and check valves



Lake Street

Lake Street is a triplex lift station with 30 hp dry-pit Smith & Loveless pumps connected to two separate force mains – one pump routes flows to a 12-inch diameter main and the other two pumps route flow to a 14-inch diameter main. This lift station has a dedicated backup generator and receptacle for portable generator. The generator should be evaluated for replacement since the generator has required extensive repairs. Bypass capabilities were recently added with the Lake Street Emergency Sewer Replacement Project. The pumps' estimated simplex flow rate is 2,600 gpm which approximates the pumps' design rating and measured flow of about 2,600 gpm. The pumps' estimated duplex flow rate is 5,500 gpm. Existing and future PHDW flows into this lift station are estimated to be 5,770 gpm and 11,242 gpm, respectively.

This lift station has significant deficiencies including insufficient wet well storage, undersized pumps, aged force mains, ongoing clogging/ragging issues, and outdated controls and electrical system. This lift station also poses a safety/falling hazard to operators working at this lift station. It is recommended to completely replace this lift station and force mains in lieu of rehabilitation. This is an immediate need, thus, the deficiencies noted below should only be completed to keep the lift station operational until a new lift station is constructed.

The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Provide arc flash protection at pump contactors
 - b. Replace the control panel breaker disconnects
 - c. Upgrade Level Controller system
 - d. Replace galvanized conduit with PVC conduit
 - e. Label control panel with line voltage
 - f. Install supports for conduits
 - g. Replace MCC cabinet.
- 2) Mechanical Upgrades
 - a. Upsize pumps
 - b. Relocate ventilation intake
 - c. Install a higher flow sump pump
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Replace floor and sink drain pipes
 - c. Provide on-site water for wash down
 - d. Provide restroom with hot water
 - e. Install alarm system and video surveillance
- 4) Additional Studies
 - a. Preliminary Design Report for upgraded lift station. Potentially relocate lift station across the street on the east side of West Rossi Street.
 - b. Evaluate generator for replacement
- 5) Maintenance Upgrades
 - a. Install a guard for the drive belt on ventilation system



Las Casitas

Las Casitas is a duplex lift station with 10 hp dry-pit Smith & Loveless pumps. This lift station has a dedicated backup generator but does not have bypass capabilities or a receptacle for portable generator. The pumps' estimated simplex flow rate is 395 gpm which is more than the pumps' rated performance but approximates the measured flows of 357 gpm and 345 gpm, respectively. The pumps are over-sized compared to the existing flows and the anticipated future PHDW flow of 137 gpm, however, due the forcemain size, the pumps cannot be downsized without also reducing the forcemain diameter which would be cost prohibitive.

The overall condition of this lift station, including both pumps, are currently in good to operational condition. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Install a new control panel above ground
 - b. Repair or replace the breaker disconnects
- 2) Mechanical Upgrades
 - a. N/A
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Install emergency bypass system
 - c. Coat bottom of dry well and entire wet well
 - d. Provide on-site water for wash down
- 4) Additional Studies
 - a. N/A
- 5) Maintenance Upgrades
 - Repair or replace Pump #2. Perform investigation to determine source of high pitch noise. Pull Pump 2 and install spare pump to see if this reveals the source.
 - b. Replace the LCD screen to automatic transfer switch
 - c. Spot repairs to generator enclosure
 - d. Remove debris from wye
 - e. Clean out and installing a blind flange at bottom of wye to facilitate cleaning
 - f. Perform an investigation upstream of this location to determine source of grease build-up (aka Fats, Oil, and Grease, or FOG investigation)



Mill Lake

Mill Lake is a duplex lift station with 15 hp dry-pit Smith & Loveless pumps. This lift station has a dedicated backup generator but does not have bypass capabilities. The pumps' estimated simplex flow rate is 510 gpm which approximates the pumps' rated performance and the measured flows of 500 gpm. The pumps are over-sized compared to the existing flows and the anticipated future PHDW flow of 132 gpm. It is recommended that when the pumps are to be replaced, the pumps be replaced with smaller pumps but still maintain cleaning velocities. This will reduce the City's operational costs over time.

The overall condition of this lift station, including both pumps, are less than satisfactory condition. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Move control cabinet above ground
 - b. Replace control panel breaker disconnects
 - c. Provide label for voltage on the cabinet
 - d. Move electrical conduit underground
- 2) Mechanical Upgrades
 - a. N/A
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Install fencing around dry well
 - c. Coat wet well
 - d. Install emergency bypass system
 - e. Provide on-site water for wash down
- 4) Additional Studies
 - a. N/A
- 5) Maintenance Upgrades
 - a. Repair the broken conduit leading into dry well
 - b. Rebalance or replace pump impellers to remove vibrations
 - c. Perform spot repairs for rust on generator enclosure
 - d. Perform a FOG investigation upstream of this location to determine source of grease build-up



Santa Rita

Santa Rita is a duplex lift station with 30 hp dry-pit Smith & Loveless pumps. This lift station has a dedicated backup generator but does not have bypass capabilities. The pumps' estimated simplex flow rate is 1,420 gpm which approximates the pumps' rated performance and the measured flows of approximately 1,500 gpm. The pumps are oversized compared to the existing PHDW flow and the anticipated future PHDW flow of 1,200 gpm but are within reason to maintain as currently installed.

The overall condition of this lift station, including both pumps, are less than satisfactory condition. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Install control cabinet above grade
 - b. Replace control panel breaker disconnects and overload reset buttons
 - c. Provide label for voltage on the cabinet
 - d. Repair broken conduit between dry and wet well
 - e. Seal all penetrations into the dry well
 - f. Upgrade Micro-Mac control system
 - g. Move conduit underground
- 2) Mechanical Upgrades
 - a. N/A
- 3) Site and Piping Upgrades
 - a. Install emergency bypass system
 - b. Install emergency overflow tank
 - c. Repair wet well coating
 - d. Provide on-site water for wash down
- 4) Additional Studies
 - a. Evaluate generator for replacement
- 5) Maintenance Upgrades
 - a. Repair rust on generator enclosure



Spicer

Spicer is a duplex lift station with 7.5 hp dry-pit Smith & Loveless pumps. This lift station does not have a dedicated backup generator or bypass capabilities. The receptacle for the portable generator is unsafe and should be upgraded as soon as possible. The pumps' estimated simplex flow rate is 205 gpm which is less than the pumps' rated performance and comparable to the measured flows of 195 gpm and 218 gpm, respectively. Inspection of the pumps revealed that they are in poor condition. Repairing the pump impellers could improve the pump performance^{2.} Prior to implementing the following recommended upgrades, a study should be performed to determine if the wet well could be relocated outside of the street. If not, a study should be conducted to determine if an emergency overflow tank is required or if the gravity system has enough capacity to add sufficient response time in case of lift station failure. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Install cabinet above grade
 - b. Installing a transfer switch for emergency back-up generator
 - c. Replace control panel breaker disconnects and overload reset buttons
 - d. Provide label for voltage on the cabinet
 - e. Replace conduit in wet well
 - f. Upgrade the SCADA control system
- 2) Mechanical Upgrades
 - a. N/A
- 3) Site and Piping Upgrades
 - a. Install emergency overflow tank
 - b. Repair leak in the 6" force main in the dry well
 - a. Install removeable bollards at the dry well
 - a. Install emergency bypass system
 - b. Coat the wet well
 - c. Repair coating on the floor of the dry well
 - b. Provide on-site water for wash down
- 4) Additional Studies
 - a. Perform study to determine if the wet well can be relocated outside of the street.
- 5) Maintenance Upgrades
 - a. N/A

² The pump impellers were replaced on May 18, 2022 with non-clog impellers. The pumps performance should be evaluated to confirm that the new impellers are operating adequately.



TP2

TP2 is a duplex lift station with 10 hp dry-pit Smith & Loveless pumps. This lift station has a dedicated backup generator but does not have bypass capabilities. The pumps' estimated simplex flow rate is 555 gpm with the pumps operating at 48 Hz. This is greater than the pumps' rated performance but approximates the measured flows of 565 gpm and 491 gpm. This pumping rate is based upon the VFDs set at 48 Hz maximum to mitigate vibrations in the pumps that may be due to the use of no clog impellers. The source of the vibrations could be investigated by rebalancing or replacing the impellers. If the VFDs were set to allow the pumps to operate at 60 Hz maximum, the pumps' estimated simplex flow rate would increase to 740 gpm, which would be sufficient to meet future PHDW flow of 580 gpm and the lift station would not need to be upsized.

The overall condition of this lift station, including both pumps, are rated less than satisfactory condition. The configuration of the lift station also poses a safety/falling risk to operators. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Replace splice box in wet well
 - b. Install a main breaker with disconnect and disconnects for both pumps on the outside of the cabinet
 - c. Label the cabinet with the voltage
 - d. Install GFI protection for air compressor
- 2) Mechanical Upgrades
 - a. Investigate vibration issue at 60 Hz. If vibrations persist, lift station upgrades will be required to meet future flows.
 - b. Install on-site flow meter
- 3) Site and Piping Upgrades
 - a. Install emergency bypass system
 - b. Install emergency overflow tank
 - c. Provide on-site water for wash down
- 4) Additional Studies
 - a. The condition of the generator should be evaluated for possible repair or replacement
 - b. Investigate how to mitigate safety risks to operators
- 5) Maintenance Upgrades
 - a. N/A



Vista Nueva

Vista Nueva is a duplex lift station with 7.5 hp submersible Flygt pumps³. This lift station has a receptacle for a portable generator and bypass capabilities but does not have a dedicated backup generator. The estimated simplex flow rate is 210 gpm which approximates the measured flow of 200 gpm for the pump that is in good condition. Inspection of the pumps revealed that one of the motors needs to be rebuilt which could restore pump performance to its rated capacity. The pumps appear to be over-sized for the future flows, but no upgrades are recommended.

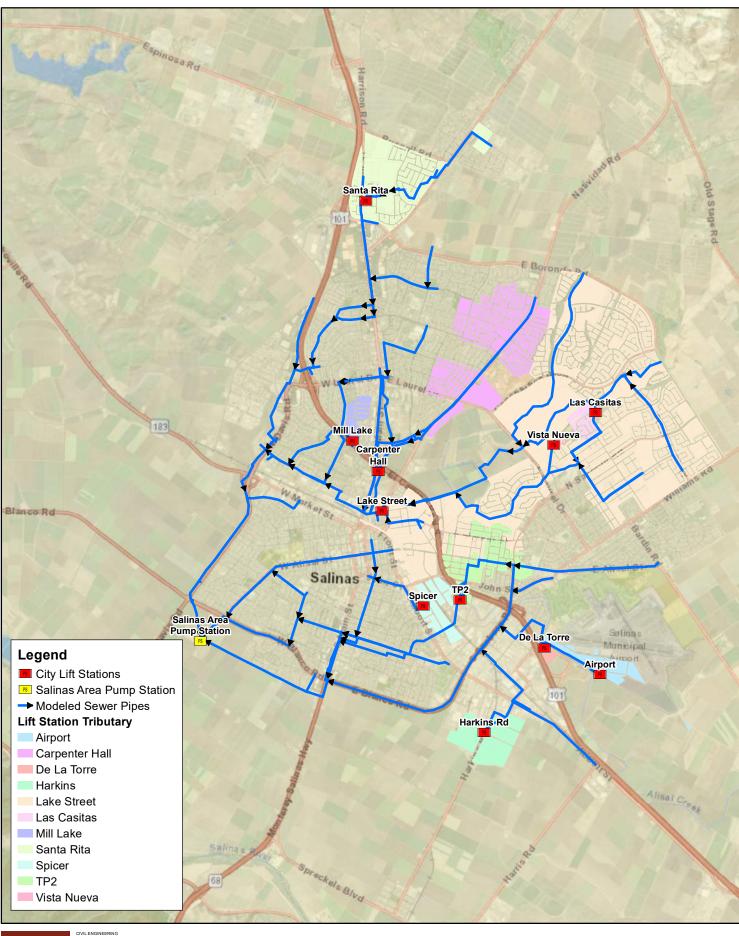
The overall condition of this lift station is mixed with one of the pumps and wet well rated as good and operational, respectively, and the other pump rated poor. The configuration of the lift station also poses a risk to the safety of operators. The proposed CIP program includes the following upgrades based on field inspection report and hydraulic evaluation:

- 1) Electrical Upgrades
 - a. Seal the conduits leading to the electrical cabinet
- 2) Mechanical Upgrades
 - a. N/A
- 3) Site and Piping Upgrades
 - a. Replace vault cover
 - b. Coat wet well
 - c. Install emergency overflow tank
 - d. Provide on-site water for wash down
- 4) Additional Studies
 - a. Conduct a study to determine source of moisture into the electrical cabinet
 - b. Investigate ways to mitigate safety risks to operators
- 5) Maintenance Upgrades
 - a. Repair or replace level indicator lights on control panel
 - b. Replace Pump #2 volute

³ Pump curve data and force main size and location are provided by Doyle McFarland in emails dated May 5, 2022.



5-42





CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING/GIS SOLUTIONS
WATER RESOURCES

VIET MINGERS SOLUTIONS
TERRESOURCES

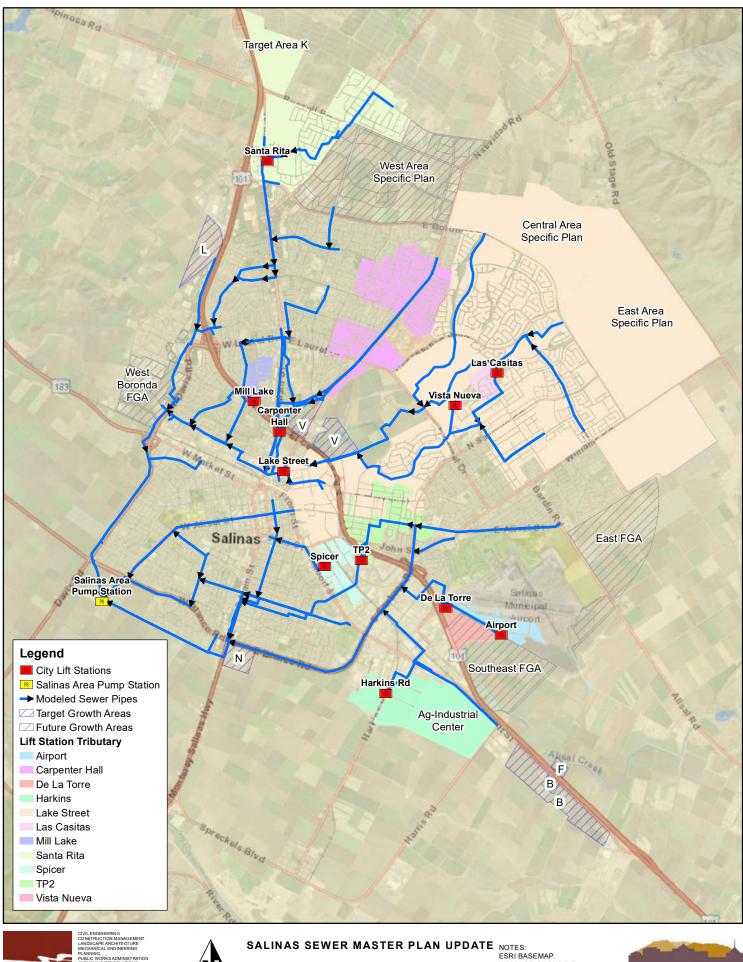
22 CLARION COURT
IN LUIS OBISPO, CA 93401
105 544-4294
1 inch =



SALINAS SEWER MASTER PLAN UPDATE NOTES: ESRI BASEMAP.

FIGURE 5-1 LIFT STATION EXISTING TRIBUTARY AREAS NOTES: ESRI BASEMAP. WALLACE GROUP DID NOT PERFORM BOUNDARY SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED MAY 2022.







1 inch = 5,000 feet

FIGURE 5-2 LIFT STATION **FUTURE TRIBUTARY AREAS** WALLACE GROUP DID NOT PERFORM BOUNDARY SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED FEBRUARY 2023.



CHAPTER 6 COLLECTION SYSTEM ANALYSIS

This Chapter presents the analysis of the domestic wastewater collection system for the City. Refer to Chapter 5 for a detailed evaluation of the City's eleven (11) lift stations and corresponding force mains. All figures are provided at the end of this chapter.

INTRODUCTION

As discussed in Chapter 3, the City's collection system is comprised of approximately 292 miles of gravity pipes, which vary in diameter from 6-inch to 54-inch, eleven (11) City-owned lift stations, and two (2) miles of force mains. The main trunk sewer system (typically 10-inch and larger, with some exceptions) was analyzed using Innovyze InfoSWMM Version 14.7 sewer modeling program to evaluate performance of the wastewater collection system under both existing and future flow conditions. Figure 6-1 provides an overview of the existing gravity wastewater collection system, lift stations, and force mains that were included in the hydraulic model.

COLLECTION SYSTEM ANALYSIS CRITERIA

The City's Public Works Department's Standard Specifications and Design Standards, updated March 2017, and the December 2019 City Sewer System Management Plan, were used as the basis to update the City's hydraulic criteria shown in Table 6-1. These standards were applied in the analysis of the trunk sewer collection system model to identify deficiencies and recommended improvements.

One of the performance criteria for gravity sewer lines is the maximum allowable flow depth, often expressed as the d/D ratio. The variables used in this ratio include the depth of flow in a pipe, d, divided by the diameter of the pipe, D. The maximum d/D criteria defined in the Sewer System Management Plan is 0.90 for all existing pipes and 0.75 for new developments. Based on discussion and review with the City, the maximum allowable flow depth criteria is based on pipe diameter ranges, consistent with industry standards that typically have varying levels of d/D ratios for various pipe sizes. Refer to Table 6-1 for the allowable d/D for all pipe sizes.

Another performance criteria to note are the forcemain hydraulics. The City standards currently state a minimum velocity of 3.5 ft/s and maximum velocity of 6.0 ft/s. As discussed in Ch. 5, forcemain velocities should be greater than 2.0 ft/s to maintain self-cleansing properties but less than 5.0 ft/s to minimize head loss and potential for water hammer. These update criteria are shown in Table 6-1.



TABLE 6-1. HYDRAULIC CRITERIA FOR EXISTING SYSTEMS

STANDARD	CRITERIA
VELOCITY	Minimum: 2.0 ft/s for peak flows; 1.75 ft/s at average rate of flow Maximum: 8.0 ft/sec
MINIMUM SLOPE	6-inch: 1.0% 8-inch: 0.40% 10-inch: 0.26% 12-inch & above: 0.20%
FRICTION FACTOR	Manning's n (gravity)=0.013 for Vitrified Clay Pipe (VCP) 0.011 for Polyvinyl Chloride (PVC) Hazen-Williams C (pressure)=100 to 120 depending on pipe size, material, and age
MINIMUM PIPE SIZE	8-inch
MAXIMUM ALLOWABLE FLOW DEPTH	10-inch or less: d/D=0.67 12-inch to 24-inch: d/D=0.80 27-inch or greater: d/D=0.90
SURCHARGING	Allowed as long as the Hydraulic Grade Line (HGL) remains at least 5-Feet Below the rim elevation
F O R C E M A I N H Y D R A U L I C S	Minimum: 2.0 ft/s Maximum: 5.0 ft/s

COLLECTION SYSTEM MODEL DEVELOPMENT

A hydraulic model of the sewer collection system was developed by Wallace Group with the Innovyze InfoSWMM Version 14.7 sewer modeling program. InfoSWMM utilizes Manning's Equation for open channel flow (gravity pipes), Dynamic Wave analysis for flow routing through the collection system, and the Hazen-Williams Equation for pressurized flow conditions (force mains). Model results were evaluated for pipeline capacity, flow velocity, and maximum d/D ratio under various flow conditions.

Flow Allocation

Existing and future flows were analyzed in the sewer model for dry and wet weather conditions. As discussed in Chapter 4, peaking factors were obtained during flow monitoring and flow rates were derived on a per-parcel basis by land use. These wastewater flows were allocated to individual sewer manholes based on the closest manhole to the land use parcel. Each tributary area represents the total residential, hotel, commercial, and institutional customers contained within the tributary boundary.

Future flows were allocated to the model based on most probable connection location of the Future Growth Areas, Focused Growth Areas, and Target areas. Refer to Figure 6-2 for the future flow allocations. Any deficiencies identified in this SSMPU are based on these assumed connections and the wastewater flows (by gravity, not pumped) discussed in Ch. 4. Additional modeling should be performed during the planning and design phases for each of these future developments should wastewater flows, tie-in



locations to the City's collection system, or timing of future developments be different than what is shown on Figure 6-2.

Model Calibration

Approximately six weeks of sewer flow data was collected in support of the hydraulic model development, as described in Chapter 4 of this report. Representative data for each flow monitoring location was compared to the model results. Through this process, both the land use flow factors and the diurnal curves were adjusted to represent the system flows as recorded through the flow monitoring.

The City provided pump curves for each of the eleven lift stations. The lift stations were calibrated based on FRM's measured flows during their lift station evaluation. If FRM noted worn impellers, poor pumping conditions, etc., the pump curve was adjusted to represent FRM's measured pumping rate.

System Conditions Analyzed

The hydraulic model was utilized to analyze dry and wet weather system flows for both existing and future flow conditions. Within the model, multiple scenarios were developed that represent these various conditions. Existing and future scenarios were utilized to identify system upgrades required in order to meet performance criteria and to identify areas recommended for high priority maintenance operations. Scenarios developed consist of the following:

- Existing ADF Scenario: This scenario represents the trunk sewer system under existing, average dry weather flow conditions.
- Future ADF Scenario: This scenario represents the trunk sewer system under future, average dry weather flow conditions with all future development connecting to the existing collection system.
- Existing MDDW Flow Scenario: This scenario represents the trunk sewer system under existing, maximum dry weather flow conditions. This scenario includes peak hour dry weather flow (PHDWF).
- ❖ Existing MDDW Flow + Reclamation Ditch Diversion: This scenario represents the trunk sewer system under existing, maximum dry weather flow conditions plus 6 cfs diversion coming from the reclamation ditch, since this diversion happens during the dry weather season only.
- ❖ Future MDDW Flow Scenario: This scenario represents the trunk sewer system under future, maximum dry weather flow conditions, with all future development connecting to the existing collection system. This scenario includes PHDWF.
- ❖ Future MDDW Flow + Reclamation Ditch Diversion: This scenario represents the trunk sewer system under future, maximum dry weather flow conditions plus the 6 cfs diversion coming from the reclamation ditch, since this diversion happens during the dry weather season.
- ❖ Existing PHWW Flow Scenario: This scenario represents the trunk sewer system under existing, peak hour wet weather flow conditions.
- ❖ Future PHWW Flow Scenario: This scenario represents the trunk sewer system under future, peak hour wet weather flow conditions, with all future development connecting to the existing collection system.



COLLECTION SYSTEM MODEL RESULTS — EXISTING FLOW CONDITIONS

Deficient System Capacity

The following locations were identified through the analysis as having insufficient capacity to meet the City's performance standards while conveying existing population wastewater flows. Figure 6-3 shows a system-wide map of available capacity under existing worst case peak conditions. Pipes with available capacity are shown in green, marginal capacity (within 10% of exceeding the maximum allowable hydraulic capacity) are shown in yellow, and above the maximum allowable hydraulic capacity are shown in red. Refer to Figure 6-4 for an overall map of the recommended areas for pipe upgrades.

Where improvements are recommended to the collection system, worst case d/D values are provided for reference. These d/D values represent a snapshot of the system under either: a) existing conditions, or b) proposed conditions with all improvements in place. In many cases, recommended upgrades would increase downstream maximum d/D, exceeding the City's standards, if the downstream recommended improvements were not constructed. Through the digital sewer model, maximum d/D was analyzed for the system, ensuring that recommended upgrades did not trigger additional downstream improvements.

Cesar Chavez

This segment receives a large amount of flow from the Alisal community, a dense part of the City. A majority of the flow comes from residential lots, but there are also several commercial lots along N Sanborn Road, and several schools.

The Cesar Chavez Park Existing CIP project proposes to upsize approximately 2,100 feet of 15-inch vitrified clay pipe (VCP) to 18-inch polyvinyl chloride (PVC) pipe from MH-J7-007 near Garner Ave to MH-K7-017 near E Laurel Dr. These pipe segments have d/D values ranging from 0.66 to 0.95 full during existing peak flow conditions. Upsizing would decrease the d/D to a range of 0.38 to 0.58.

This project also proposes upsizing approximately 3,000 ft of 21-inch VCP to 24-inch PVC pipe from MH-K7-017 near E Laurel Dr to MH-L6-001 near Circle Dr. These pipe segments have d/D values of 0.39 to 1 during existing peak conditions. Four (4) manholes are also surcharging within 5 ft of the manhole rim in this section. Upsizing would decrease d/D values to a range of 0.29 to 0.66.

An additional 3,500 ft of 24-inch VCP should be upgraded to 27-inch PVC from manhole L6-001 near Circle Dr to manhole K5-007 near Longbow Way. These pipe segments have d/D values from 0.60 to 0.85 during existing peak flow conditions. Upsizing this pipe will reduce d/D values to within 0.48 and 0.61.

In addition to the pipe replacements, it is also proposed to construct approximately 70 ft of new 24-inch pipe from MH-K5-007 to MH-K5-014, to split flow between 24-inch and 30-inch parallel mains.

City maintenance crews have noted that CCTV evaluation recorded pipe encrustations and manholes condition repairs for the pipe segment between K5-001 and K5-003.



Cherokee Dr

This segment of pipe is an important collector for the northern portion of Salinas. It receives a large amount of residential flow from the Santa Rita neighborhoods as well as commercial flows from the Northridge Mall and Santa Rita Plaza.

The Cherokee Dr. Existing CIP project proposes to replace approximately 1,600 feet of 18-inch VCP with 24-inch PVC pipe on Cherokee Dr from Seminole Way (MH-G3-008) to Tulane St (MH-H3-009). Cherokee Dr has insufficient capacity for existing conditions, with pipes segment d/D values between 0.67 and 1.0 during existing peak flow conditions. Four (4) of the twelve (12) manholes in this section are also surcharging within 5 ft of the manhole rim in the existing PHWWF condition. Upsizing these segments will reduce d/D values to between 0.34 and 0.48.

Upstream TP2

The Upstream TP2 Diversion Existing CIP project proposes to divert flows along East Alisal to South Sanborn Road by increasing the invert at MH-M6-012 by 0.35 ft. This can be done by constructing a weir within the existing manhole. The weir will cause the 18-inch along East Alisal to act as an overflow line, lessening the flow just downstream of TP2, which currently has a d/D value of 0.91 to 1.0 under existing peak conditions and two (2) surcharging manholes within 5 ft of the manhole rim.

It should be noted that future flows will affect this CIP, causing a need for upsizing the pipes along South Sanborn Rd.

Noice Dr/ Tyler St

The Noice Dr./Tyler Street existing CIP consists of two sections of pipe: one on Noice Drive and one on Tyler Street. These two sections are connected on West Laurel Drive and consist of VCP with diameters of 12-inches or less.

Noice Drive receives mostly residential flow, but also some commercial flow from N Main St, as well as flow from the North Salinas High School. For this section the Noice Dr/ Tyler St Existing CIP project proposes to replace approximately 2,100 feet of 8-inch VCP to 12-inch PVC pipe from MH-G4-015 at Chaparral St to MH-H4-011 at E Laurel Dr. This pipe segment has a d/D of 1.0 during existing peak flow conditions. Seven (7) of the nine (9) manholes on this segment are also surcharging to within 5 ft of the manhole rim during peak conditions. Upsizing would bring d/D values at peak condition down to 0.43 to 0.53.

Based on survey of this area, the downstream invert at MH-H4-012 is higher than the upstream invert at MH-H4-011. As part of this CIP, it is recommended to reconstruct MH-H4-012 to match inverts and change the flow direction from MH-H4-011 to MH-H4-012.

Additionally, it is recommended that approximately 170 ft of new 12-inch PVC pipe be constructed to connect MH-H4-006 to MH-H4-001 at West Laurel Drive and North Main Street. This new pipe will relieve the parallel 8-inch lines along North Main St that exceeds capacity under existing peak flow conditions.



Tyler Street also receives mostly residential flows with some commercial flow, and flow from one school, Kamman Elementary. It is recommended that approximately 3,300 feet of 12-inch VCP along West Laurel Dr. and Tyler St. from MH-H3-023 to MH-I3-001 should be upsized to 15-inch PVC. The d/D value for this section is 1.0 and nine (9) of the eleven (11) manholes are surcharging to within 5 ft of the manhole rims in the existing PHWWF condition. Upsizing would bring d/D values down to 0.43 to 0.70.

Natividad Rd or Alternative Natividad Consolidation

Natividad Road is a principal arterial in Salinas and this segment of pipe collects flow mostly from residential lots, with portions coming from commercial, and a few schools.

The Natividad Rd CIP project proposes to replace approximately 2,700 feet of 12-inch VCP to 15-inch PVC pipe from MH-G6-002 to MH-H6-003. These pipe segments have a d/D value of 1.0 during existing peak flow conditions. Upsizing would reduce d/D values to a range of 0.31 to 0.68. This project also recommends an overflow weir be constructed 0.5 ft above MH-H6-003 invert to make the 12-inch parallel an overflow pipe. Approximately 3,600 ft of 15-inch VCP should be replaced with 18-inch PVC pipe from MH-H6-003 to MH-I5-007. These pipe segments have d/D values of 0.85 to 1.0 during existing peak flow conditions.

At Sherwood Dr, approximately 305 ft of 12-inch VCP from MH-J5-003 to MH-J5-005 should be upsized to 15-inch PVC pipe. An additional 2,000 ft of 15-inch VCP should be upsized to 18-inch PVC from MH-J5-005 to MH-J4-010. These segments of pipe have d/D values of 0.99 to 1.0 during existing peak flow conditions. Eighteen (18) of the manholes are also surcharging within 5 ft of the manhole rim in the existing PHWWF condition. Upsizing would bring down the d/D values to between 0.39 and 0.54.

As an alternative project, the Natividad Consolidation CIP proposes to abandon the parallel 12-inch overflow and upsize the approximately 7,400 ft of 15-inch pipe to 21-inch from MH-H6-003 to MH-I5-011 and 24-inch from MH-I5-011 to MH-J4-022, as well as upsize approximately 1,100 feet of 21-inch line to 30-in line from MH-J4-022 to MH-K4-002. Note, the last segment of this CIP proposes to upsize the 21-inch line under HWY 101.

Northridge Mall

This segment of pipe runs on North Main Street from East Boronda Road to just past San Juan Grade Road. This pipe receives mostly residential flows, in addition to commercial flows from Northridge Mall and Santa Rita Plaza, as well as flows from three schools.

The Northridge Mall Existing CIP project proposes the upsizing of approximately 2,300 ft of 15-inch VCP to 18-inch PVC pipe from MH-E4-007 to MH-F4-011 along N Main St. These pipe segments have a d/D of 1.0 during existing peak flow conditions. Upsizing will reduce the d/D to a range of 0.31 to 0.80.

It is also recommended to connect the 18-inch pipe to the 27-inch pipe at MH-F4-031, abandoning 1,800 feet of the parallel 12-inch line along North Main Street from MH-F4-



031 to MH-G4-005. With current conditions, six (6) manholes are surcharging within 5 ft of the manhole rim in the existing PHWWF condition.

Low Pipe Velocity

Low pipe velocity results in the increased likelihood for solids to settle out of wastewater flow, leading to pipe backups and blockages. The City's design standards specify a minimum pipe velocity of 2.0 ft/s at peak conditions in order to "flush" out the line and maintain solids in suspension. A total of 325 modeled pipes were identified with a velocity below 2.0 ft/s under existing max day conditions. It is recommended that pipes identified with a maximum velocity of less than 2.0 ft/s be flushed on a regular basis that corresponds with the City's maintenance schedule. Total length of pipe running with a max day velocity less than 2.0 ft/s is 23 miles. Figure 6-5 depicts the pipes identified with low pipe velocities. Note, these recommendations are only for sewer mains modeled. It is anticipated that there are more sewer mains within the City's sewer collection system that have low velocities, thus a good sewer cleaning program is imperative to minimize risk of sanitary sewer overflows.

COLLECTION SYSTEM MODEL RESULTS – FUTURE FLOW CONDITIONS

As discussed, Figure 6-2 depicts the flow allocations that were used to analyze the future flow conditions in the model. It is important to understand that some of these deficient areas are due to a combination of multiple future developments. As stated previously, additional modeling should be performed during the planning and design phases of these future developments should wastewater flows, tie-in locations to the City's collection system, or timing of future developments be different than what is shown on Figure 6-2.

Deficient System Capacity

The following locations were identified through the analysis as having insufficient capacity to meet the City's performance standards while conveying future wastewater flows. The future flow scenarios assume that all existing CIPs identified by the sewer model have been constructed. Figure 6-6 shows a system-wide map of available capacity under future worst case peak conditions. Pipes with available capacity are shown in green, marginal capacity (within 10% of exceeding the maximum allowable hydraulic capacity) are shown in yellow, and above the maximum allowable hydraulic capacity are shown in red. Refer to Figure 6-7 for an overall map of the recommended areas for future pipe upgrades.

San Juan Grade

This section of pipe receives flow from the most northern part of the City, mainly from the residences of the Bolsa Knolls neighborhood. This pipe also receives some commercial flow, and flow from two schools.

The San Juan Grade Future CIP project upsizes approximately 3,800 ft of 8-inch and 10-inch VCP to 12-inch PVC pipe from MH-C5-008 to MH-D4-055. These pipe segments have d/D values of 0.33 to 1.0 during future peak flow conditions. Ten (10) of the MHs are surcharging within 5 ft of the manhole rim in the future PHWWF condition. Upsizing would bring the d/D values down to a range between 0.24 to 0.60.



North Davis Road

The North Davis Road Future CIP recommends upsizing approximately 240 ft of 18-inch to 24-inch from MH-H3-009 to MH-H3-013, 1,700 ft. of 24-inch to 30-inch from MH-H3-013 near Cherokee Dr to MH-H2-002 at Calle del Adobe, and 3,400 ft. of 30-inch to 32-inch from MH-H2-002 to MH-J2-047 at N Davis Rd. Under peak future conditions, this segment runs 43-100% full due to future flows. A majority of the future flows (81%) can be attributed to the West Area Specific Plan, with Target Area K contributing 15%, and Target Areal L contributing 4%.

It should be noted that this project assumes Existing Cherokee Drive CIP, and Existing Northridge Mall CIP have been constructed.

West Laurel Drive

The West Laurel Drive Future CIP recommends upsizing approximately 1,550 ft. of 12-inch to 15-inch from MH-H4-001 at N Main St to MH-H3-023 near Laurel Park. Under peak future conditions, this segment on West Laurel Drive runs 66-88% full. All future flows driving this project are from the Laurel Drive at North Main Street Focused Growth Area.

It should be noted that this project assumes Existing Noice Dr/Tyler Street CIP has been constructed.

Victor Street

The Victor Street Future CIP project recommends upsizing approximately 1,600 ft. of 15-inch to 18-inch from MH-J3-012 at Ashbury Way to MH-J2-007 at W Rossi St. Under peak future conditions, this segment along Victor St runs 73-98% full. All future flows driving this project are from the Laurel Drive at North Main Street Focused Growth Area.

It should be noted that this project assumes Existing Noice Dr/Tyler Street CIP has been constructed and Future West Laurel Dr. CIP has been constructed or will be constructed concurrently.

Freedom Parkway

The Freedom Parkway Future CIP project recommends the upsize of approximately 2,025 ft of 10-inch pipe to 15-inch from MH-J9-005 at Estrella Way to MH-J9-001 at N Sanborn Rd. An additional 2,725 ft of 12-inch pipe from MH-J9-001 to MH-I8-013 at Nogal Dr should be upsized to 18-inch. Under peak future conditions, this segment on Freedom Parkway runs 50-100% full and eight (8) manholes are surcharging within 5 ft. of the manhole rims. All future flows driving this project are from the East Area Specific Plan.

Natividad Creek Park

The Natividad Creek Park Future CIP project recommends upsizing approximately 230 ft of 18-inch to 21-inch from MH-H8-012 to MH-H8-004 and approximately 3,800 ft of 24-inch to 27-inch from MH-H8-004 at Freedom Pkwy to MH-I7-005 at the Twin Creeks Golf Course. Under peak future conditions, this segment through Natividad Creek Park runs 76-100% full. The future flows driving this project are split between the East Area Specific Plan at 58% and Central Area Specific Plan at 42%.



It should be noted that this project assumes Future Freedom Pkwy CIP has been constructed or will be constructed concurrently.

East Alisal Street

The East Alisal Street Future CIP project recommends upsizing approximately 5,400 ft. of 15-inch to 18-inch from MH-M8-010 near Bardin Rd to MH-M7-009 at Williams Rd. Additionally, approximately 2,200 ft of 18-inch should be upsized to 21-inch from MH-M7-009 to MH-M6-012 at N Sanborn Rd. Under peak future conditions, this segment runs 67-100% full and fourteen (14) manholes are surcharging within 5 ft of the manhole rims. All future flows driving this project are from the East Future Growth Area.

Abbott Street

The Abbot Street Future CIP project recommends upsizing approximately 1,300 ft of 12-inch to 15-inch from MH-Q7-001 at Harris Rd to MH-Q7-004. An additional 850 ft. of 12-inch pipe from MH-P6-015 to MH-P6-006 at Harkins Rd should be upsized to 15-inch, and 700 ft of 15-inch to 18-inch from MH-P6-006. Under peak future conditions, this segment runs 66-100% full. Under future max day flows three (3) manholes are surcharging within 5 ft of the manhole rim. The future flows driving this project are the East Future Growth Area at 59%, Target Area B at 39%, and Target Area F at 2%.

South Sanborn Road

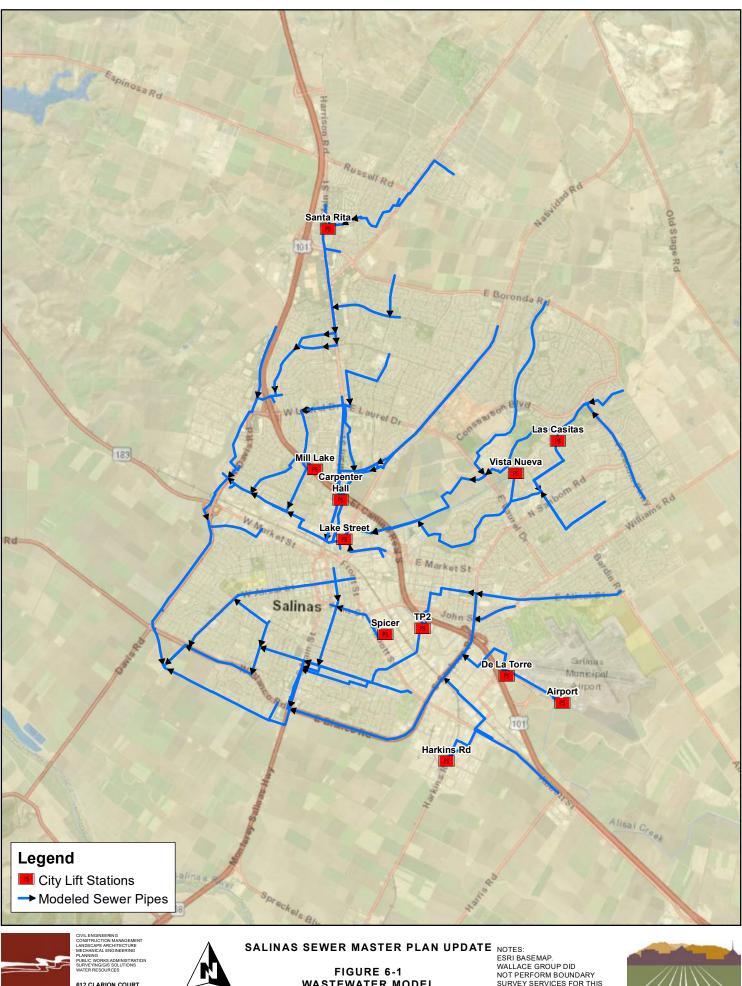
In order to avoid upgrades at both South Sanborn and downstream of TP2, the South Sanborn Future CIP project proposes to increase the overflow elevation at MH-M6-012 to 65.09 ft in elevation (an additional 0.65 ft from Existing CIP Upstream TP2 Diversion). This hydraulic change would send future flows primarily down South Sanborn Road. Under peak future conditions, this segment runs 66-100% full and MH-N6-004 is surcharging. All future flows driving this project are from the East Future Growth Area.

This project proposes to upsize approximately 4,365 ft of 18-inch to 21-inch from MH-M6-012 at E Alisal St to MH O6-006 at Pellet Ave, 500 ft of 21-inch to 24-inch from MH O6-006 to MH O6-008 at Industrial St, and 1,500 ft of 24-inch to 27-inch from MH O6-008 to MH 05-002 near Abbott St. Since the overflow weir will send more flows down South Sanborn, these pipe upgrades will need to be constructed before the overflow elevation weir, ensuring that there is enough capacity to accommodate the flows down South Sanborn.

It should be noted that there is a concrete "weir" at MH N6-003 to stop South Sanborn Rd. flows from backing into Mayfair Dr. Detailed design for this project should consider raising the slope/invert on Mayfair Dr or increasing the slope along South Sanborn to prevent further backwater effects.

It should also be noted that this project assumes Future East Alisal CIP has been constructed or will be constructed concurrently.





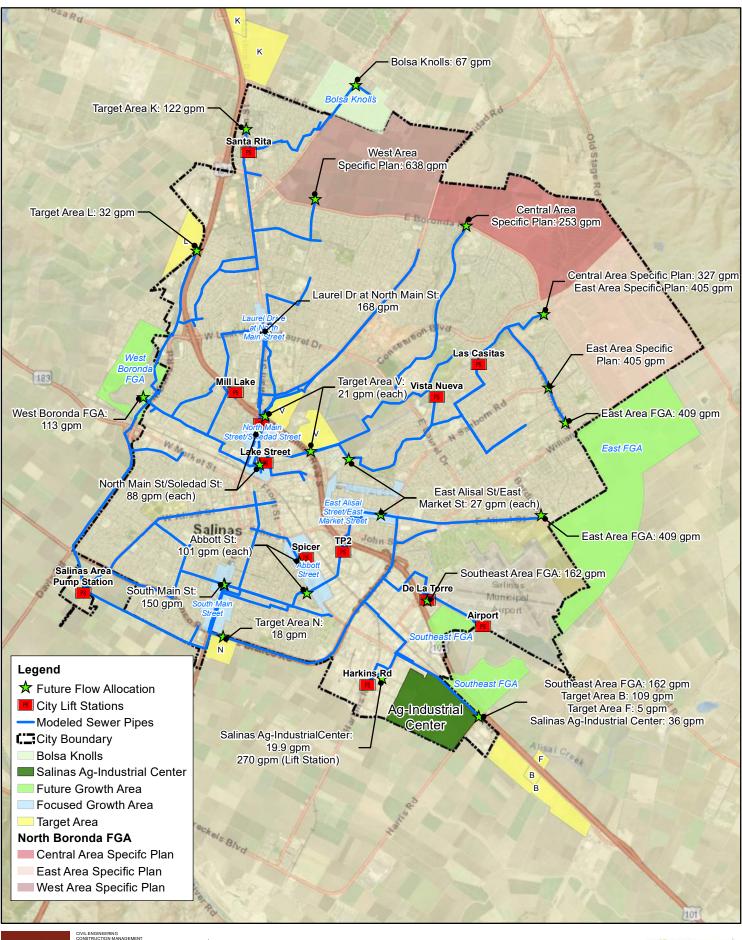


612 CLARION COURT SAN LUIS OBISPO, CA 93401 T 805 544-4011 F 805 544-4294 www.wallacegroup.us 1 inch = 5,000 feet

WASTEWATER MODEL OVERVIEW MAP

SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED MAY 2022.





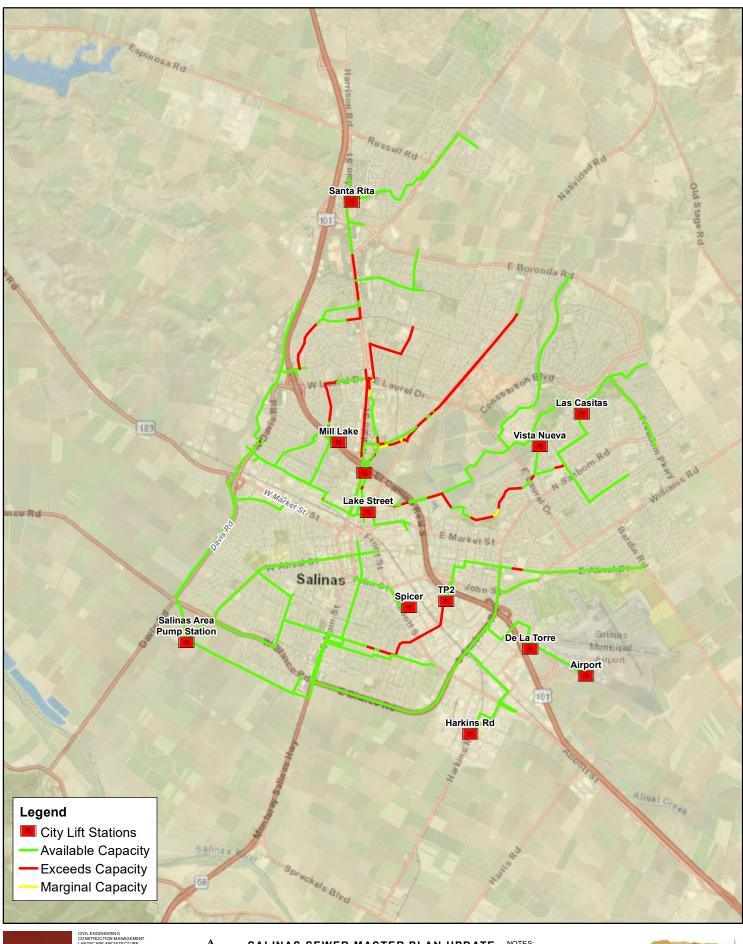


ICTION MANAGEMENT PER ARCHITECTURE DAL ENGINEERING ORGANIS ADMINISTRATION (GGIS SOULTIONS SOULTIONS SOURCES ARRION COURT JIS OBISPO, CA 93401 1 inch = 5,000 feet

SALINAS SEWER MASTER PLAN UPDATE

FIGURE 6-2 FUTURE FLOW ALLOCATION NOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP. NOT A LEGAL DOCUMENT.
MAP PRODUCED FEBRUARY 2028







612 CLARION COURT SAN LUIS OBISPO, CA 93401 T 805 544-4011 F 805 544-4294 www.wallacegroup.us

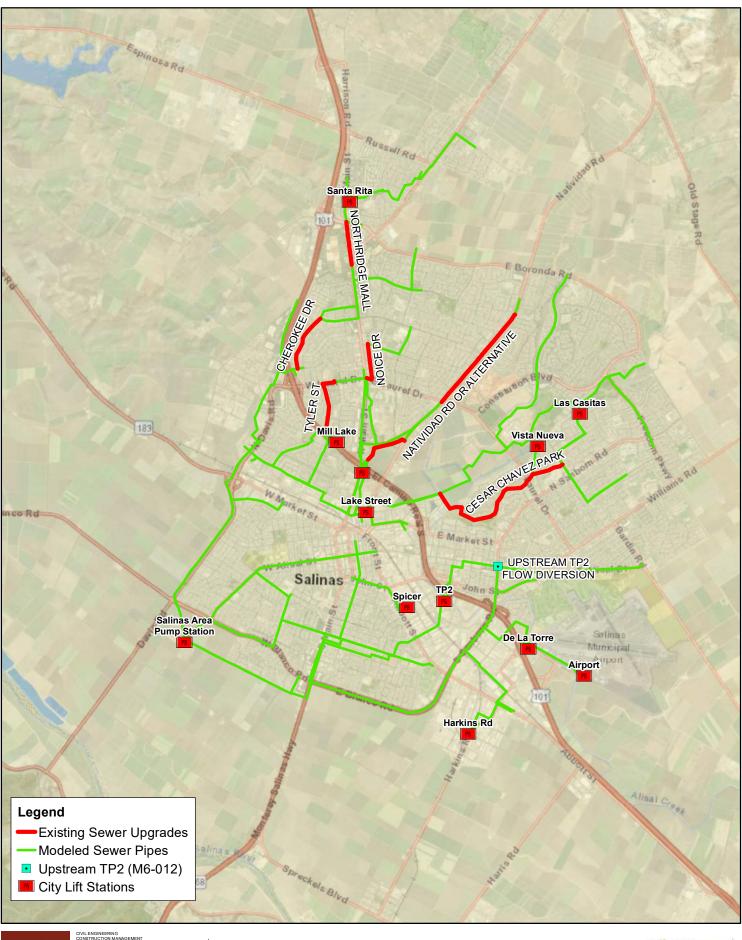
1 inch = 5,000 feet

FIGURE 6-3



EXISTING CAPACITY DURING

PEAK CONDITIONS



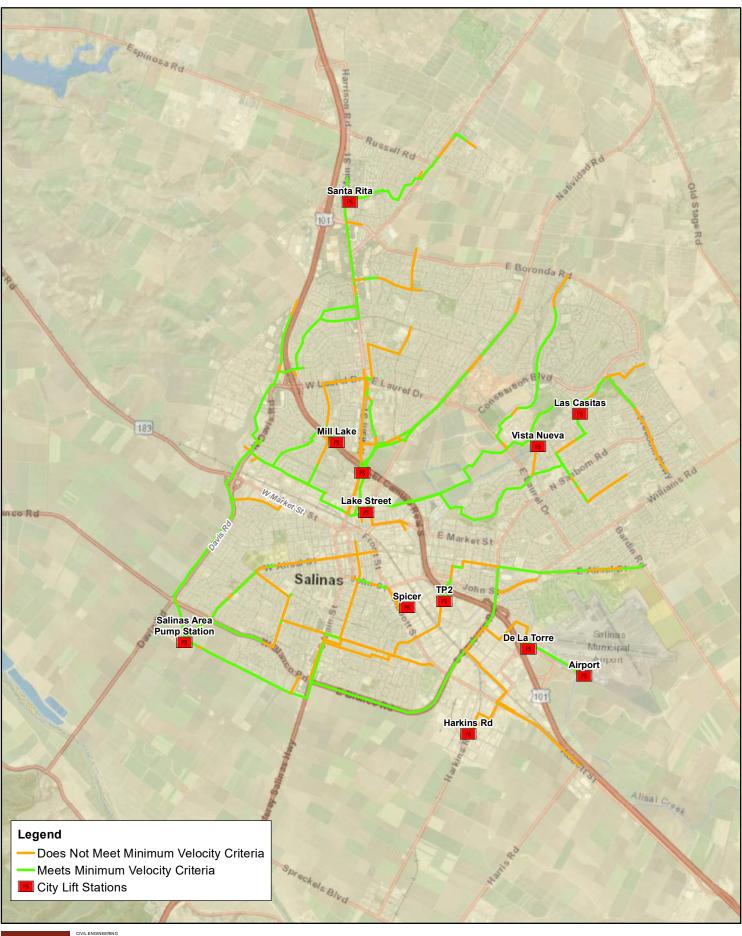


1 inch = 5,000 feet

SALINAS SEWER MASTER PLAN UPDATE

FIGURE 6-4 **EXISTING SEWER UPGRADE PROJECTS** NOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP. NOT A LEGAL DOCUMENT.
MAP PRODUCED FEBRUARY 2023.





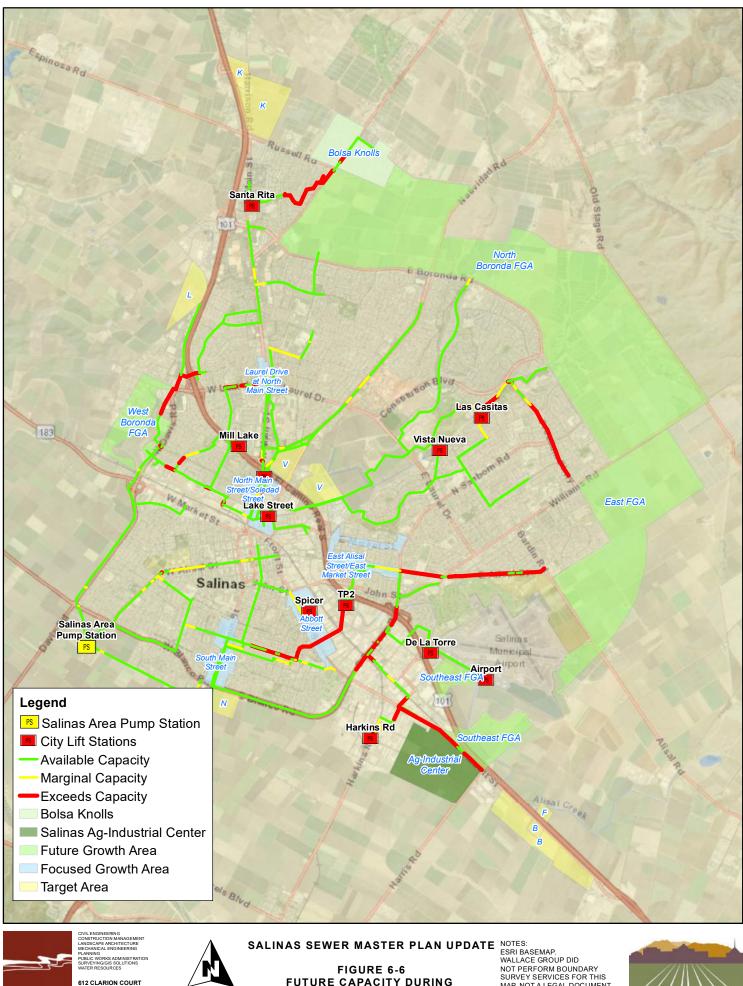




SALINAS SEWER MASTER PLAN UPDATE

FIGURE 6-5 LOW PIPE VELOCITY DURING PEAK FLOW CONDITIONS NOTES: ESRI BASEMAP. WALLACE GROUP DID NOT PERFORM BOUNDARY SURVEY SERVICES FOR THIS MAP. NOT A LEGAL DOCUMENT MAP PRODUCED MAY 2022.









FUTURE CAPACITY DURING PEAK CONDITIONS

MAP. NOT A LEGAL DOCUMENT. MAP PRODUCED FEBRUARY 2023.



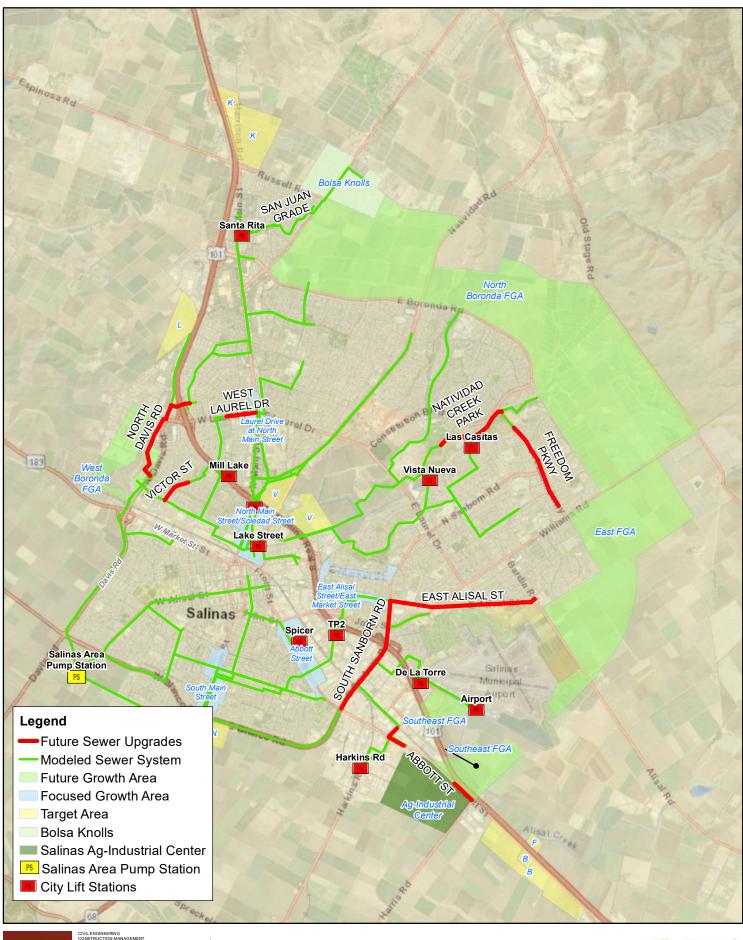






FIGURE 6-7 **FUTURE SEWER UPGRADE PROJECTS** NOTES:
ESRI BASEMAP.
WALLACE GROUP DID
NOT PERFORM BOUNDARY
SURVEY SERVICES FOR THIS
MAP. NOT A LEGAL DOCUMENT.
MAP PRODUCED FEBRUARY 2023



CHAPTER 7 CAPITAL IMPROVEMENT PROGRAM

This Chapter presents the proposed Capital Improvement Program (CIP), with a brief description of the proposed projects and a preliminary cost estimate for each. Also included in the CIP recommendations are general timelines for the improvements. The Mark Thomas 2017 CCTV Evaluation and O&M projects discussed in Chapter 3, I/I Evaluation discussed in Chapter 4, and Lift Station improvements discussed in Chapter 5 are included in the CIP.

BASIS OF CAPITAL IMPROVEMENT PROGRAM COSTS

The CIP costs were developed based on engineering judgment, confirmed bid prices for similar work in Monterey County, consultation with vendors and contractors, established budgetary unit prices for the work, and other reliable sources. Hard construction costs are typically escalated by a factor of 1.4 to allow budget for "soft costs" that include preliminary engineering, engineering, administration, construction management and inspection costs. All CIP costs are express in Year 2022 dollars, using the McGraw-Hill Engineering News Record (ENR) Construction Cost Index of 13004 (May 2022). Actual project costs will vary depending on economic conditions at the time of construction and should be escalated to the year or years schedule for the work.

Sewer Main Upgrade Unit Costs

Table 7-1 provides costs for the recommended capital improvement projects. The unit cost for replacement of gravity sewers includes the proposed pipelines, lateral re-connections, sewer bypassing, and traffic control. Construction methods such as pipe bursting and trenching were determined for different segments of each project depending on pipe conditions (existing sags, joint offsets, etc.) and number of lateral re-connections. Trenching was assumed for all new sewer main construction. Additionally, the City provided a GIS overlay of the known streets with concrete in the roadway. If the project required trenching in these roads, a unit cost was applied to account for removal and replacement of concrete in the roadway.

For the manhole condition assessment performed by the 2017 Mark Thomas CCTV Evaluation, the cost estimates for manhole repairs presented in Table 4 of the evaluation were escalated to Year 2022 dollars and used. The Mark Thomas CCTV Evaluation can be found in Appendix B of this SSMPU.



TABLE 7-1. SEWER MAIN CONSTRUCTION UPGRADE UNIT COSTS

CONSTRUCTION TYPE	UNIT COST/LINEAL FEET
6-INCH BURSTING	\$380
6-INCH TRENCHING	\$400
8-INCH BURSTING	\$420
8-INCH TRENCHING	\$450
10-INCH BURSTING	\$460
10-INCH TRENCHING	\$500
12-INCH BURSTING	\$510
12-INCH TRENCHING	\$560
15-INCH BURSTING	\$590
15-INCH TRENCHING	\$660
18-INCH BURSTING	\$690
18-INCH TRENCHING	\$780
21-INCH BURSTING	\$800
21-INCH TRENCHING	\$920
24-INCH BURSTING	\$930
24-INCH TRENCHING	\$1,090
27-INCH BURSTING	\$1,080
27-INCH TRENCHING	\$1,280
30-INCH BURSTING	\$1,250
30-INCH TRENCHING	\$1,510
32-INCH BURSTING	\$1,390
32-INCH TRENCHING	\$1,690
36-INCH BURSTING	\$1,690
36-INCH TRENCHING	\$2,100
CONCRETE IN ROADWAY	\$65
MANHOLE REPLACEMENT	\$16,000 EACH
COAT MANHOLE	\$4,000 EACH
INSPECTION PORT	\$3,500 EACH



CIP RANKING

The existing capital improvement projects were ranked to determine what priority the existing recommended projects should be constructed. These projects include those identified through the hydraulic model, lift station evaluation, Mark Thomas 2017 CCTV Evaluation, and the O&M repairs noted by City operations and maintenance crews.

Table 7-2 evaluates each of the projects in five categories: overflow to a water body of the State, if it meets design criteria, if it is identified by the City as a maintenance hot spot, its community impact, and if it is near a City manhole monitor that alerts crews if a manhole is surcharging. With input from the City, each category was provided a weighted importance factor based on the relative importance of the category. The importance factor is multiplied by the score of the project received and then added together to determine its final score.

It is recommended that the City review these projects periodically to determine if any substantial changes have occurred that may re-prioritize a project to a higher ranking. The future capital improvement projects were not ranked since they are determined by construction of the future developments that were identified for this SSMPU.

Lift Station CIPs

Lift Station CIPs have been categorized in two separate ways: one based on improvements needed at each lift station as a whole and the other based on improvement project type for all lift stations. Table 7-3 ranks each individual lift station based on eight categories: overflow to a water body, inspection frequency, existing pumping capacity deficiencies, peak hour emergency response time, if bypassing capabilities are needed, if an onsite generator with automatic transfer switch is needed, if control system upgrades are needed, and potential impact to the community. Although not included in the scoring, Table 7-3 also shows if the lift station would be impacted by future development. This criterion is important to consider if the lift station is being considered for upgrade and the likelihood of the upgrade being impacted by future development.

The other categorization of lift station improvements is based on project type. The following projects have been grouped together and ranked by City staff. See cutsheets at the end of this chapter for the lift stations that these projects apply to.

- 1. Controller Upgrades and Standardization
- 2. Install Emergency Bypass and Washdown Water
- 3. Safety/Falling Hazard Concerns
- 4. Generator Replacement
- 5. Onsite Standby Generator
- 6. Power Receptacle
- 7. Painting/Coating Maintenance

Depending on timing of full replacement of the lift stations, it may be recommended to upgrade lift station components that will aid in operation and maintenance, which are the Projects #1-7 noted above. This will allow time for the City to develop a funding plan for full replacement. This excludes Lake Street Lift Station, which needs full replacement immediately.



TIMING OF RECOMMENDED IMPROVEMENTS

The existing capital improvement projects are triggered by existing deficiencies, while the future capital improvement projects are triggered by one or more future developments connecting to the City's collection system. All projects identified as existing deficiencies based on the hydraulic model or O&M and are detailed out in Table 7-4. These existing projects are due to existing wastewater flows, but it is also important for these projects to be completed to accommodate future wastewater flows. All lift station existing CIP projects are detailed in Table 7-5. These existing projects are recommended to be completed within the next 1-7 years. The last four projects are unranked but are still considered existing deficiencies to be addressed by the City. The Inflow/Infiltration evaluation should be performed during a significant wet weather year in the next 1-5 years. The CCTV Inspection program should evaluate the entire collection system every 5 years or approximately 20% of the system per year. The brick manhole and flushing inlet replacements are considered lower priority due to the ongoing nature of the projects as the City performs continuous inspection of these area. Over the next 15 years, all brick manholes should be coated or replaced and all flushing inlets should be replaced with an 8-inch inspection port or new manhole.

The future capital improvement projects are triggered by potential future development. Since the timing of these projects and wastewater flow projections have not been finalized, it is recommended that additional modeling be performed during the planning and design phases of these future developments. The future projects presented in Table 7-6 assume the future wastewater flow allocations shown in Figure 6-2.

Recommended projects have not been evaluated for potential environmental impacts as a part of this study. Projects will be subject to the requirements of CEQA prior to approval and funding.

Following the tables, Figures 7-1 to 7-33 are project description sheets are provided for the sewer projects identified by sewer modeling (both existing and future) and the lift station upgrades (by lift station or project type). These description sheets can be used by City staff in the planning for each project and for inclusion in fiscal year budget requests.

Exhibit 1 in Appendix F shows all sewer upgrade projects and the sewer repairs noted by City crews.



TABLE 7-2 CITY OF SALINAS SSMPU EXISTING HYDRAULIC AND MAINTENANCE REPAIR CIP RANKING MATRIX

Importance Factor		5	4	3	2	1			
Project Name	Type of Project	Overflow to Water Body of the State Yes - 10 No - 0	Design Standard Meets Design Standard - 0 Doesn't Meet Design Standards - 2 Surcharging - 5 Overflowing - 10	Maintenance Hot Spot Not Critical - 0 Yearly Check - 5 Weekly or Monthly Checks - 10		Near City Manhole Monitor Yes-5 No-0	Impacted By Future Development Yes/No	Score = Importance Factor X Points	Ranking
Cesar Chavez Park (includes North Madeira Avenue Repairs)	Hydraulic Deficiency	10	5	5	10	0	Yes, East Alisal Redevelopment	105	1
Upper Carr Lake Repairs	O&M	10	0	10	10	0	Yes, North Boronda FGA	100	2
Upstream TP2 Diversion	Hydraulic Deficiency	10	5	0	10	0	No	90	3
Northridge Mall	Hydraulic Deficiency	10	5	0	10	0	Yes, Target area K	90	4
East Market and Upstream of Lake Street Repairs	O&M	10	0	5	5	0	No	75	5
Louis & Van Buren Repairs	O&M	10	0	5	0	5	No	70	6
West Market at Davis Overcrossing	O&M	10	0	5	0	0	Yes, West Boronda FGA	65	7
Cherokee Dr	Hydraulic Deficiency	0	5	0	10	5	Yes, Target Area K	45	8
Malarin St and Wilgart Way Repairs	O&M	0	5	5	5	0	No	45	9
Romie Lane Repairs & Reconfiguration Analysis	O&M	0	0	10	5	0	No	40	10
King Street Repairs	O&M	0	0	10	0	5	No	35	11
Del Monte and Mae Repairs	O&M	0	0	10	0	5	No	35	12
Riker Street Repair	O&M	0	0	10	0	5	No	35	13
West Market Street Repairs	O&M	0	0	10	0	5	No	35	14
Johnson Place Repairs	O&M	0	5	5	0	0	No	35	15
N Main St Hwy 101 Underpass Bunker Repair	O&M	0	0	10	0	0	Yes, Target area V	30	16
Donner Way Repair	O&M	0	0	10	0	0	No	30	17
San Miguel Ave Repair	O&M	0	0	10	0	0	No	30	18
Noice Drive/Tyler Street	Hydraulic Deficiency	0	5	0	5	0	No	30	19
Natividad Rd or Alternative Natividad Consolidation	Hydraulic Deficiency	0	5	0	5	0	Yes, Target area V, north boronda FGA	30	20
Acacia, Bautista, Woodside Repairs	O&M	0	0	5	0	5	No	20	21
Comanche, Polk, and North First Repairs	O&M	0	0	5	0	5	Yes, Target area K	20	22
Sherwood Dr Repairs	O&M	0	0	5	0	5	Yes, Target area V	20	23
East Laurel and Williams Repairs	O&M	0	0	5	0	0	No	15	24
Hoover Street Repair	O&M	0	0	5	0	0	No	15	25



TABLE 7-2 CITY OF SALINAS SSMPU EXISTING HYDRAULIC AND MAINTENANCE REPAIR CIP RANKING MATRIX

Importance Factor		5	4	3	2	1			
		Overflow to Water Body of the State Yes - 10	Design Standard Meets Design Standard - 0 Doesn't Meet Design Standards - 2 Surcharging - 5	Maintenance Hot Spot Not Critical - 0 Yearly Check - 5	< 5,000 - 0 5,001 to 10,000 - 5	Near City Manhole Monitor Yes-5	Impacted By Future Development	Score =	
Project Name	Type of Project	No - 0	Overflowing - 10	Weekly or Monthly Checks - 10	>10,000 - 10	No-0	Yes/No	Factor X Points	Ranking
Katherine Ave & Pajaro St Repairs	O&M	0	0	5	0	0	No	15	26
Wood Street Reconfiguration Analysis	O&M	0	0	5	0	0	No	15	27
Inflow/Infiltration Evaluation	Hydraulic		-				-		Dependent on significant wet weather year
CCTV Inspection Program	O&M								Annual Program
Brick Manhole Inspection & Replacement	O&M								Ongoing Inspection
Flushing Inlet (Cleanout) Inspection & Replacement	O&M								Ongoing Inspection



TABLE 7-3 CITY OF SALINAS SSMPU EXISTING LIFT STATION CIP RANKING MATRIX

Importance Factor	5	4	3	3	2	2	2	1			
	Overflow to Water Body of the State	Inspection Frequency	Existing Pumping Capacity Deficiencies	Peak Hour Emergency Response Time	Bypass Required?	Onsite Generator with Automatic Transfer Switch Required?	Critical Control/Electronic Upgrades Required?	Community Impact	Impacted By Future Development		
Project Name	Yes - 10 No - 0	Emergency Callouts-10 Daily Inspections-5 Weekly Inspections-0	Yes-10 No-0	0-15 minutes-10 15-30 minutes-5 Greater than 30 minutes-0	Yes-5 No-0	Yes-5 Replace Generator-3 No-0	Yes-5 No-0	< 5,000 - 0 5,001 to 10,000 - 5 >10,000 - 10	Yes/No	Score = Importance Factor X Points	Ranking
									Yes, Target Area V, East Alisal Street/East Market Street, Central Area and East Area Specific Plans, and East Area FGA Pumps must be upsized for future flows.		
Lake St Lift Station	10	10	10	10	0	3	5	10	D 1 1/4 11 0 11	176	1
Santa Rita Lift Station	10	10	0	10	5	3	5	5	Bolsa Knolls Septic Conversion & Target Area K	151	2
Carpenter Hall Lift Station	10	5	0	10	5	3	0	10	Yes, North Boronda FGA and Targe Areas K & V	126	3
De La Torre Lift Station	10	10	0	0	5	5	5	0	Possible, Southeast FGA Pumps may need to be upsized for future flows	120	4
Spicer Lift Station	10	10	0	0	5	5	5	0	No	120	5
Mill Lake Lift Station	10	5	0	10	5	0	5	0	No	120	6
Vista Nueva Lift Station	10	10	0	0	0	0	0	0	No	90	7
Las Casitas Lift Station	10	0	0	10	0	0	5	0	No	90	8
TP2 Lift Station	10	0	0	0	5	3	0	10	Yes, East Alisal Street/East Market Street and East FGA. Pumps must be upsized for future flows.	76	9
						_	_		Yes, Salinas Ag- Industrial Center Pumps must be upsized for future flows		
Harkins Lift Station Airport Lift Station	0 10	10 0	0	0 0	5 0	5	5	0	Yes, Southeast FGA	70 50	10 11
AII POIT LIIL STALIOTI	10	U	l U	U	U	U	U	U	res, southeast rGA	50	1 1 1



Project #	Title	Description	Tributary Area	Length (Ft)	Old Diameter (in)	New Diameter (in)	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
			Lake St	2,100	15	18	Acosta Plz	Garner Ave to E Laurel Dr	J7-007	K7-017			
1	Cesar Chavez Park	Upsize sewer main	Lake St	3,000	21	24	Open Space/Park	E Laurel Dr to near Circle Dr	K7-017	L6-001	\$8,369,000	\$3,347,600	\$11,716,600
			Lake St	3,500	24	27	Open Space/Park	Circle Dr to Longbow Way	L6-001	K5-007			
		New sewer main	Lake St	70		24		Near Yorkshire Way	K5-007	K5-014			
CCTV eval	ulation noted pipe encrustation	s and manholes need new frames, covers, and lining in	a portion of the	Cesar Ci	havez Park C	IP. These re	pairs are noted below	v and should be replaced i	f Cesar Chavez Park Cli	is not constructed in the ne	ear term.	T	1
1.1		Mark Thomas 2017 Findings Minor defects, needs new frame and cover, lining interior of manhole (Garde:10) (K5-001); Visible agregate and broken frame, needs new frame & cover, lining interior of manhole (Grade: 3) (K5-003); Pipe (Grade:4),WLS of 0.6, encrustations	Lake St	380	24	24	N Madeira Ave	N Madeira north of Cesar Chavez park between St Helen Way and Terrace St	K5-001	K5-003	\$438,000	\$175,200	\$613,200
				ı									
2	Upper Carr Lake Repairs	Mark Thomas 2017 Findings New MH frame and cover, install marker (Grade:5) (MH I6-004); expose and raise MH- curently buried (Grade:10) (I6-006); New MH frame and cover, install marker (Grade:10) (I6-005); (I6-004 to I6-006) Pipe WLS =0.35, root ball, (Grade: 3); (I6-006 to I6-005) (Grade:2)	Lake St	410	21	21	Laurel Dr.	Bike Trail Near Veteran's Way	16-004	16-005	\$396,500	\$158,600	\$555,100
		Mark Thomas 2017 Findings New MH frame & cover w/ PCC collar, line in 5 yrs (Grade:3) (J6-001); New frame & cover w/ PCC collar, line in 5 yrs (Grade:3) (J6-002);Pipe d/D: 0.75, grease deposits (Grade: 10)	Lake St	300	27	27	Trail around Upper Carr Lake	Off of E Laurel Dr near Veteran's Way	J6-001	J6-002	\$406,000	\$162,400	\$568,400
									To	otal Repair Project Costs	\$802,500	\$321,000	\$1,123,500
3	Upstream TP2 Diversion	Weir Construction	TP2		-	-	East Alisal St	South Sanborn Rd	M6-012		\$45,000	\$18,000	\$63,000
4	Northridge Mall	Upsize sewer main		2,300	15	18	North Main St	From East Boronda Road to San Juan Grade Road	E4-007	F4-011	\$1.916.000	\$766,400	\$2,682,400
4	Horumuye Man	Sewer Main Connection/Realignment	-	320		18	North Main St	From Big 5 Sporting Goods to Harden Pkwy	F4-007	F4-031	φ1,810,000	φ100,400	ΨΖ,00Ζ,400



Project #	Title	Description	Tributary Area	Length (Ft)	Old Diameter (in)	New Diameter (in)	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
		Mark Thomas 2017 Findings Expose and raise MH to grade, buried (Grade:10) (K5- 008)	Lake St				Yorshire Way	Yorkshire Way, between Longbow Way and Doncaster Pl	K5-008		\$5,900	\$2,360	\$8,260
		Mark Thomas 2017 Findings Expose and raise MH to grade, buried (Grade:10) (K5- 010); Pipe broken, encrustations (Grade:5)	Lake St	150	24	24	Longbow Way	Long bow Way and Kern St	K5-009	K5-010	\$169,400	\$67,760	\$237,160
5	East Market and Upstream of Lake Street Repairs	Mark Thomas 2017 Findings Replace frame & cover w PCC collar, reline, Corroded frame & chimney (Grade: 10) (K5-012); Replace Frame & cover w PCC collar, install marker, corrosion, grease and surcharge (Grade:10) (K5-021); Pipe cracks, grease deposits, (Grade:3); Replace frame & cover w PCC collar, install marker, corroded frame and aggregate (Grade:3) (K5-019); Replace frame & cover, install ecc. Cone for fence, corroded frame & heavy grease & surch. (Grade:10) (K5-020); Pipe WLS: 0.25,d/D:0.9, grease deposits (Grade:2)	Lake St	840	24 & 30	24 & 30	East of Sun St	Between Sun St and HWY 101	K5-012, K5-019	K5-020, K5-021	\$1,125,100	\$450,040	\$1,575,140
		Mark Thomas 2017 Findings New frame & cover, lining interior of manhole (Grade:10) (L4-002 and L4-004)	Lake St				E Market St	E Market St, between Sun St and Peach Dr	L4-002	L4-004	\$23,800	\$9,520	\$33,320
									To	otal Repair Project Costs	\$1,324,200	\$529,680	\$1,853,880
The Louis	and Van Buren maintenance re	epairs are along the future San Juan Grade CIP. These	segments shou	ld be repla	aced if the fu	ture San Jua	n Grade CIP is not o	constructed in the near tern	n.				
6	Louise and Van Buren Street Repair	Pipe sags, surcharging manholes	Santa Rita	260	8	8	Louise St	Louise St, between Lenny St and Louise Ct	D5-001	D4-003	\$149,000	\$59,600	\$208,600
		Pipe sags, surcharging manholes	Santa Rita	70	8	8	Van Buren Ave	near East Bolivar St	D4-007	D4-055 St Repair Project Costs	\$63,500 \$212,500	\$25,400 \$85,000	\$88,900 \$297,500
								10ta	T Louise and Van Daren	ot Repair Froject 003t3	ΨΣ12,500	ψου,ουο	\$291,300
7	West Market at Davis Overcrossing	Bunker doors on Large Trunk line need replacement	-				West Market St	N Davis Road Overcrossing	J2-045	K2-038	\$13,350	\$5,340	\$18,690
8	Cherokee Drive	Upsize sewer main		1,600	18	24	Cherokee Dr	From Seminole Way to Tulane Street	G3-008	H3-009	\$1,920,000	\$768,000	\$2,688,000
		Pipe issue joints, roots		380	8	8	Wilgart Way	Wilgart Way, E Romie Ln to Fl	O4-050	O4-011	\$171,000	\$68,400	\$239,400
9	Malarin St and Wilgart Way	Mark Thomas 2017 Findings Heavy corrosion, reline manhole (Grade:4)					Near Railroad	Between Work St and Brunken Ave, near railroad	N5-003		\$9,300	\$3,720	\$13,020
3	Repairs	Mark Thomas 2017 Findings Grease deposits and surcharging, recommend PCC collar to prevent I/I, new bench and rechannelize (Grade:10)					Los Palos Dr	Near intersection of Los Palos Dr and Fairmont Dr	O5-019	-	\$6,300	\$2,520	\$8,820
							-		То	tal Repair Project Costs	\$186,600	\$74,640	\$261,240
10	Romie Lane Repairs & Reconfiguration Analysis	Hydrogen Sulfide damage, MH rings and lids need replacement. Concrete in roadway. Recommended reconfiguration analysis before repairs.		4,030	18	18	Romie Lane	Near Los Palos Drive to South Main Street	O4-007	N3-002		\$100,000	\$100,000
11	King Street Repairs	Major pipe sags	TP2	1,170	8	10	King St	King St, E Market to E Alisal	L5-033	L5-039	\$585,000	\$234,000	\$819,000
		Trough pipe missing in MH	Lake St				C Street	On C St, Galindo St to		K8-012	\$16,000	\$6,400	\$22,400
12	Del Monte and Mae Repairs		Lake St	820	8	8	Del Monte Ave	Mae Ave Del Monte Ave, Mae	K8-011	J8-020	\$369,000	\$147,600	\$516,600
_		· · · · · · · · · · · · · · · · · · ·						Ave to Green St		320	+ , 	Ţ · · · ,000	+,000



Project #	Title	Description	Tributary Area	Length (Ft)	Old Diameter (in)	New Diameter (in)	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
		Pipe sags, broken pipe, trough and pipe are gone	Lake St	830	6	6	Mae Ave	Mae Ave, D St to Del Monte	J8-008	K8-013	\$332,000	\$132,800	\$464,800
							1		Т	otal Repair Project Costs	\$717,000	\$286,800	\$1,003,800
13	Riker Street Repair	Pipe has damage and missing sections at manhole		20	6	6	Riker Street	Lang Street		M3-035	\$8,000	\$3,200	\$11,200
		Pipe has major sags, consider re-alignment of section. Concrete in roadway.		450	8	8	Villa Street	At Villa St and Kirkwood Ave	L2-016	K3-016	\$231,750	\$92,700	\$324,450
14	West Market Street Repairs	Both F.I.'s are blown out					West Market St	Near El Cerrito Market Capitol St, W Market St	L3-043	L3-010	\$32,000	\$12,800	\$44,800
		Pipe sags. Concrete in roadway.		840	6	6	Capitol St	to Archer St	L3-013	L3-040	\$336,000	\$134,400	\$470,400
		Pipe sags. Concrete in roadway. Replace F.I. with new manhole.		710	6	6	Capitol St	Capitol St, Archer St to F.I.	L3-041	F.I	\$346,150	\$138,460	\$484,610
									Т	otal Repair Project Costs	\$945,900	\$378,360	\$1,324,260
15	Johnson Place Repairs	Pipe damage, sags, spidering under tracks, ongoing backups, MH O5-005 has settled, always surcharging		1,470	12	12	Johnson PI	Johnson Pl Abbott Pl to railroad tracks	N5-011	O5-005	\$839,200	\$335,680	\$1,174,880
16	N Main St Hwy 101 Underpass Bunker Repair	Bunker damage to pipe, pipe missing at bunker on both sides, clogging		50	10	10	N Main St	N Main St at Hwy 101	J4-012	J4-013	\$25,000	\$10,000	\$35,000
17	Donner Way	Pipe damages, sags, etc.	Carpenter Hall	280	8	8	Donner Way	Truckee Way to Emerald Dr	G6-037	G6-060	\$126,000	\$50,400	\$176,400
18	San Miguel Ave Repair	Pipe Damage; broken pipe 10-feet from manhole		10	8	8	Pajaro St	Pajaro St and San Miguel	04-025	O3-038	\$4,500	\$1,800	\$6,300
		Upsize sewer main		2,100	8	12	Noice Dr	From Chaparral Street to East Laurel Drive	G4-015	H4-011			
40		Reconstruct manhole					E Laurel Dr	East Laurel Drive near N Main Street	H4-012		#0.400.000	Ø4 000 000	A 4 700 000
19	Noice Drive/Tyler Street	New sewer main		60		12	E Laurel Dr	East Laurel Drive to North Main Street	H4-006	H4-001	\$3,400,000	\$1,360,000	\$4,760,000
		Upsize sewer main		3,300	12	15	Tyler Street	West Laurel Drive down to HWY 101	H3-023	13-001			
		Upsize sewer main	Carpenter Hall	2,700	12	15	Natividad Rd	From near Sausal Drive to East Alvin Drive	G6-002	H6-003			
		Weir Construction	Carpenter Hall				Natividad Rd	East Alvin Drive	H6-003				
	Natividad Rd		Carpenter Hall		15	18	Natividad Rd	East Alvin Drive to near East Laurel Drive	H6-003	15-007	\$6,090,000	\$2,436,000	\$8,526,000
20		Upsize sewer main	Carpenter Hall	305	12	15	Off of Sherwood Dr	From Sherwood Drive toward East Bernal Drive	J5-003	J5-005			
20			Carpenter Hall	2,000	15	18		From near Sherwood Dr to Santa Clara Ave	J5-005	J4-010			
				2,400	15	21	Natividad Rd	East Alvin Drive to Pacheco St	H6-003	I5-011			
	Alternative Natividad Consolidation	Upsize sewer main		5,000	15	24	Natividad Rd	to Sherwood Park on East Bernal Drive	I5-011	J4-022	\$9,120,000	\$3,648,000	\$12,768,000
				1,100	21	30	Easement	Portion along Alpine Dr	J4-022	J4-011			
				620	21	30	Under	Highway 101	J4-011	K4-002			



Project #	Title	Description	Tributary Area	Length (Ft)	Old Diameter (in)	New Diameter (in)	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
		Pipe Sags, replace F.I. with new manhole		130	8	8	Acacia Circle North	W Acacia St	F.I.	N3-039	\$74,500	\$29,800	\$104,300
21	Acacia, Bautista, Woodside	Pipe Sags		280	8	8	Woodside Dr	Woodside Dr, Teakwood Pl to Riker St	O3-016	O3-015	\$126,000	\$50,400	\$176,400
	Repairs	Pipe Sags		490	8	8	Bautista Dr	Bautista Dr, W Romie Ln to Orange Dr	N3-014	N3-060	\$220,500	\$88,200	\$308,700
		Pipe issue joints, roots, offsets, replace F.I. with new manhole		230	8	8	Bautista Dr	Bautista Dr, F.I to W Acacia	F.I	N3-029	\$119,500	\$47,800	\$167,300
									7	otal Repair Project Costs	\$540,500	\$216,200	\$756,700
		Pipe issue, joints, replace F.I. with new manhole		690	6	6	Comanche Way	Shawnee Way to Cherokee Dr	F.I.	G3-010	\$292,000	\$116,800	\$408,800
22	Comanche, Polk, and North First Repairs	Pipe issue joints, roots, replace F.I. with new manhole		490	8	8	Polk St	Polk St, Monroe St to W Laurel Dr	F.I.	13-045	\$236,500	\$94,600	\$331,100
		Pipe sags		640	8	8	N 1st St	N 1st St, Boeing Ave, W Curtis St	H4-061	H4-054	\$288,000	\$115,200	\$403,200
									1	otal Repair Project Costs	\$816,500	\$326,600	\$1,143,100
23	Sherwood Dr Repairs	Pipe cracks at 220-ft mark downstream from K4-052. Obstruction (possibly old water line) in K4-076	Lake St	840	12	12	Sherwood Dr	Near Sioux Dr to E Rossi St	K4-052	K4-076	\$486,400	\$194,560	\$680,960
		Pipe sags, broken pipe		450	10	10	Easement	E Laurel Dr at 105	K7-011	K7-014	\$225,000	\$90,000	\$315,000
24	East Laurel and Williams Repairs							Oregon St Williams Rd, E Market			· · · · · · · · · · · · · · · · · · ·	, ,	· · ·
	·	Pipe sags		1,080	8	8	Williams Rd	St to Quilla St	L7-009	M7-006 Total Repair Project Costs	\$486,000 \$711,000	\$194,400 \$284,400	\$680,400 \$995.400
										otal Hopan 110joot oooto	ψ1 11,000	\$201,100	4000,400
25	Hoover Street Repair	F.I. repair blown out	Santa Rita				Hoover Street	1885 Hoover Street			\$16,000	\$6,400	\$22,400
26	Katherine Ave & Pajaro St Repairs	Mark Thomas 2017 Findings Exposed aggregate & heavy corrosion, fiberglass peeling, weld cover, recommend reline manhole, new bench, and rechannelize (Grade:10) (O4-001); Welded/broken cover, recommend new frame & cover (Grade:10), (O4-002); Pipe d/D 0.85 (Grade: 1)	-				Katherine Ave	Katherine Ave and Alameda Ave	O4-001	O4-002	\$16,800	\$6,720	\$23,520
		Mark Thomas 2017 Findings Corrosion, broken cover, rechannel, needs new manhole (Grade:10)					Pajaro St	Pajaro St near Katherine Ave	O4-006	NA	\$14,600	\$5,840	\$20,440
							1	,	7	otal Repair Project Costs	\$31,400	\$12,560	\$43,960
27	Wood Street Reconfiguration Analysis	Pipe sags, always plugs, can't CCTV Entire area needs reconfiguration	Lake St	1,820				Between Wood and Roosevelt Street	L5-029	L5-034		\$50,000	\$50,000
	CCTV Program	CCTV inspection of 20% (approximately 58 miles) of the collection system each year	All									\$9,392,000	\$9,392,000
-	Inflow/Infiltration Evaluation	Conduct full I/I evaluation of the entire collection system (during significant wet weather year) and update the sewer model	All								-	\$140,000	\$140,000
	Brick Manhole Inspection & Coat/New Manhole Replacement	Inspect and replace brick manholes (108 based on field survey and City input)	All								Coat: \$432,000 New Manhole: \$1,728,000	Coat: \$172,800 New Manhole: \$691,200	Coat: \$604,800 New Manhole: \$2,419,200
	Flushing Inlet (Cleanout) Inspection & Port/New Manhole Replacement	Inspect and replace flushing inlets/cleanouts (1,403 based on City GIS)	All								Inspection Port: \$4,910,500 New Manhole: \$22,448,000	Inspection Port: \$1,964,200 New Manhole: \$8,979,200 PROJECT CIP TOTAL COSTS	Inspection Port: \$6,874,700 New Manhole: \$31,427,200 \$59-\$90 million
		f the construction costs for planning, engineering, Cl 022 dollars, using McGraw-Hill ENR Construction Cos			will need to	be escalate	d to the year or year	s scheduled for the work	·		EAISTING SEWER	. ROULD OF TOTAL COSTS	фээ-фэо million



TABLE 7-5. CITY OF SALINAS EXISTING LIFT STATIONS CAPITAL IMPROVEMENT PROGRAM (CIP)

Project #	Title	Description	Tributary Area (Acres)	PHDW Flow (gpm)	Firm Capacity	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
1	Lake Street Lift Station	Full lift station replacement/relocation, see cutsheet for summary	4,108	6,375	-13%		Intersection of E Lake St and E Rossi St across from Monterey County Housing Alliance	K4-022	K4-019	9,500,000	3,800,000	13,300,000
2	Santa Rita Lift Station	Full lift station replacement, see cutsheet for summary	348	670	112%	2021 Sucre Court	Behind the parking lot of Salinas Valley Motel	D4-019		3,500,000	1,400,000	4,900,000
3	Spicer Lift Station	Full lift station replacement, see cutsheet for summary	79	99	107%		On Spicer street near A & S Metals	N5-009	N5-007	2,200,000	880,000	3,080,000
4	Mill Lake Lift Station	Full lift station replacement, see cutsheet for summary	43	132	287%	81 Gardenia Dr	Off of Heather Circle	J4-020	I3-001	2,750,000	1,100,000	3,850,000
5	Carpenter Hall Lift Station	Lift station rehabilitation, see cutsheet for summary	508	1,226	31%		Behind the Coast Auto Insurance parking lot	J4-011	K4-002	1,050,000	420,000	1,470,000
6	De La Torre Lift Station	Full lift station replacement, see cutsheet for summary	10	7	4845%	1200 De La Torre	Across De La Torre St from Inns of California Salinas	O7-001	N7-009	1,200,000	480,000	1,680,000
7	Vista Nueva Lift Station	Full lift station replacement, see cutsheet for summary	6	41	408%	//// (-arpor ///o	Off Garner Ave near Natividad Creek	J7-034	J7-014	2,200,000	880,000	3,080,000
8	Harkins Road Lift Station	Full lift station replacement, see cutsheet for summary	146	135	175%	1200 Harkins Rd	Intersection of Dayton St and Harkins Rd	Q6-001	Q6-009	1,300,000	520,000	1,820,000
9	Las Casitas Lift Station	Lift station rehabilitation, see cutsheet for summary	38	137	189%	721 Las Casitas Dr	Near intersection of Ranchero Dr and Las Casitas Dr	17-001		650,000	260,000	910,000
10	TP2 Lift Station	Full lift station replacement, see cutsheet for summary	136	279	99%		Across Alisal Creek from Fleet Service Center	N5-006	N5-022	2,500,000	1,000,000	3,500,000
11	Airport Lift Station	Lift station rehabilitation, see cutsheet for summary	584	60	960%	730 La Guardia St	South west corner of the Ramco Enterprise LP parking lot	O8-004	O8-005	800,000	320,000	1,120,000
									EXISTING LIFT STA	TION CIP TOTAL F	PROJECT COSTS	38,710,000

*Soft costs include a 40% escalation of the construction costs for planning, engineering, CM, legal/admin.
**All CIP costs are expressed in May 2022 dollars, using McGraw-Hill ENR Construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.



TABLE 7-6.
CITY OF SALINAS FUTURE CAPITAL IMPROVEMENT PROGRAM (CIP)

Title	Description	Tributary Area	Length (Ft)	Old Diameter (in)	New Diameter (in)	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
San Juan Grade	Upsize sewer main	Santa Rita	3,800	8 and 10	12	San Juan Grade Road	From Russell Rd to Van Buren Ave	C5-008	D4-055	\$2,370,000	\$948,000	\$3,318,000
			240	18	24	Tulane Street	Between Cherokee Dr and US HWY 101	H3-009	H3-013			
North Davis Road	Upsize sewer main		1,700	24	30	N Davis Rd	HWY 101 to Calle del Adobe	H3-013	H2-002	\$8,430,000	\$3,372,000	\$11,802,000
NOITH DAVIS ROAU	Opsize sewei main		3,400	30	32	Parallel to N Davis Rd	Calle del Adobe to intersect with N Davis Rd near Rossi Rico Parkway	H2-002	J2-047	ψ0,430,000	ψ3,372,000	\$11,802,000
West Laurel Drive	Upsize sewer main		1,550	12	15	W Laurel Dr	From N Main St to near Laurel Park	H4-001	H3-023	\$1,020,000	\$408,000	\$1,428,000
Victor Street	Upsize sewer main		1,600	15	18	Victor St	From Ashby Way to W Rossi St	J3-012	J2-007	\$1,250,000	\$500,000	\$1,750,000
												1
Freedom Parkway	Upsize sewer main	Lake St	2,025	10	15	Freedom Parkway	From Estrella Way to N Sanborn Rd	J9-005	J9-001	\$3,280,000	\$1,312,000	\$4,592,000
		Lake St	2,725	12	18	Freedom Parkway	From N Sanborn Rd to Nogal Dr	J9-001	18-013			
Natividad Creek Park	Upsize sewer main	Lake St	230	18	21	Natividad Creek Park	Crossing Freedom Parkway to Natividad Creek Park	H8-002	H8-004	\$4,590,000	\$1,836,000	\$6,426,000
Natividad Cleek Faik	·	Carpenter Hall	3,800	24	27	Natividad Creek Park	Natividad Creek Park to Twin Creeks Golf Course	H8-004	17-005	ψ4,090,000	\$1,000,000	\$6,426,000
							From Pardin Dd to					
East Alisal Street	Upsize sewer main		5,400	15	18	E Alisal St	From Bardin Rd to Williams Rd	M8-010	M7-009	\$5,780,000	\$2,312,000	\$8,092,000
	,	Part in TP2	2,200	18	21	E Alisal St	From Williams Rd to S Sanborn Rd	M7-009	M6-012	,,	. ,,	, -,,, -
		1				1	1		1			
			1,300	12	15	Abbott St	From Harris Rd	Q7-001	Q7-004			
Abbott Street	Upsize sewer main		700	12 15	15 18	Abbott St Harkins Rd	To Harkins Rd From Abbot St toward Schilling Pl	P6-015 P6-006	P6-006 after P6-003 (no City ID)	\$1,920,000	\$768,000	\$2,688,000



TABLE 7-6. CITY OF SALINAS FUTURE CAPITAL IMPROVEMENT PROGRAM (CIP)

Title	Description	Tributary Area	Length (Ft)	Old Diameter (in)	New Diameter (in)	Street	Location	Upstream Manhole Number	Downstream Manhole Number	Construction Cost (\$)	Soft Cost (\$)*	Total Project Cost (\$)**
	Increase Overflow Elevation	TP2			65.09 ft (elevation)	S Sanborn Rd	S Sanborn at E Alisal St		M6-012			
South Sanhara Bood			4,365	18	21	S Sanborn Rd	From E Alisal St to Pellet Ave	M6-012	O6-006	\$5,980,000	\$2,392,000	¢9 272 000
South Sanborn Road	Upsize Sewer Main		500	21	24	S Sanborn Rd	From Pellet Ave to Industrial St	O6-006	O6-008	φ 3,960,000	φ2,392,000	\$8,372,000
			1,500	24	27	S Sanborn Rd	From Industrial St to near Abbott St	O6-008	O5-002			



\$48,468,000

^{*}Soft costs include a 40% escalation of the construction costs for planning, engineering, CM, legal/admin.
**All CIP costs are expressed in May 2022 dollars, using McGraw-Hill ENR Construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.



Existing CIP Project #1: Cesar Chavez Park

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger

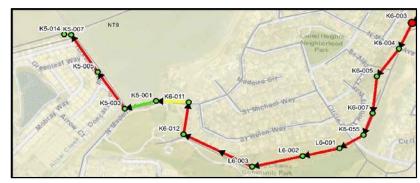
- Existing Condition
- Future Condition

Project Components

- Upgrade Gravity Pipeline
- ✓ New Gravity Pipeline
- Upgrade Lift Station
- Upgrade Force Main
- Rehabilitation/RepairInspection and/or analysis
 - Replace Manhole



SEE BELOW, TOP RIGHT



Project Need

- ✓ Insufficient capacity for existing flow
 ☐ Insufficient capacity for future flow
- Existing condition limits O&M
- Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹ \$8,369,000 Planning, Engineering, CM, Legal/Admin (40%) \$3,347,600 Total Project Cost \$11,716,600

Project Description

The Cesar Chavez Park Existing CIP project proposes to upsize approximately 2,100 feet of 15-inch pipe to 18-inch pipe from MH-J7-007 near Garner Ave to MH-K7-017 near E Laurel Dr. These pipe segments run 66% to 95% full during existing peak flow conditions. This project also proposes upsizing approximately 3,000 ft of 21-inch pipe to 24-inch from MH-K7-017 near E Laurel Dr to MH-L6-001 near Circle Dr. These pipe segments run 39% to 100% full during existing peak conditions. Four (4) manholes are surcharging within 5 ft of the manhole rim in this section. An additional 3,500 ft of 24-inch should be upgraded to 27-inch from manhole L6-001 near Circle Dr to manhole K5-007 near Longbow Way. These pipe segments run at 60% to 85% full during existing peak flow conditions. The existing 21-inch and 24-inch pipe sizes are based on as-built records and should be field verified before upsizing.

In addition to the pipe replacements, it is also proposed to construct approximately 70 ft of new 24-inch pipe from MH-K5-007 to MH-K5-014 to split flow between 24-inch and 30-inch parallel mains.

It should be noted that CCTV evaluation recorded pipe encrustations and manholes condition repairs for the pipe segment between K5-001 and K5-003.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing CIP Project #3: Upstream TP2 Diversion

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger	NTS STATE OF THE S
✓ Existing Condition Leg	
Future Condition	MH M6-012 Modeled Pipes Exceeds Capacity Analysis of the Capacity Analy
Market and the second	Sft from rim Sft from rim
 □ Upgrade Gravity Pipeline □ New Gravity Pipeline □ Upgrade Lift Station □ Upgrade Force Main □ Rehabilitation/Repair □ Inspection and/or analysis ☑ Replace Manhole 	Spicer De La Torre
Project Need P	roject Cost Breakdown
☐ Insufficient capacity for existing flow	Construction Cost ¹ \$45,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%) \$18,000
Existing condition limits O&M	Total Project Cost \$63,000
Consolidate parallel sewer mains	• • •
Project Description	and the state of t

The Upstream TP2 Diversion Existing CIP project proposes to divert flows along East Alisal to South Sanborn Rd. by increasing the invert at MH-M6-012 by 0.35 ft. This will cause the 18-inch along East Alisal to act as an overflow line, lessening the flow just downstream of TP2 which currently runs at 91-100% full under existing peak conditions.

It should be noted that future flows will affect this CIP, causing a need to upsize along South Sanborn Rd (see Future CIP South Sanborn Road).

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Existing CIP Project #3: Upstream TP2 Diversion



Existing CIP Project #4: Northridge Mall

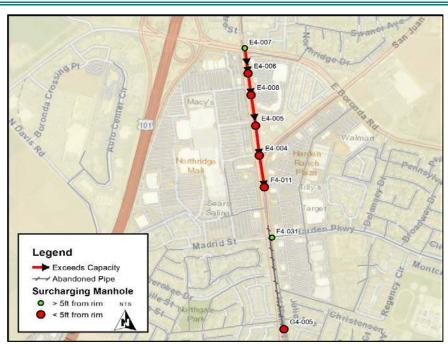
City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger

- Existing Condition
- Future Condition

Project Components

- Upgrade Gravity Pipeline
- New Gravity Pipeline
- Upgrade Lift Station
- Upgrade Force Main
- ☐ Rehabilitation/Repair
- Inspection and/or analysis
- Replace Manhole



Project Need

- Insufficient capacity for existing flow
- Insufficient capacity for future flow
- ☐ Existing condition limits O&M
- ☐ Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹ \$1,916,000 Planning, Engineering, CM, Legal/Admin (40%) \$766,400

Total Project Cost \$2,682,400

Project Description

The Northridge Mall Existing CIP project proposes the upsizing of approximately 2,300 ft of 15-inch pipe to 18-inch from MH E4-007 to MH F4-011 along N Main St. These pipe segments run 100% full during existing peak flow conditions. It is also recommended to connect the 18-inch pipe at F4-007 to the 27-inch pipe at MH F4-031, abandoning 1,800 feet of the parallel 12-inch line along North Main Street from MH F4-031 to G4-005. This connection will require trenching in a roadway where concrete has been identified. A cost per lineal foot to remove and replace the concrete has been added to the construction cost. With current conditions, six (6) manholes are surcharging within 5 ft of the manhole rim in the existing PHWWF condition.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Existing CIP Project #4: Northridge Mall



Existing CIP Project #8: Cherokee Drive

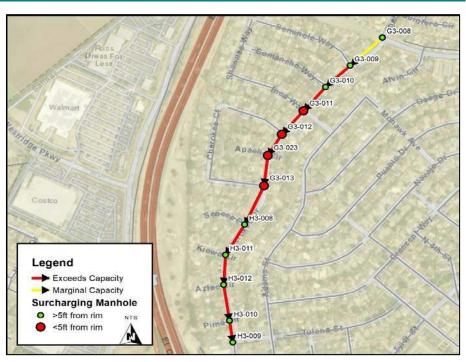
City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger

- Existing Condition
- √ Future Condition

Project Components

- Upgrade Gravity Pipeline
 - New Gravity Pipeline
- Upgrade Lift Station
- Upgrade Force Main
- Rehabilitation/Repair
- Inspection and/or analysis
- Replace Manhole



Project Need

- ✓ Insufficient capacity for existing flow
- Insufficient capacity for future flow
- Existing condition limits O&M
- Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹ \$1,920,000

Planning, Engineering, CM, Legal/Admin (40%) \$768,000

Total Project Cost \$2,688,000

Project Description

The Cherokee Dr Existing CIP project proposes to replace approximately 1,600 feet of 18-inch pipe with 24-inch pipe on Cherokee Dr from Seminole Way (MH-G3-008) to Tulane St (MH-H3-009). Cherokee Dr has insufficient capacity for existing conditions. These pipes segments run 67% to 100% full during existing peak flow conditions. Four (4) of the twelve (12) manholes in this section are surcharging within 5 ft of the manhole rim in the existing PHWWF condition.

- 1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.
- 1. Construction costs AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Existing CIP Project #8: Cherokee Drive



Existing CIP Project #19: Noice Drive/Tyler Street

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger ✓ Existing Condition Future Condition Jurisdiction ✓ City of Salinas Project Components ✓ Upgrade Gravity Pipeline ✓ New Gravity Pipeline Upgrade Lift Station Upgrade Force Main Rehabilitation/Repair Inspection and/or analysis ✓ Replace Manhole



Project Need

Insufficient capacity for existing flow
 Insufficient capacity for future flow
 Existing condition limits O&M
 Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹ \$3,400,000 Planning, Engineering, CM, Legal/Admin (40%) \$1,360,000 **Total Project Cost** \$4,760,000

Project Description

The Noice Dr/ Tyler St Existing CIP project proposes to replace approximately 2,100 feet of 8-inch pipe to 12-inch pipe on Noice Dr from MH-G4-015 at Chaparral St to MH-H4-011 at E Laurel Dr. This pipe segment runs 100% full during existing peak flow conditions. It is also recommended to reconstruct MH-H4-012 to match inverts and change the flow direction from MH-H4-011 to MH-H4-012. Additionally, it is recommended that approximately 60 ft of new 12-inch pipe be constructed to connect MH-H4-006 to MH-H4-001 at West Laurel Dr and North Main St. This new pipe will relieve the parallel 8-inch lines along North Main St that exceeds capacity under existing peak flow conditions. Finally, approximately 3,300 feet of 12-inch pipe along West Laurel Dr. and Tyler St. from MH-H3-023 to MH-I3-001 should be upsized to 15-inch. Sixteen (16) of the twenty (20) manholes are surcharging within 5 ft of the manhole rim in the existing PHWWF condition.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Existing CIP Project #19: Noice Drive/Tyler Street



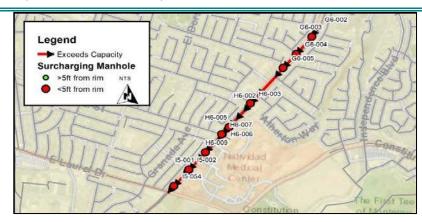
Existing CIP Project #20: Natividad Rd or Alternative Natividad Consolidation

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger Existing Condition Future Condition Project Components Upgrade Gravity Pipeline ☐ Upgrade Lift Station

Upgrade Force Main ☐ Rehabilitation/Repair Inspection and/or analysis

Replace Manhole





Project Need

☑ Insufficient capacity for existing flow ☐ Insufficient capacity for future flow

Existing condition limits O&M

Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹ \$6,090,000 Planning, Engineering, CM, Legal/Admin (40%) \$2,436,000

> **Total Project Cost** \$8,526,000

Project Description

The Natividad Rd CIP project proposes to replace approximately 2,700 feet of 12-inch to 15-inch from MH-G6-002 to MH-H6-003. These pipe segments run 85% to 100% full during existing peak flow conditions. This project recommends an overflow weir be constructed 0.5 ft in MH-H6-003 to make the 12-inch parallel an overflow pipe. Approximately 3,600 ft of 15-inch pipe should be replaced with 18-inch from MH-H6-003 to MH-I5-007. These pipe segments run 100% full during existing peak flow conditions. At Sherwood Dr, approximately 305 ft of 12-inch pipe from MH-J5-003 to MH-J5-005 should be upsized to 15-inch and approximately 2,000 ft of 15-inch to 18-inch from MH-J5-005 to MH-J4-010. These segments of pipe are running at 100% full at existing peak flow conditions. Eighteen (18) of the manholes are surcharging within 5 ft of the manhole rim in the existing PHWWF condition.

As an alternative, the Natividad Consolidation CIP proposes to abandon the parallel 12-inch overflow and upsize the approximately 7,400 ft of 15-inch pipe to 21-inch from MH-H6-003 to MH-I5-011 and 24-inch from MH-I5-011 to MH-J4-022, as well as upsize approximately 1,100 feet of 21-inch line to 30-in line from MH-J4-022 to MH-K4-002. Note, the last segment of this CIP proposes to upsize 620 feet of 21-inch to 30-inch under HWY 101.

Wallace Group

www.wallacegroup.us

^{1.} Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.



Existing Lift Station CIP (BY LIFT STATION): Lake Street

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Projec	t Trigg	er
--------	---------	----

	 _			_				
. /	 Ŀι	111	ırΔ	Co	nd	ıτ	10	n

Jurisdiction

City of Salinas

Project Components

Upgrade Gravity Pipe	line	Pipel	ity	Grav	Upgrade	
----------------------	------	-------	-----	------	---------	--

New Gravity Pipeline

Upgrade Lift Station Upgrade Force Main

☐ Rehabilitation/Repair

Inspection and/or analysis

Replace Lift Station



Project Need

✓ Insufficient capacity for existing flow

- ✓ Insufficient capacity for future flow
- Existing condition limits O&M
- Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹

\$9,500,000

Planning, Engineering, CM, Legal/Admin (40%)

\$3,800,000

Total Project Cost

\$13,300,000

Project Description

Relocate lift station across the street on the east side of West Rossi Street. The costs are for a full lift station replacement. Costs include replacement of forcemain. Costs do not include any land acquisition.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Existing Lift Station CIP (BY LIFT STATION): Lake Street



Existing Lift Station CIP (BY LIFT STATION): Santa Rita

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		45
Existing Condition		193
☐ Future Condition	4	起
to a distriction		+
Jurisdiction		
City of Salinas		18:02
Project Components		
☐ Upgrade Gravity Pipeline		
☐ New Gravity Pipeline		
✓ Upgrade Lift Station		N. A.
Upgrade Force Main		
Rehabilitation/Repair		1
☐ Inspection and/or analysis		
Replace Manhole		2. 生工
The place Walliote		
	32. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	河 ()
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$3,500,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$1,400,000
✓ Existing condition limits O&M	Total Project Cost	\$4,900,000
Consolidate parallel sewer mains		
Project Description		
It is recommended to do a full replacement o	f this lift station as it is in less than satisfactory condition. The costs provi	ded are for
	cquisition if required. Costs do not include replacement of the forcemain	١.
Electrical Upgrades		
Install control cabinet above grade	a fau wantahia mayayatay	
Install receptacle and transfer switch Replace control panel breaker discor		
Provide label for voltage on the cabi		
Repair broken conduit between dry		
Seal all penetrations into the dry we		
Upgrade Micro-Mac control system		
Move conduit underground		
Mechanical Upgrades		
N/A		
Site and Piping Upgrades Install emergency bypass system		
Install emergency bypass system Install emergency overflow tank		
Repair wet well coating		
Provide on-site water for wash down	1	

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

KEW

Wallace Group



Existing Lift Station CIP (BY LIFT STATION): Spicer

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		The state of the s
Future Condition		The said
Jurisdiction		A ADM A
✓ City of Salinas		
Project Components		Maria de la Companya
Upgrade Gravity Pipeline		
New Gravity Pipeline		No la
✓ Upgrade Lift Station		
Upgrade Force Main		
Rehabilitation/Repair		1 150
Inspection and/or analysis		Man Ball Man
Replace Manhole		
Project Need	Project Cost Breakdown	
Insufficient capacity for existing flow	Construction Cost ¹	\$2,200,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$880,000
Existing condition limits O&M	Total Project Cost	\$3,080,000
Consolidate parallel sewer mains		
Project Description		
It is recommended to do a full replacement of this lift	station as it is in less than satisfactory condition. The costs provi	ided are for
	n if required. Costs do not include replacement of the forcemain	
Electrical Upgrades		
Install cabinet above grade		
Installing a transfer switch for emergency back		
Replace control panel breaker disconnects ar	id overload reset buttons	
Provide label for voltage on the cabinet		
Replace conduit in wet well Upgrade the SCADA control system		
Mechanical Upgrades		
N/A		
Site and Piping Upgrades		
Install emergency overflow tank		
Repair leak in the 6" force main in the dry we	II .	
Install removeable bollards at the dry well		
Install emergency bypass system		
Coat the wet well Repair coating on the floor of the dry well		
Provide on-site water for wash down		
Additional Studies		
Perform study to determine if the wet well ca	an be relocated outside of the street.	

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: Wallace Group



Existing Lift Station CIP (BY LIFT STATION): Mill Lake

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger	
✓ Existing Condition	
Future Condition	
Jurisdiction	
Laber 1	
✓ City of Salinas	100.2
Project Components	
Upgrade Gravity Pipeline	
New Gravity Pipeline	
Upgrade Lift Station	
Upgrade Force Main	
Rehabilitation/Repair	Total Control
☐ Inspection and/or analysis	
Replace Manhole	
	SACHWIS -
Project Need Project Cost Breakdown	
☐ Insufficient capacity for existing flow Construction Cost ¹ \$2	2,750,000
☐ Insufficient capacity for future flow Planning, Engineering, CM, Legal/Admin (40%) \$1	1,100,000
✓ Existing condition limits O&M Total Project Cost \$3	3,850,000
Consolidate parallel sewer mains	
Duningt Description	
Project Description	
It is recommended to do a full replacement of this lift station as it is in less than satisfactory condition. The costs provided a	re for full
replacement. Costs do not include land acquisition if required. Costs do not include replacement of the forcemain.	
Electrical Upgrades Move control cabinet above ground	
Replace control panel breaker disconnects	
Install receptacle and transfer switch for portable generator	
Provide label for voltage on the cabinet	
Move electrical conduit underground	
Mechanical Upgrades	
N/A	
Site and Piping Upgrades	
Install emergency overflow tank	
Install fencing around dry well	
Coat wet well	
Install emergency bypass system Provide on-site water for wash down	

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

KEW

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY LIFT STATION): Carpenter Hall

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction		
✓ City of Salinas	Tour The second	
Project Components		
Upgrade Gravity Pipeline		
☐ New Gravity Pipeline	CITY MORENTY	LIPATI I BOSS
Upgrade Lift Station	THE SPASSING TO THE SPASSING T	1
Upgrade Force Main	THE RESERVE TO SERVE	
Rehabilitation/Repair		
Inspection and/or analysis		
Replace Manhole		
		ASSET ASSET
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$1,050,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$420,000
Existing condition limits O&M	Total Project Cost	\$1,470,000
Consolidate parallel sewer mains		
Project Description		
Costs provided are for the upgrades provided by replacement.	pelow. This lift station is anticipated to only be rehabilitated, not a fu	ıll
El		
Electrical Upgrades Label electrical cabinets with line volt	age	
Repair or replace motor to pump #1	350	
Install disconnect switches for each pu	ump at the bottom of the dry pit.	
Install receptacle and transfer switch	for portable generator	
Mechanical Upgrades		
Replace flow meter Install emergency bypass system		
Site and Piping Upgrades		
Install emergency overflow tank		
Repair or replace wet well access lid		
Repair piping/penetration from dry w	ell to wet well	
Provide on-site water for wash down Additional Studies		
Additional Studies		

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: KEW Wallace Group www.wallacegroup.us San Luis Obispo, CA

Evaluate generator for replacement



Existing Lift Station CIP (BY LIFT STATION): De La Torre

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		1
✓ Future Condition	The state of the s	
Jurisdiction		
✓ City of Salinas		
Project Components	I I I I I I I I I I I I I I I I I I I	
Upgrade Gravity Pipeline		
☐ New Gravity Pipeline	THAT	
✓ Upgrade Lift Station	The state of the s	
Upgrade Force Main		
Rehabilitation/Repair		
☐ Inspection and/or analysis		
Replace Manhole		
	1	
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$1,200,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$480,000
Existing condition limits O&M	Total Project Cost	\$1,680,000
☐ Consolidate parallel sewer mains		
Project Description		
	in the lift station for existing uses and then full replacement of t	the lift station

Recommend minor upgrades as needed to maintain the lift station for existing uses and then full replacement of the lift station to meet future demands. Costs included on this cut sheet are for a full replacement of this lift station but do not include property acquisition if required. Does not include forcemain replacement.

Electrical Upgrades

Install a receptacle and transfer switch for portable electrical generator

Replace the control panel breaker disconnects

Replace the overload reset buttons for the contactors

Install new control panel above ground

Upgrade Level Controller system

Mechanical Upgrades

Repair motors or replace complete pump and motor

Site and Piping Upgrades

Install emergency overflow tank

Install fencing around lift station

Provide on-site water for wash down

Install emergency bypass system

KEW

Coat wet well and recoat the dry well floor

Additional Studies

Perform study to determine if lift station is required to be replaced or is capable of being upsized to meet future demands

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY LIFT STATION): Vista Nueva

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger	
Existing Condition	
Future Condition	
Jurisdiction	
✓ City of Salinas	
Project Components	
☐ Upgrade Gravity Pipeline	
New Gravity Pipeline	
✓ Upgrade Lift Station	
☐ Upgrade Force Main	
Rehabilitation/Repair	
☐ Inspection and/or analysis	
Replace Manhole	
Project Need F	Project Cost Breakdown
☐ Insufficient capacity for existing flow	Construction Cost ¹ \$2,200,000
✓ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%) \$880,000
Existing condition limits O&M	Total Project Cost \$3,080,000
Consolidate parallel sewer mains	
Project Description	
	ation as it is in less than satisfactory condition. The costs provided are for frequired. Costs do not include replacement of the forcemain.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

Conduct a study to determine source of moisture into the electrical cabinet

PREPARED BY:

KEW

Wallace Group

www.wallacegroup.us San Luis Obispo, CA

Existing Lift Station CIP (BY LIFT STATION): Vista Nueva



Existing Lift Station CIP (BY LIFT STATION): Harkins Road

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
✓ Existing Condition		
✓ Future Condition		
Jurisdiction		
✓ City of Salinas	ATT CALL	Sand Control of the
Project Components		
Upgrade Gravity Pipeline		
New Gravity Pipeline		
✓ Upgrade Lift Station		
Upgrade Force Main		
Rehabilitation/Repair		
☐ Inspection and/or analysis		
Replace Manhole		A STATE OF THE STA
		Consideration .
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$1,300,000
✓ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$520,000
Existing condition limits O&M	Total Project Cost	\$1,820,000
Consolidate parallel sewer mains		
Project Description		
Project Description		
	n the lift station for existing uses and then full replace	
	n this cut sheet are for a full replacement of this lift st	ation but do not
include property acquisition if required. Does not i	include forcemain replacement.	
Electrical Upgrades		
Install receptacle and transfer switch for po		
Replace the control panel breaker disconne		
Replace the overload reset buttons for the	contactors	
Label control panel with line voltage		
Install new control panel above ground		
Upgrade Level Controller system		
Mechanical Upgrades	and (NIC)	
Replace pumps with smaller pumps when r	requirea (NIC)	
Site and Piping Upgrades		
Install emergency overflow tank		
Install fencing around lift station Provide on-site water for wash down		
Provide on-site water for wash down		

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: KEW
Wallace Group
www.wallacegroup.us
San Luis Obispo, CA

Install improved emergency bypass system



Existing Lift Station CIP (BY LIFT STATION): Las Casitas

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Particular transport		
Project Trigger Existing Condition		
Future Condition		
- Amountain		ENE
Jurisdiction		
☑ City of Salinas		
Project Components		
 Upgrade Gravity Pipeline New Gravity Pipeline Upgrade Lift Station Upgrade Force Main Rehabilitation/Repair Inspection and/or analysis Replace Manhole 		
Project Need P	Project Cost Breakdown	
 ☐ Insufficient capacity for existing flow ☐ Insufficient capacity for future flow ☑ Existing condition limits O&M ☐ Consolidate parallel sewer mains 	Construction Cost ¹ Planning, Engineering, CM, Legal/Admin (40%) Total Project Cost	\$650,000 \$260,000 \$910,000
Project Description		
Costs provided are for the upgrades provided below full replacement. Electrical Upgrades Install a receptacle & transfer switch for portab Install a new control panel above ground Repair or replace the breaker disconnects Mechanical Upgrades N/A Site and Piping Upgrades Install emergency overflow tank Install emergency bypass system Coat bottom of dry well and entire wet well	w. This lift station is anticipated to only be rehabilit	ated, not a

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: KEW

Provide on-site water for wash down

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY LIFT STATION): TP2

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
	Sec. 200	
Jurisdiction		
✓ City of Salinas		
Project Components		
☐ Upgrade Gravity Pipeline		and the last
☐ New Gravity Pipeline	AND THE PERSON NAMED IN COLUMN 1	700
✓ Upgrade Lift Station		
☐ Upgrade Force Main		
Rehabilitation/Repair	The second secon	
☐ Inspection and/or analysis		30
Replace Manhole		
	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	当場を 神神 製造
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$2,500,000
✓ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$1,000,000
Existing condition limits O&M	Total Project Cost	\$3,500,000
Consolidate parallel sewer mains	·	
Project Description		
	of this lift station as it is in less than satisfactory condition. The costs provide	ed are for full
	isition if required. Costs do not include replacement of the forcemain.	
Electrical Upgrades Install receptacle and transfer switc	n for nortable generator	
Replace splice box in wet well	The portuble generator	
	ct and disconnects for both pumps on the outside of the cabinet	
Label the cabinet with the voltage		
Install GFI protection for air compre	ssor	
Mechanical Upgrades	If vibrations persist, lift station upgrades will be required to meet future flo	NA/C
Install on-site flow meter	in vibrations persist, int station upgrades will be required to meet ruture no	JW5.
Site and Piping Upgrades		
Install emergency bypass system		
Install emergency overflow tank		
Provide on-site water for wash dow		
Additional Studies	1	

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated

PREPARED BY: KEW

to the year or years scheduled for the work.

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY LIFT STATION): Airport (Moffett)

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger	
Existing Condition	THE RESERVE AND ADDRESS OF THE PARTY OF THE
Future Condition	ALTERNATION AND APPROXIMENTS
Jurisdiction	
	Mr.
✓ City of Salinas	
Project Components	
☐ Upgrade Gravity Pipeline	
□ New Gravity Pipeline □	BANKEY LINE MARKET BY
✓ Upgrade Lift Station	
☐ Upgrade Force Main	
☐ Rehabilitation/Repair	
☐ Inspection and/or analysis	
Replace Manhole	
Project Need	Project Cost Breakdown
☐ Insufficient capacity for existing flow	Construction Cost ¹ \$800,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%) \$320,000
Existing condition limits O&M	Total Project Cost \$1,120,000
☐ Consolidate parallel sewer mains	
Project Description	
full replacement. Electrical Upgrades Install overloads on load side of contact Replace breaker disconnect handles for Proper labeling for the line voltage on t positions Provide wiring diagram at station Replace Sch 40 pipe with proper electri Install XP fittings/seals on conduits Mechanical Upgrades Replace pumps and motors Move check valves into a vault located of Site and Piping Upgrades Install emergency overflow tank Replace wet well coating Relocate wet well vent Provide on-site water for wash down	pumps 1 and 2 and install proper disconnect hardware he cabinet and the back-up manual transfer switch lever cal conduit

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: KEW
Wallace Group
www.wallacegroup.us
San Luis Obispo, CA



Existing Lift Station CIP (BY PROJECT): Controller Upgrades and Standardization

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Station Priority	
	1. Lake St, Vista Nueva, Carpenter Hall, Santa Rita	
	2. Spicer, Harkins, TP2, Harris Rd.	
Project Components	3. Mill Lake, Las Casitas, Airport	
☐ Upgrade Gravity Pipeline		
New Gravity Pipeline		
Upgrade Lift Station		
Upgrade Force Main		
Rehabilitation/Repair		
Inspection and/or analysis		
Replace Manhole		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$410,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$164,000
Existing condition limits O&M	Total Project Cost	\$574,000
☐ Consolidate parallel sewer mains		
Project Description		

All of the lift stations need new and standardized controllers to improve O&M.

The lift station with the highest priority for controller replacement is Lake Street. Lake St has had a controls failure that lead to an overflow/spill. The next priority lift stations are Vista Nueva, Carpenter Hall, and Santa Rita. Mill Lake, Las Casitas, and Aiport lift stations are lowest priority because the controllers were replaced relatively recently. However, it has already become difficult to find replacement pieces for these controllers and updates to match the other lift stations will be necessary eventually.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

KEW

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY PROJECT): Emergency Bypass and Washdown Water

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Stations	
✓ City of Salinas	Emergency Bypass:	
	Santa Rita, Carpenter Hall, De La Torre, Harkins, Las	Casitas,
Project Components	Mill Lake, Spicer, TP2	
☐ Upgrade Gravity Pipeline	Washdown Water:	
☐ New Gravity Pipeline	All Lift Stations	
Upgrade Lift Station		
Upgrade Force Main		
Rehabilitation/Repair		
Inspection and/or analysis		
Replace Manhole		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$500,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$200,000
Existing condition limits O&M	Total Project Cost	\$700,000
☐ Consolidate parallel sewer mains		
Project Description		

An emergency bypass provides operations' staff the ability to bypass wastewater flows if/when the pumps or power go out at the lift station. Having an emergency bypass would greatly improve operations and maintenance. Santa Rita, Carpenter Hall, De La Torre, Harkins, Las Casitas, Mill Lake, Spicer, and TP2 currently do not have emergency bypass capabilities and thus require other means and methods, which often are costly, to pump down the lift stations if there are issues with the pumps or the facility loses power. This CIP will install a new bypass at each of the identified lift station sites.

Wash water is also needed at each of the lift stations and would improve operations. This CIP will install a hose bib connection that would allow operator's to connect a hose for washing hands or down the facility.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

KEW

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY PROJECT): Safety/Falling Hazard Concerns

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Stations	
✓ City of Salinas	Lake Street, TP2, Vista Nueva	
Project Components		
☐ Upgrade Gravity Pipeline		
☐ New Gravity Pipeline		
Upgrade Lift Station		
Upgrade Force Main		
Rehabilitation/Repair		
Inspection and/or analysis		
Replace Manhole		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$600,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$240,000
Existing condition limits O&M	Total Project Cost	\$840,000
☐ Consolidate parallel sewer mains		
Project Description		

Some of the lift stations have unsafe configurations for operations and maintenance. These lift stations put the operators at risk for falls and injuries. This CIP will provide for a technical study to evaluate what safety features can be installed to increase the safety of the operators. This CIP has also provided an assumed construction budget (\$200,000 each) to allow for improvements to be installed. This budget will need to be re-evaluated once the technical study has been completed.

PREPARED BY: **KEW**

^{1.} Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.



Existing Lift Station CIP (BY PROJECT): Generator Replacement

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Station Priority	
✓ City of Salinas	1. TP2	
	2. Lake Street	
Project Components	3. Santa Rita, Carpenter Hall	
☐ Upgrade Gravity Pipeline		
□ New Gravity Pipeline		
✓ Upgrade Lift Station		
☐ Upgrade Force Main		
☐ Rehabilitation/Repair		
☐ Inspection and/or analysis		
☐ Replace Manhole		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$1,100,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (30%)	\$330,000
Existing condition limits O&M	Total Project Cost	\$1,430,000
Consolidate parallel sewer mains	•	
Project Description		
	s is essential in case of an emergency. Some of the generate and Carpenter Hall will all need generator replacements in	•

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: KEW

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY PROJECT): Onsite Standby Generator

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Stations	
✓ City of Salinas	De La Torre, Harkins, Vista Nueva	
Project Components		
Upgrade Gravity PipelineNew Gravity Pipeline		
<u> </u>		
✓ Upgrade Lift Station✓ Upgrade Force Main		
Rehabilitation/Repair		
Inspection and/or analysis		
Replace Manhole		
The place Walmore		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$600,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (30%)	\$180,000
✓ Existing condition limits O&M	Total Project Cost	\$780,000
Consolidate parallel sewer mains		
Project Description		

In case of an emergency having a backup generator at the lift stations is extremely important. The lift stations that do not currently have generators are the goal of this CIP while the ones that need replacement are a seperate CIP. Note the Spicer Lift Station site does not currently have a back up generator, but due to site constraints it will need to remain only using a portable generator.

PREPARED BY: KEW

^{1.} Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.



Existing Lift Station CIP (BY PROJECT): Power Receptacle

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Station Priority	
✓ City of Salinas	1. Carpenter Hall	
	2. Harkins Rd, Spicer	
Project Components		
☐ Upgrade Gravity Pipeline		
☐ New Gravity Pipeline		
Upgrade Lift Station		
Upgrade Force Main		
∇ Rehabilitation/Repair		
☐ Inspection and/or analysis		
Replace Manhole		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$155,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (25%)	\$38,750
Existing condition limits O&M	Total Project Cost	\$193,750
☐ Consolidate parallel sewer mains		
Project Description		
A power receptacle capable of connecting a	portable generator to the lift stations is necessary in case of	

emergencies. Carpenter Hall is the highest priority because it is the only lift station without a receptacle. The next priority would be the lift stations that have unsafe hook ups that need replacement.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

KEW

Wallace Group www.wallacegroup.us San Luis Obispo, CA



Existing Lift Station CIP (BY PROJECT): Painting/Coating Maintenance

City of Salinas Capital Improvement Project Information Sheet 2023 Sanitary Sewer Master Plan Update

Project Trigger		
Existing Condition		
☐ Future Condition		
Jurisdiction	Lift Station Priority	
✓ City of Salinas	All Lift Stations	
Project Components		
☐ Upgrade Gravity Pipeline		
☐ New Gravity Pipeline		
Upgrade Lift Station		
Upgrade Force Main		
✓ Rehabilitation/Repair		
Inspection and/or analysis		
Replace Manhole		
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$900,000
☐ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (20%)	\$180,000
Existing condition limits O&M	Total Project Cost	\$1,080,000
☐ Consolidate parallel sewer mains		
Project Description		

To extend the life of the lift stations and reduce infiltration and inflow (I &I) of additional water into the system, fresh coatings are required. It is prudent to budget for coating the interior of wet wells, piping, underground facilities, etc every few years to extend the life of the facility. This CIP budget is a total dedicated budget to coating but can be spread out over several years.

PREPARED BY: KEW

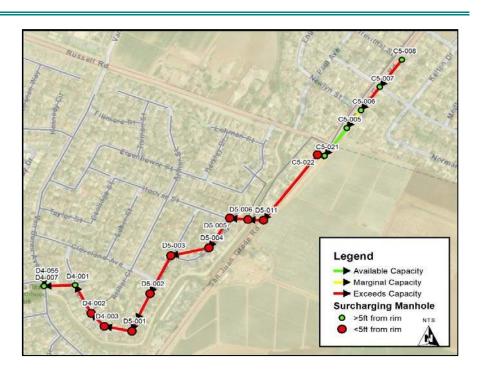
^{1.} Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.



Future CIP Project: San Juan Grade

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Pro	ject Trigger	
	Existing Condition	
√	Future Condition	
Futi	ure Flows	
Bols	sa Knolls	100%
Proj	ject Components	
Proj	ject Components Upgrade Gravity Pip	eline
Proj	•	
Proj	Upgrade Gravity Pip	e
Proj	Upgrade Gravity Pip New Gravity Pipelin	e
Proj	Upgrade Gravity Pip New Gravity Pipelin Upgrade Lift Station	e n
Proj	Upgrade Gravity Pip New Gravity Pipelin Upgrade Lift Station Upgrade Force Mair	e n ir



Project Need

☐ Insufficient capacity for existing flow ☐ Insufficient capacity for future flow

insufficient capacity for future flow

Existing condition limits O&M

Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost¹

\$2,370,000

Planning, Engineering, CM, Legal/Admin (40%)

\$948,000

Total Project Cost

\$3,318,000

Project Description

The San Juan Grade Existing CIP project upsizing approximately 3,800 ft of 8-inch and 10-inch pipe to 12-inch from MH C5-008 to D4-055. These pipe segments run 33% to 100% full during future peak flow conditions. Ten (10) of the MHs are surcharging within 5 ft of the manhole rim in the future PHWWF condition.

It should be noted that City maintanence crews have recorded pipe sags and surcharging manholes along pipe segments D5-001 to D4-003 and D4-007 to D4-055.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: A

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: San Juan Grade



Future CIP Project: North Davis Rd.

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger

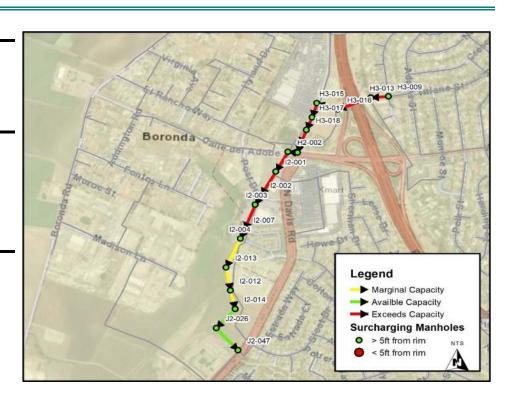
	Existing Condition
_/	Future Condition

Future Flows

West Area Specific Plan	74%
Target Area K	14%
Target Area L	4%
Bolsa Knolls	8%

Project Components

,	ect components
./	Upgrade Gravity Pipeline
	New Gravity Pipeline
	Upgrade Lift Station
	Upgrade Force Main
	Rehabilitation/Repair
	Inspection and/or analysis
	Replace Manhole



Project Need

	Insufficient capacity for existing flow
1	Insufficient capacity for future flow
	Existing condition limits O&M

Consolidate parallel sewer mains

Project Cost Breakdown

Planning, Engineering, CM, Legal/Admin (40%)	\$3,372,000
Total Project Cost	\$11,802,000

Project Description

The North Davis Road Future CIP recommends upsizing approximately 240 ft of 18-inch to 24-in from MH-H3-009 to MH-H3-013, 1,700 ft. of 24-inch to 30-inch from MH-H3-013 near Cherokee Dr to MH-H2-002 at Calle del Adobe, and 3,400 ft. of 30-inch to 32-inch from MH-H2-002 to MH-J2-047 at N Davis Rd. Under peak future conditions, this segment runs 43-100% full. Note: This project assumes Existing Cherokee Drive CIP and Existing Northridge Mall CIP have been constructed.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: North Davis Rd.



Future CIP Project: West Laurel Dr.

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger	
Existing Condition	
✓ Future Condition	
Future Flows	Laurel Park
Laurel Drive at N. Main Street FGA 100%	H3-023 H4-005 H4-010 H4-008 H4-007
Project Components	
 Upgrade Gravity Pipeline New Gravity Pipeline Upgrade Lift Station Upgrade Force Main 	Legend Legend
Rehabilitation/Repair	→ Marginal Capacity → Availble Capacity
☐ Inspection and/or analysis	→ Exceeds Capacity Surcharging Manholes
Replace Manhole	○ > 5ft from rim
Project Need	Project Cost Breakdown

- Insufficient capacity for existing flow
- Insufficient capacity for future flow
- Existing condition limits O&M
- Consolidate parallel sewer mains

Construction Cost¹ \$1,020,000 Planning, Engineering, CM, Legal/Admin (40%) \$408,000

.

Total Project Cost \$1,428,000

Project Description

The West Laurel Drive Future CIP recommends upsizing approximately 1,550 ft. of 12-inch to 15-inch from MH-H4-001 at N Main St to MH-H3-023 near Laurel Park. Under peak future conditions, this segment on West Laurel Drive runs 66-88% full.

Note: This project assumes Existing Noice Dr/Tyler Street CIP has been constructed.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: West Laurel Dr.



Future CIP Project: Victor St.

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger	_	
Existing Condition	The state of	0.0
Future Condition		1
Future Flows Laurel Drive at N. Main Street FGA 100%	J3-031 J3-013 J3	J3-012
Project Components	and the second second	Van
Upgrade Gravity Pipeline New Gravity Pipeline Upgrade Lift Station Upgrade Force Main Rehabilitation/Repair Inspection and/or analysis Replace Manhole	Legend → Marginal → Availble → Exceeds Surchargin ○ > 5ft fron	Capacity Capacity g Manholes n rim NTS
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$1,250,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$500,000
Existing condition limits O&M	Total Project Cost	\$1,750,000
Consolidate parallel sewer mains		

Project Description

The Victor Street Future CIP project recommends upsizing approximately 1,600 ft. of 15-inch to 18-inch from MH-J3-012 at Ashbury way to MH-J2-007 at W Rossi St. Under peak future conditions, this segment along Victor St runs 73-98% full.

Note: This project assumes Existing Noice Dr/Tyler Street CIP has been constructed and Future West Laurel Dr. CIP has been constructed or will be constructed concurrently.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: Victor St.



Future CIP Project: Freedom Pkwy

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger	The state of the s	
Existing Condition	The same of the sa	Ath.
✓ Future Condition	Natural B-013	E.
	18-011	
	(B-012)	
Future Flows	The second of th	
East Area Specific Plan 100%	18-019	
	19:001	
	The state of the s	
Project Components	J9-001	4000
✓ Upgrade Gravity Pipeline	The state of the s	and the same of th
New Gravity Pipeline	J9-003	Villiams
Upgrade Lift Station	J9-002	Park Pougaro
Upgrade Force Main	Legend J9-004	1
☐ Rehabilitation/Repair	→ Available Capacity → Exceeds Capacity J9-005	SOUP ATTENDED
☐ Inspection and/or analysis	Surcharging Manholes	300
Replace Manhole	St. from rim ST. From rim A	
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$3,280,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$1,312,000
☐ Existing condition limits O&M	Total Project Cost	\$4,592,000
☐ Consolidate parallel sewer mains		
Project Description The Freedom Daylousy Future CID project rese	promonds the unsine of approximately 2 025 ft of 40 in the mine to	1F inch
The Freedom Parkway Future CIP project reco	ommends the upsize of approximately 2,025 ft of 10-inch pipe to) 15-INCN

The Freedom Parkway Future CIP project recommends the upsize of approximately 2,025 ft of 10-inch pipe to 15-inch from MH-J9-005 at Estrella Way to MH-J9-001 at N Sanborn Rd. An additional 2,725 ft of 12-inch pipe from MH-J9-001 to MH-I8-013 at Nogal Dr should be upsized to 18-inch. Under peak future conditions, this segment on Freedom Parkway runs 50-100% full and 8 manholes are surcharging within 5 ft. of the manhole rims.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: Freedom Pkwy



Future CIP Project: Natividad Creek Park

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger Existing Condition Future Condition Legend Marginal Capacity Available Capacity Exceeds Capacity Surcharging Manholes **Future Flows** > 5ft from rim < 5ft from rim</p> East Area Specific Plan 58% Central Area Specific Plan 42% **Project Components** Upgrade Gravity Pipeline The First Te **New Gravity Pipeline** Las Casitas ☐ Upgrade Lift Station Upgrade Force Main

Project Need

Rehabilitation/RepairInspection and/or analysis

Replace Manhole

	Insufficient capacity for existing flow
√	Insufficient capacity for future flow
Ш	Existing condition limits O&M

Consolidate parallel sewer mains

Project Cost Breakdown

\$4,590,000
\$1,836,000
\$6,426,000

Project Description

The Natividad Creek Park Future CIP project recommends upsizing approximately 230 ft of 18-inch to 21-inch from MH-H8-002 to MH-H8-004 and approximately 3,800 ft of 24-inch to 27-inch from MH-H8-004 at Freedom Pkwy to MH-I7-005 at the Twin Creeks Golf Course. Under peak future conditions, this segment through Natividad Creek Park runs 76-100% full.

Note: This project assumes Future Freedom Pkwy CIP has been constructed or will be constructed concurrently.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: Natividad Creek Park



Future CIP Project: East Alisal St.

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger		
☐ Existing Condition		in the
✓ Future Condition	1 4 comment of the state of the	1
Future Flows East Future Growth Area 100%	Alisar Parkers of the	
Project Components	M6-012 M6-002 AT 207	NA NA
✓ Upgrade Gravity Pipeline	M7-007 M7-009 NA NA M7-001 M8-007 M8-007	M8-010 M8-003 M8-001
	M/-010 M8-008	
☐ Upgrade Lift Station		
Upgrade Force Main	Legend	rin mp
Rehabilitation/Repair	Salmu Available	5 (2000) (2000) (300)
Inspection and/or analysis	→ Exceeds © Surcharging	
Replace Manhole	> 5ft from < 5ft from	0.00
Project Need	Project Cost Breakdown	
☐ Insufficient capacity for existing flow	Construction Cost ¹	\$5,780,000
Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%)	\$2,312,000
Existing condition limits O&M	Total Project Cost	\$8,092,000
Consolidate parallel sewer mains		

Project Description

The East Alisal Street Future CIP project recommends upsizing approximately 5,400 ft. of 15-inch to 18-inch from MH-M8-010 near Bardin Rd to MH-M7-009 at Williams Rd. Additionally, approximately 2,200 ft of 18-inch should be upsized to 21-inch from MH-M7-009 to MH-M6-012 at N Sanborn Rd. Under peak future conditions, this segment runs 67-100% full and 14 manholes are surcharging within 5 ft of the manhole rims.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: East Alisal St.



Future CIP Project: Abbott St.

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger

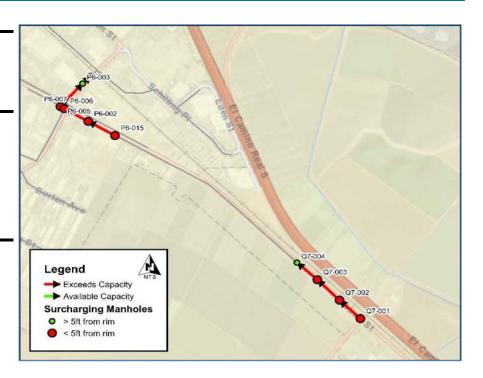
	Existing Condition
1	Future Condition

Future Flows

East Future Growth Area	32%
Target Area B	21%
Target Area F	1%
Salinas Ag-Industrial Center	46%

Project Components

- New Gravity Pipeline
- Upgrade Lift Station
- Upgrade Force MainRehabilitation/Repair
- ☐ Inspection and/or analysis
- Replace Manhole



Project Need

	Insufficient capacity for existing flow
--	---

- Insufficient capacity for future flow
- Existing condition limits O&M
- Consolidate parallel sewer mains

Project Cost Breakdown

Construction Cost ¹	. , ,
Planning, Engineering, CM, Legal/Admin (40%)	\$768,000
Total Project Cost	\$2,688,000

Project Description

The Abbot Street Future CIP project recommends upsizing approximately 1,300 ft of 12-inch to 15-inch from MH-Q7-001 at Harris Rd to MH-Q7-004. Between MH Q7-004 and P6-015, there is an exisitng 15-inch pipe that does not need to be upsized. An additional 850 ft. of 12-inch pipe from MH-P6-015 to MH-P6-006 at Harkins Rd should be upsized to 15-inch, and 700 ft of 15-inch to 18-inch from MH-P6-006 to the manhole after P6-003 (no City ID). Under peak future conditions, this segment runs 66-100% full. Under future max day flows seven of the manholes are surcharging within 5 ft of the manhole rim.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY:

AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: Abbott St.



Future CIP Project: South Sanborn Rd.

City of Salinas Capital Improvement Project Information Sheet 2022 Sanitary Sewer Master Plan Update

Project Trigger	
Existing Condition	Gagney Sty
▼ Future Condition	Sui Senidar S Sad M6-012
	A NA
Future Flows	M6-004
East Future Growth Area 100%	M6-005 M6-006
	N6-003
	N6-004
Project Components	N6-006
✓ Upgrade Gravity Pipeline	No.007
New Gravity Pipeline	NG-008
Upgrade Lift Station	06-006
Upgrade Force Main	O6-009 O6-007
Rehabilitation/Repair	Marginal Capacity ➤ Available Capacity
☐ Inspection and/or analysis	Junction Exceeds Capacity Surcharging Manholes
Replace Manhole	05-002 0 > 5ft from rim NTS
	< 5ft from rim
Project Need	Project Cost Breakdown
☐ Insufficient capacity for existing flow	Construction Cost ¹ \$5,980,000
✓ Insufficient capacity for future flow	Planning, Engineering, CM, Legal/Admin (40%) \$2,392,000
Existing condition limits O&M	Total Project Cost \$8,372,000
Consolidate parallel sewer mains	

Project Description

In order to avoid upgrades at both South Sanborn and downstream of TP2, the South Sanborn Future CIP project proposes to increase the overflow elevation at MH-M6-012 to 65.09 ft in elevation (an additional 0.65 ft from Existing CIP Upstream TP2 Diversion). This hydraulic change would send future flows primarily down South Sanborn Road. Under peak future conditions, this segment runs 66-100% full and MH-N6-004 is surcharging. This project proposes to upsize approximately 4,365 ft of 18-inch to 21-inch from MH-M6-012 at E Alisal St to MH-O6-006 at Pellet Ave, 500 ft of 21-inch to 24-inch from MH O6-008 at Industrial St, and 1,500 ft of 24-inch to 27-inch from MH-O6-008 to MH-O5-002 near Abbott St.

It should be noted that there is concrete "weir" at MH N6-003 to stop South Sanborn Rd. flows from backing into Mayfair Dr. Detailed design for this project should consider raising the slope/invert on Mayfair Dr or increasing the slope along South Sanborn to prevent further backwater effects.

Note: This project assumes Future East Alisal CIP has been constructed or will be constructed concurrently.

1. Construction costs are expressed in Year 2022 dollars, using an ENR construction Cost Index of 13004, and will need to be escalated to the year or years scheduled for the work.

PREPARED BY: AC & AK

Wallace Group www.wallacegroup.us San Luis Obispo, CA

Future CIP Project: South Sanborn Rd.

APPENDICES

APPENDIX A: Economic Development Element Tables



Table LU-3 Development Capacity

			Assum	ptions			Acre	es			Projec				rojected Noi				Proje		
										Dw	elling Units	/Househo	lds		Square Feet	(thousan	ds)		Popula	ation	
		Maxii Du/Acro		Ave Du/Acı	rage re FAR	Focused Growth Areas	Remaining City	Future Growth Areas	Total	Focused Growth Areas	Remaining City	Future Growth Areas	Total	Focused Growth Areas	Remaining City	Future Growth Areas	Total	Focused Growth Areas	Remaining City	Future Growth Areas	Total
Open Spa	ce Land Use Designations																				
agr	Agriculture	0.1				0	22	0	22	0	0	0	0	0	0	0	0	0	0	0	0
opn	Open Space	0.05				2	106	503	611	0	0	0	0	0	0	0	0	0	0	0	0
pks	Parks		0.2		0.05	2	1,077 <u>962</u>	193	1, 272 <u>157</u>	0	0	0	0	5	2,346 <u>2,096</u>	420	2,771 <u>2,521</u>	0	0	0	0
Residentia	al Land Use Designations																				
rld	Residential Low Density	8		6.5		9	2,942	1,042	3,992	57	19,121	6,771	25,950	0	0	0	0	211	70,174	24,850	95,235
rmd	Residential Medium Density	15		11.75		43	856	515	1,414	507	10,060	6,052	16,619	0	0	0	0	1,859	36,922	22,210	60,991
rhd	Residential High Density	24		16.75		9	658	160	827	153	11,013	2,680	13,846	0	0	0	0	560	40,419	9,837	50,816
Commerc	ial/Office Land Use Designation																				
ret	Retail																				
	Citywide	10	0.4	0.5	0.25	56	477 <u>592</u>	16	549 <u>664</u>	28	119	8	155	609	5,196 - <u>6,006</u>	178	5,984 <u>6,793</u>	103	438	30	570
	Central City	18	3	1.5	1.5	9	0	0	9	13	0	0	13	586	0	0	586	49	0	0	49
	Outside Existing Sphere of Influence		0.4		0.25		<u>0</u>	<u>164</u>	<u>164</u>							1,383	<u> </u>				
off	Office																/	rget Area		_	
	Citywide	10	0.4	0.5	0.25	41	83	3	126	20	21	1	42	442	898	30	/1,371	74	76	5	155
	Central City	22	3	1.5	1.5	42	0	0	42	63	0	0	63	2,724	0	0	2,724	230	0	0	230
T 1 1 T 1	East Romie Lane Corridor	10	1	0.5	0.5	0	47	0	47	0	24	0	24	0	1,030	0/	1,030	10	87	0	87
	strial/Industrial Land Use Designations		0.4		0.25	0	220	0122	220262	0	0	0	0	0	2 202	11.571	2 5025 072	0	0	0	0
bus	Business Park Gen. Comm/Lt. Ind.		0.4		0.35		230	0 <u>132</u>	230 362	0	0	-	0	,	3,303	1 1,571 599	3,503 <u>5,073</u>	0	0	0	
gco	General Industrial		0.4		0.3	73	540 641	46 670 817	659 1,311	0	0	0	0	950 0	7,057 8,376	399 8,670	8,607 17,136	0	0	0	0
gin			0.5		0.3	U	041	070 <u>017</u>	1,311	U	0	U	0	U	8,370	10,173 /	/	U	0	0	U
Public/Se	mipublic Land Use Designations																				
psp	Public/Semipublic		0.4		0.25	58	925	247	1,241	0	0	0	0	636	10,078	2,799	13,513	0	0	0	0
	Salinas Municipal Airport		0.2		0.05	0	620	0	620	0	0	0	0	0	1,351	0	1,351	0	0	0	0
	Other Land Use Designations																				
mix	Mixed Use											_		_		_					
	Citywide	10	1	3	0.5	111	0	120	231	332	0	360	692	2,413	0	2,613	5,026	1,220	0	1,321	2,541
	Central City	varies	varies	5.5	3	62	0	0	62	339	0	0	339	8,056	0	0	8,056	1,244	0	0	1,244
art	Arterial Frontage	det plan	0.3	5	0.25	39	24	0	62	194	118	0	312	422	258	0	679	711	434	0	1,145
	TOTAL					888	9,248	3,525 3,068	13,328 13,771	1,706	40,377	15,873	58,055	16,844	40,092 40,752	15,401 19,857	72,337 77,343	6,261	148,549	58,253	213,063

1 household = 1 dwelling unit; 3.67 persons per household; FAR = floor area ratio.

19,766

Table LU-ED-1 Additional Economic Development Element Development Capacity

Target Area Land Use		Land Demand (gross acres)	Land Demand (net acres)	Building Capacity (square feet)	
В	Industrial	147	115	1,502,820	
	Subtotal	147	115	1,502,820	
В	Retail	10	8	87,120	
F	Retail	10	8	87,120	
K	Retail	30	23	250,470	
L1/L1	Retail	74	57	620,730	
N Retail		40	31	337,590	
V Retail		115	74	810,448	
Subtotal		279	201	2,193,478	
K Business Park		132	103	1,570,338	
	Subtotal	132	103	1,570,338	
Total		558	419	5,255,959	

- 5,266,636

The Land Demand (Net Acres) column reflects the gross acreage minus acreage required for infrastructure, roadways, etc.

APPENDIX B:	2017 M ark	Thomas	CCTV	Sanitary	Sewer	Analysis





CCTV SANITARY SEWER ANALYSIS

Prepared For: City of Salinas

Submitted by: Mark Thomas



Date: December 7, 2017

Contents

I.	Introduction 3							
II.	Site and Pr	roject Description	3					
III.	Assessmen	nt Standards for Gravity Sewer System	4					
	1. Pipelin	ne Assessment and Certification Program (PACP)	4					
	2. PACP (Condition Grading System	4					
	3. PACP F	Pipe Inspections	5					
	4. Manho	ole Assessment and Certification Program (MACP)	6					
	5. PACP F	Results	6					
	a.	SSMH 1 to SSMH 2	6					
	b.	SSMH 3 to SSMH 4	7					
	c.	SSMH 6 to SSMH 7	7					
	d.	SSMH 7 to SSMH 8	7					
	e.	SSMH 9 to SSMH 10	8					
	f.	SSMH 11 to SSMH 12	8					
	g.	SSMH 13 to SSMH 14	8					
	h.	SSMH 15 to SSMH 16	8					
	i.	SSMH 17 to SSMH 18	9					
	j.	SSMH 19 to SSMH 20	9					
	k.	SSMH 23 to SSMH 24	9					
	6. MACP	Results	9					
	a.	SSMH 1	10					
	b.	SSMH 2	10					
	C.	SSMH 3	10					
	d.	SSMH 4 & 5	10					
	e.	SSMH 6	10					
	f.	SSMH 7	11					
	g.	SSMH 8	11					
	h.	SSMH 9	11					
	i.	SSMH 10	11					
	j.	SSMH 11	12					
	k.	SSMH 12	12					

		CCTV Sanitary Sewer Analysis On-Call Services City of Salinas
	I. SSMH 13	12
	m. SSMH 14	12
	n. SSMH 15	12
	o. SSMH 16	13
	p. SSMH 17	13
	q. SSMH 18	13
	r. SSMH 19	13
	s. SSMH 20	14
	t. SSMH 21	14
	u. SSMH 22	14
	v. SSMH 23	14
	w. SSMH 24	15
	x. SSMH 25	15
	y. SSMH 26	15
IV.	Results and Recommer	ndations 15
	1. PACP Results	15
	2. PACP Repair Cost E	stimate 16
	3. MACP Results	17
	4. MACP Repair Cost	Estimates 18
V.	Appendix	21

1. Appendix A: Location Maps

2. Appendix B: Cost Estimate

3. Appendix C: PACP & MACP Reports

21

23

23

Introduction

This report presents the results of our Closed-Circuit Television (CCTV) inspections performed to address the conditions of sanitary sewer mains and manholes in various locations throughout the City of Salinas. The CCTV inspections were conducted on large diameter sewer mains ranging from 12" to 30" diameter pipes and were completed using Pipeline Assessment Certification Program (PACP) standards.

The City of Salinas retained Mark Thomas to inspect and analyze the condition of approximately 5,300 linear feet of sanitary sewer mains and 23 manhole structures.

The purpose of this report is to discuss existing sanitary sewer conditions. In addition, this report provides a detailed analysis of the pipeline conditions as well as an estimated cost for the recommended repairs.

Site and Project Description

The City of Salinas owns, maintains, and operates approximately 290 miles of sanitary sewer pipes ranging from 6 to 72 inches in diameter, 11 pump stations, and 7 flow split structures. The City's sewer waste ultimately flows to the Monterey Regional Water Pollution Control Agency's (MRWPCA's) treatment plant.

In 2011, the City of Salinas retained CDM Smith consultants to develop a city-wide master plan for the city's sanitary sewer system. Within this master plan, areas of concern were addressed due to capacity limitations based on the projected growth of the City and surrounding areas. The master plan analyzed and located various manholes and mains that exhibited high surcharge levels. In an effort to follow up on the recommendations from the master plan, the City retained Mark Thomas to inspect mains and manholes that are of concern to the City. The manholes and mains that Mark Thomas was asked to inspect are located throughout the City of Salinas. The following segments were chosen for inspection by the City:

- 30" sanitary sewer upstream of Lake Street Pump station. Mains and manholes are located at the intersection of Sherwood Drive & East Rossi Street and Calle Cebu
- 24" & 30" mains in agricultural easements near Kern Street and North Madeira Avenue
- 30" main crossing East Laurel Drive south of Monterey County Parks Department offices
- 21" main in easement just west of Monterey County Parks Department offices
- Various manholes on Katherine Avenue and East Romie Lane

Mark Thomas inspectors and CCTV operators were unable to complete the project per the original scope due to discrepancies between the maps provided by the City and actual on site conditions. For example, several of the manholes in agricultural easements had been buried 6-feet deep to allow for the mixing of the top 4-feet of soil after harvest seasons. In other instances, the manholes had been paved over from asphalt overlays, or the operators encountered unmarked manholes in the middle of segments they were asked to investigate. Due to these issues that were encountered while performing inspections, Mark Thomas operators met with staff from the City to obtain new direction in scope. Appendix A shows maps with assigned manhole names and their locations.

Assessment Standards for Gravity Sewer System

1. Pipeline Assessment and Certification Program (PACP)

The National Association of Sewer Service Companies (NASSCO), along with the assistance of the Water Research Centre (WRC), has developed a national certification program to establish a viable solution to standardize the identification, categorization, evaluation, and prioritization of sanitary sewer or storm sewer infrastructure through CCTV investigations. This standardized certification program was used to ensure consistent record-keeping when compiling CCTV reports into a common database that can then be used for operation and maintenance (O&M) activities as well as pipe rehabilitation and replacement.

A NASCCO PACP standard was used to conduct CCTV investigations and document findings. The PACP defect descriptions are organized into the following general categories:

- <u>Structural Defect Coding</u>: This group includes the type of defects where the pipe is considered to be damaged ranging from a minor case defect to a more severe case, depicted as pipe failure. The Structural Defect Coding group includes defects described as: cracks, fractures, broken pipe, holes, deformities, collapsed pipes, joint defects, surface damage defects, weld failures, point repair codes, brickwork defects, and lining failures.
- Operation and Maintenance (O&M) Coding: This group includes the various codes that involve
 the spectrum of defects that may impede the operation and maintenance of the sewer piping
 system. The Operation and Maintenance Coding group includes defects comprised of roots,
 infiltration, deposits and encrustations, obstacles/obstructions, and vermin.
- <u>Construction Features Coding</u>: This group includes the various codes associated with the typical construction of the sewer piping system. The Construction Features Coding group includes taps, intruding seal material, pipe alignment codes, and access points.
- <u>Miscellaneous Features Coding</u>: This group includes observation codes such as water levels (detection of sags), pipe material changes, and dye testing notes.

2. PACP Condition Grading System

The tables below describe the grading system for structural and O&M defects, and general guidelines regarding deterioration rates. Each defect can be scored with a grade ranging from 1 to 5, where a grade 5 has the greatest potential for pipe failure.

	Table 1 – Structural and O&M Defects Grading Table								
Grade	Grade Description	Grade Definition							
5	Immediate Attention	Defects requiring immediate attention							
4	Poor	Severe defects that will become Grade 5 defects within the foreseeable future							
3	Fair	Moderate defects that will continue to deteriorate							
2	Good	Defects that have not begun to deteriorate							
1	Excellent	Minor defects							

Table 2 – General Guidelines Regarding Deterioration Rates							
Grade Grade Definition							
5	Pipe has failed or will likely fail within the next 5 years						
4	Pipe will probably fail in 5 to 10 years						
3	Pipe may fail in 10 to 20 years						
2	Pipe unlikely to fail for at least 20 years						
1	Failure unlikely in the foreseeable future						

3. PACP Pipe Inspections

Close Circuit Television (CCTV) video inspections were performed to assess the condition of the sanitary sewer mains to confirm the location and magnitude of structural defects, points of inflow and infiltration, lateral locations, undocumented/illegal connections, existing pipe lining, and blockages within the system.

CCTV inspections were conducted in accordance with NASSCO PACP standards. Personnel performing CCTV inspections were PACP-certified and completed all inspections using standard PACP codes for all defects and observations during the inspection. The CCTV data was recorded using GraniteXP, PACP-compliant software. CCTV inspections were recorded in color using a pan and-tilt, radial-viewing, inspection to allow videos and images to be sufficiently clear to easily observe the sewer line defects and features.

The gravity sewer mains and manholes were cleaned prior to conducting CCTV inspections. Cleaning consisted of hydraulic jet cleaning to facilitate the internal CCTV inspection.

The inspections were conducted from the upstream manhole towards the downstream manhole in the direction of flow to minimize splashing onto the camera and for smoother movement of the CCTV equipment. During the CCTV inspection, the CCTV camera was temporarily stopped at each observed defect or feature in order to obtain a clear still picture and video image.

The camera inspections were performed between September 12 and September 25, 2017. It is necessary for the inspections to be performed during lower flow conditions to allow the camera

lenses to sit above the flow line within the pipe. *Roto Rooter Plumbers*, Mark Thomas contractor from San Jose, California, was on site and vacuumed out water to allow our camera lenses to have a clear view and to be able to capture the defects of the pipe whenever the flow of the water was too high. If the water had not been vacuumed out by our contractor's vacuum truck, the flow would have been at approximately 75% of the total pipe capacity, and we would not have been able to view and capture the defects.

4. Manhole Assessment and Certification Program (MACP)

Sanitary sewer manhole inspections are an important component of the gravity sewer system assessment due to the susceptibility of manholes to structural defects and/or Inflow/Infiltration which may contribute to SSOs. Manhole inspection not only provide valuable information on the physical condition of the manholes, but also an opportunity to observe pipe diameters, inverts, and surcharging within mainline gravity sewers. Prior to conducting inspections of manhole components, a non-entry (topside) manhole inspection was conducted to determine the overall condition of the manhole as viewed from the ground surface. The surrounding area was observed and noted if manholes located in areas that are conducive to flooding or ponding that allows water to enter the sanitary sewer system. Alongside PACP assessments, NASSCO has also developed a program for rating and assessing defects within manholes. This system is called the Manhole Assessment and Certification Program, or MACP. There are two inspection protocols, or procedures, when conducting MACP inspections.

Level 1 MACP inspections provide basic condition assessment information of the manhole. Level 2 MACP inspections provide full documentation of defects and conditions of the manhole, similar to a PACP inspection. Since Level 2 MACP inspections are similar to a PACP inspection, they use the established coding system required while performing PACP inspections.

For this project, Mark Thomas inspector used Level 2 MACP inspection procedure and form to document the defects and condition for all 23 manholes. See the PACP section above for information regarding O&M and structural coding, and attached photographs of the above ground location of each manhole in Appendix for result assessment and recommendation.

5. PACP Results

As stated in Section 3, pipe segments that were inspected differ from pipe segments that were in the original scope. Manholes for the project were not assigned with ID or any names by the City. Our operators had to coordinate with City's staff to come up with naming convention for each manhole that was assessed.

Below we will discuss the findings for each of these pipe segments.

a. SSMH 1 to SSMH 2

Segment SSMH 1 to SSMH 2 is located on North Madeira Avenue just to the north of the Cesar Chavez Community Park. The segment is 24" diameter VCP pipe and is approximately 321-feet in length. This segment was part of the original project scope.

There are seven (7) structural defects and ten (10) O&M defects in this section of pipe. A defect rated 4 is the highest defect out of the seven structural defects. This defect was a water

level sag (MWLS) that caused a water depth to pipe diameter ratio (d/D) of 60%. Several of the other defects were additional d/D sags ranging between 25% and 45%. All of the O&M defects were small encrustations that were found on the walls of the pipe.

b. SSMH 3 to SSMH 4

Segment SSMH 3 to SSMH 4 is located on the north end of Kern Street. SSMH 3 is located on Kern Street, while SSMH 4 is paved over and is located in the Holiday Inn Express & Suites hotel parking lot. This segment is approximately 126-feet of 24" diameter VCP pipe. The original scope consisted of inspecting this segment along with a parallel 30" main, but the manholes for the 30" line are buried 6 feet deep in an agricultural easement just north of the Sherwood Lake mobile home park.

Our investigation found one (1) structural defect and one (1) continuous O&M defect. The structural defect is located right at SSMH 3 and is a broken pipe, which is rated as a 5. Similar to segment SSMH 1 to SSMH 2, the O&M defect was encrustation attached to the walls of the pipe.

c. SSMH 6 to SSMH 7

Segment SSMH 6 to SSMH 7 is located in a bike trail just to the west of the Monterey County Parks Department on East Laurel Drive. It is approximately 264-feet of 21" diameter VCP pipe. The original scope of work asked Mark Thomas to inspect segment SSMH 7 to SSMH 8. SSMH 7 is paved over or buried, so the City instructed Mark Thomas to survey from SSMH 6 which is located further upstream. Since SSMH 7 is buried, Mark Thomas operators inspected from SSMH 6 to SSMH 7, and then continued onto SSMH 8 to complete the segment from the original scope.

Our CCTV finding of this pipe segment consisted of three (3) structural defects and six (6) O&M defects. The most severe structural defect was a water level sag of 35% which was rated a 3. Overall this segment was in great condition. There was one O&M defect that should be addressed, and that is a root ball that was found at the farthest downstream portion of the main, at SSMH 7. With an increase in routine maintenance, this root ball can be easily addressed.

d. SSMH 7 to SSMH 8

Segment SSMH 7 to SSMH 8 is located in a bike trail just to the west of the Monterey County Parks Department on East Laurel Drive. It is approximately 553-feet of 21" diameter VCP pipe. Entrance to SSMH 7 can only be accessed via the upstream segment by entering into SSMH 6 due to the lid to SSMH 7 being buried or paved over. As stated above, this segment is part of the original scope.

The inspection found nine (9) structural defects, which were all rated 2, and six (6) O&M defects, which were also all rated 2. Similar to segment SSMH 6 to SSMH 7, this segment is also in great condition.

e. SSMH 9 to SSMH 10

Segment SSMH 9 to SSMH 10 is located in an easement between Sun Street and Highway 101. This segment is a 30" diameter VCP pipe and is approximately 377-feet long. This segment was not in the original scope and was included as an alternate segment for inspection.

The inspection found only one (1) structural defect and one (1) O&M defect. The structural defects were multiple cracks which are rated 3. The one O&M defect present in the main was due to grease deposited along the walls of the pipe . This defect spanned the entire length of the pipe.

f. SSMH 11 to SSMH 12

Segment SSMH 11 to SSMH 12 is located in an easement between Sun Street and Highway 101. This segment is a 24" diameter VCP pipe and is approximately 385-feet long. Similar to the segment above, this segment was not in the original scope and was included as an alternate segment for inspection.

The inspection found two (2) structural defects and ten (10) O&M defects. Both structural defects were due to water level sags at 25%, which are rated 2. The O&M defects of most concern were two water mark levels of 90%. This water marks indicated that the water levels in the pipe at peak hour sometimes get up to 90%. Grease deposits were also found throughout the segment. Other than water mark and grease deposits, this segment of the pipe is in fair condition at the present time.

g. SSMH 13 to SSMH 14

Segment SSMH 13 to SSMH 14 is located alongside Natividad Creek to the south of the intersection of Freedom Parkway and Constitution Boulevard. It is a 24" diameter VCP pipe and is approximately 425-feet long. The original scope consisted of the next segment downstream from SSMH 13 to SSMH 14. Mark Thomas and the City were unable to locate the downstream manhole from SSMH 14, so the City allowed SSMH 13 to SSMH 14 to be used as an alternate segment to prevent difficulties removing the transponder in case it became stuck.

The inspection found one (1) structural defect and four (4) O&M defects. The only structural defect was due to a water level sag of 25%, which are rated as a 2. The O&M defects are not critical. There are grease deposits all throughout the pipe segment. Other than these cases, the pipe is in great condition.

h. SSMH 15 to SSMH 16

Segment SSMH 15 to SSMH 16 is located on a bike trail just to the south of the Monterey County Parks Department that is located on East Laurel Drive. It is a 27" VCP diameter pipe and is approximately 318-feet long.

There were no structural defects within this main and four (4) O&M defects. The O&M defects consisted of water level marks at 75%, encrustation, and grease deposits.

i. SSMH 17 to SSMH 18

Segment SSMH 17 to SSMH 18 is located in the parking lot between the buildings at 597 and 607 Brunken Avenue. The original scope consisted of surveying segments that are located farther downstream from this location on Malarin Street. The manholes were located but the channels of the manholes did not allow access into the pipe with the CCTV transporter. The pipes protruded far into the manholes and only had a gap of about 1 foot from pipe to pipe, instead of the 4 feet in a normal manhole channel. Due to the tightness in the channel, the City allowed us to inspect segment SSMH 17 to SSMH 18 as an alternate. This alternate segment is an 18" diameter polyethylene pipe that is approximately 350 feet long.

This segment has three (3) structural defects, all of which are 35%, 45% and 55% water level sag, one of which is rated a 4. There were five (5) O&M defects within this segment. The most severe was the level of the flow within the pipe. At one point, the camera became submerged. Our contractor had to pump out the water as we inspected to accurately inspect the main.

i. SSMH 19 to SSMH 20

Segment SSMH 19 to SSMH 20 is located on East Romie Lane between Los Palos Drive and Wilgart Way in front of the Salinas Valley Memorial Hospital. The original scope was to inspect from SSMH 19 downstream to a manhole just east of Alameda Avenue that the City thought was the next downstream manhole. While performing the CCTV inspection, our operator found an unmarked manhole, which we are now naming SSMH 20. We attempted to inspect that newly found "segment" but were unable to open the lid to SSMH 20 due to the lid being welded shut by the City due to the deterioration of the frame. This alternate segment, SSSMH 19 to SSMH 20, is an 18" diameter polyethylene pipe that is approximately 435-feet long.

There is only one (1) structural defect and three (3) O&M defects within this segment. The defect of most concern is a water level mark that shows that the pipe segment reaches 85% flow.

k. SSMH 23 to SSMH 24

Segment SSMH 23 to SSMH 24 is located on East Market Street between Sun Street and Peach Drive. It is a 12" diameter VCP main and is approximately 359-feet long. It was included as part of the original scope.

This segment had three (3) structural defects, which were all rated 3. Another thing to note is that this segment had eight laterals that had full or partial grease blockages. This segment also had five (5) O&M defects that all had to do with the high water level marks on the pipe. The highest water level mark was shown at 60% and is rated a 4.

6. MACP Results

As part of the sewer conditional assessments, Mark Thomas performed 23 MACP inspections on manholes throughout the City of Salinas. Some of the manholes that were inspected were manholes that were also part of the PACP inspections. Similar to the PACP results, some manholes that were part of the original scope were not accessible, which resulted in the City assigning

different manholes for Mark Thomas to inspect.

Below we will discuss the findings for each of these manholes.

a. SSMH 1

SSMH 1 is located on North Madeira Ave just to the north of the Cesar Chavez Community Park. It is directly in front of the home at 259 North Madeira Avenue. The manhole is approximately 9-feet deep from rim to invert.

This manhole showed minor structural defects on the chimney, cone, and walls. The highest rated structural defect was visible aggregate on the chimney near the frame and cover of the manhole. The only defect of concern is the corroded and cracked frame & cover. Overall the interior structure of this manhole is in good condition.

b. SSMH 2

SSMH 2 is located on North Madeira Ave just to the north of the Cesar Chavez Community Park. It is the next downstream manhole from Manhole 1. It is located on the shoulder in the dirt area of North Madeira Ave, near the reclamation ditch. The manhole is approximately 14-feet deep from rim to invert.

This manhole showed minor structural defects on the chimney, cone, and walls. The highest rated structural defect was visible aggregate on the chimney, cone, and walls which is rated as a defect 3. Similar to SSMH 1, SSMH 2 had issues with the frame. The frame was broken, but the cover and the seal between the frame and cover appeared to be sound. Overall this manhole is in fair condition.

c. SSMH 3

SSMH 3 is located on the northern end of Kern Street near the Holiday Inn Express & Suites. The manhole is approximately 14-feet deep from rim to invert.

This manhole has no structural or operational defects. It is in good condition.

d. SSMH 4 & 5

SSMH 4 & SSMH 5 were included in the original scope and were inaccessible due to the covers being paved over with asphalt. SSMH 4 is located under the Holiday Inn Express & Suites parking lot, and SSMH 5 is under the asphalt at the intersection of Longbow Drive & Greenleaf Way within the Sherwood Lake Mobile Home Park.

Due to the operator's inability to access the manhole, a condition assessment was not performed.

e. SSMH 6

SSMH 6 is located on a bike trail to the northwest of the Monterey County Parks Department

on East Laurel Drive. It is approximately 22-feet deep from rim to invert.

The concrete collar around the frame and cover is broken all around the manhole lid. The only structural defect within the manhole is a Hole, Soil Visible, which is rated as a 5. This defect is located where the manhole frame meets the concrete of the manhole. Other than the issues with the frame and cover, the manhole interior is in fair condition.

f. SSMH 7

SSMH 7 is located on a bike trail to the northwest of the Monterey County Parks Department on East Laurel Drive. It is the next downstream manhole from SSMH 6.

Our operators and the City could not locate the manhole due to it possibly being buried next to the bike trail or paved over under the trail. Due to the operator's inability to access the manhole, a condition assessment was not completed.

g. SSMH 8

SSMH 8 is located on a bike trail to the northwest of the Monterey County Parks Department on East Laurel Drive. It is the next downstream manhole from SSMH 7. SSMH 8 is approximately 14-feet deep from rim to invert.

Half of the concrete collar on the outside of the manhole frame and cover is broken. There is another break on the inner wall of the chimney where the grade rings are located. The frame and cover are cracked and corroded. Other than the issues near the frame and cover, the manhole interior walls and bench are in great condition.

h. SSMH 9

SSMH 9 is located on the eastern corner of the Expo Grounds on Sun Street. The manhole's rim to invert elevation is approximately 18-feet deep.

Both the frame and cover for SSMH 9 are heavily corroded and loose-fitting. The other structural defect present inside the manhole is the visible aggregate in the concrete of the manhole walls. This is only given a rating of 3. Other than the visible aggregate, the manhole is in good structural condition.

i. SSMH 10

SSMH 10 is located just to the south of the baseball diamond in the Expo Grounds on Sun Street. The manhole's rim to invert depth is approximately 20-feet deep.

The frame for SSMH 10 is heavily corroded and bubbling. Other than the issues with the frame, the manhole is structurally sound. On the other hand, there is evidence of surcharging and heavy grease inside the manhole. The walls show evidence of surcharging up 16 feet from the invert. Also, there are heavy debris deposits on the bench due to possible surcharging.

j. SSMH 11

SSMH 11 is located on the eastern corner of the Expo Grounds on Sun Street. It is just south of SSMH 9. The manhole's rim to invert elevation is approximately 16-feet deep.

The frame and chimney area for SSMH 10 are both heavily corroded. Other than the issues with the chimney area, the manhole is structurally sound.

k. SSMH 12

SSMH 12 is located just to the south of the baseball diamond on the Expo Grounds on Sun Street. It is slightly to the south of SSMH 10. The manhole's rim to invert elevation is approximately 18-feet deep.

The frame and chimney area for SSMH 12 are both heavily corroded. Other than the issues with the chimney area, the manhole is structurally sound. There are apparent O&M defects within the manhole. There is evidence of grease and surcharging inside the manhole. The walls show surcharging marks and there are also deposits on the bench.

I. SSMH 13

SSMH 13 is located in the sidewalk on the south corner of the intersection between Constitution Boulevard and Freedom Parkway. The manhole's rim to invert elevation is approximately 25-feet deep.

The frame for SSMH 13 is heavily corroded and there is a break in the wall of the grade rings. Other issues present are roots at the joints where the pipes connect to the invert of the manhole.

m. SSMH 14

SSMH 14 is located in the landscaped area between Constitution Boulevard and Natividad Creek Park. It is near the intersection of Constitution Boulevard and Cape Cod Way. The manhole's rim to invert elevation is approximately 12-feet deep. The manhole's concrete collar has eroded away and has left the lid and frame exposed. The manhole is on a sloped surface which results in part of the manhole frame and cover being raised off the grade.

Unlike the other manholes that have been inspected, the frame and cover for this manhole is in good condition. The issues within the manhole are within the chimney where the grade rings are located. There is a crack on one of the grade ring joints and there is a hole visible to the outside. Not only is there a crack at this joint, the other joints do not have any proper grouting and are not sealed correctly. This hole is located on the side where the manhole chimney is exposed due to the concrete collar deteriorating away. There is exposed steel reinforcement bars at the location of the crack.

n. SSMH 15

SSMH 15 is located in an unpaved area adjacent to a bike trail that is located south of the

Monterey County Parks Department offices on East Laurel Drive. The manhole is rather shallow and is approximately 5.5-feet deep from rim to invert.

The frame for the manhole is heavily corroded. The top surface of the concrete has corroded away inside the manhole which results in the aggregate being exposed. This is rated as a defect level 3.

o. SSMH 16

SSMH 16 is located in an unpaved area adjacent to a bike trail that is located south of the Monterey County Parks Department offices on East Laurel Drive. SSMH 16 is downstream to SSMH 15. The manhole is approximately 9-feet deep from rim to invert.

The frame for the manhole is heavily corroded. The top surface of the concrete has corroded away inside the manhole which results in the aggregate being exposed. This is rated as a defect level 3. Exposed aggregate is also present on the bench and channel.

p. SSMH 17

SSMH 17 is located in the parking lot between the buildings at 597 and 607 Brunken Avenue. The manhole elevation is 9.5-feet from rim to invert.

Aggregate is exposed from the rim all the way down into the bench and channel. There is also exposed rebar in the upper wall of the channel at the downstream invert. The rebar is not protruding into the channel, but the concrete has eroded away and has made the rebar visible. The level of exposed aggregate and rebar is coded as a rating of 4.

q. SSMH 18

SSMH 18 is located in the parking lot between the buildings at 597 and 607 Brunken Avenue. Manhole 18 is the next downstream manhole from SSMH 17. The manhole elevation is 10.5-feet from rim to invert.

The walls of this manhole have areas where the aggregate in the concrete is not only exposed but also missing, which is rated as a defect 4. Also, it appears that the manhole had been lined at one point, but the lining has detached in several locations throughout the manhole. Another issue with the manhole is that the channel is not completely opened. At one point, a pipe was inserted into the manhole and the pipe was left within the channel and was not cut correctly to fit up against the inner wall of the manhole.

r. SSMH 19

SSMH 19 is located on East Romie Lane in front of Salinas Valley Memorial Hospital. The manhole is approximately 13.5 feet deep.

This manhole has exposed aggregate within the concrete of the rings and has a corroding frame. Due the condition of the frame, the cover has to be welded onto the frame by the City in order for the cover to sit flush within the frame. The manhole had been rehabilitated in the

past with a fiberglass liner that is now peeling off of the walls. Also, the concrete bench has large chunks of concrete missing, which is rated as a defect 4.

s. SSMH 20

SSMH 20 is located on the intersection of East Romie Lane and Alameda Avenue. The manhole is approximately 11-feet deep. This manhole is two manholes downstream from SSMH 19.

Similar to SSMH 19, SSMH 20 has a broken frame which requires the cover to be welded onto it to prevent rocking and knocking. Each time the City wants to access the manhole, they need to break the welds and reweld it when placing the cover back on. The interior of the manhole is in great condition.

t. SSMH 21

SSMH 21 is located on East Romie Lane in front of 106 East Romie Lane. The manhole is approximately 7-feet deep.

Similar to SSMH 19 & SSMH 20, SSMH 21 has a broken frame which requires the cover to be welded onto it to prevent rocking and knocking. The surface of the frame where the cover sits is extremely rusted and corroded. Each time the City wants to access the manhole, they need to break the welds and re-weld it when placing the cover back onto the frame. The chimney area of the manhole has exposed aggregate in the concrete. It appears that this manhole has been lined with fiberglass. The areas that are lined are in great condition but the exposed concrete has been badly damaged. This is evident in the chimney as well as on the bench. The bench has missing concrete and should be rechanneled. There is also a piece of pipe that is protruding far into the manhole channel and should be cut back.

u. SSMH 22

SSMH 22 is located on Katherine Avenue at the intersection of Katherine Avenue and Pajaro Street in front of 110 Katherine Avenue. It is the next downstream manhole from SSMH 21. The manhole is approximately 6.5-feet deep.

Similar to SSMH 19, 20, & 21, SSMH 22 has a broken frame that requires the cover to be welded onto it to prevent rocking and knocking. The surface of the frame where the cover sits is extremely rusted and corroded. Each time the City wants to access the manhole, they need to break the welds and reweld it when placing the cover back onto the frame. The concrete within this manhole is completely deteriorating and the walls of the chimney have missing chunks of concrete. The walls are lined with fiberglass but the exposed concrete is breaking away in the chimney and the bench.

v. SSMH 23

SSMH 23 is located at the intersection of Sun Street and East Market Street. The manhole is approximately 12.5-feet deep. This manhole is constructed of brick instead of concrete, which makes it dissimilar from the manholes that have been described above.

The frame of the manhole is heavily corroded. Some of the joints between the bricks are missing mortar from the chimney all the way to the bench. Other than this defect, the manhole is in great condition.

w. SSMH 24

SSMH 24 is located at the intersection of Peach Drive and East Market Street. The manhole is approximately 13.5-feet deep. SSMH 24 is also constructed out of brick instead of concrete. This manhole is the next downstream manhole from SSMH 23.

The frame of the manhole is heavily corroded. Some of the joints between the bricks are missing mortar from the chimney all the way to the bench. Other than this defect, the manhole is in great condition.

x. SSMH 25

SSMH 25 is located on Malarin Street in front of the driveway to 590 Brunken Avenue at the intersection of Brunken Avenue and Malarin Street. The manhole is approximately 11.5-feet deep.

The manhole has been lined with a fiberglass material. The liner seems to have not been installed correctly on the manhole cone and it appears to be detaching from the manhole walls on the cone.

v. SSMH 26

SSMH 26 is located on Sierra Street on the grass of Maple Park. The manhole is approximately 13-feet deep.

The manhole has been lined with a fiberglass material. Grease deposits high up on the manhole wall show evidence of surcharging within this manhole. There is also missing aggregate in the concrete of the channel.

Results and Recommendations

The goal of sewer system condition assessments is to create a plan of action for long term as well as ongoing rehabilitation and maintenance. This plan of action is later developed into a Capital Improvement Program (CIP) that sets the structure for future rehabilitation projects. The following is a brief summary of the key findings.

1. PACP Results

Overall the mains that were inspected were in great condition. Most of the structural defects that were observed were rated as 2 or 3 per PACP ratings. These are of minor to moderate concern and shall be repaired within 10 years. Operational & Maintenance related defects were more common than structural defects in these mains.

The most common issue with the pipes was that several had evidence of grease deposits as well as high water marks. Since grease floats above water, there was evidence of grease deposits high up on the walls of the mains. These issues can be addressed by implementing a more rigorous Fats, Oils, & Grease (FOG) program throughout the City. A FOG program can be beneficial in educating the public about what can and cannot go down their drains. Not only was grease a problem in these mains, but the operators also discovered some lateral tie-ins that were completely blocked by grease. These blockages cannot be cleared during a mainline flushing and require a flushing of the laterals themselves. If the grease continues to build up in the laterals, they can lead to blockages which can lead to sewer overflows. The segment that had the most issues with lateral blockages was SSMH 23 to SSMH 24. Other segments with FOG issues were SSMH 9 to 10, SSMH 13 to 14, & SSMH 15 to 16. Implementing a new FOG program would aid in reducing the amount of grease entering the sewer system which will lead to a reduction in maintenance costs. Until the FOG program is implemented and is deemed effective, routine lateral cleaning can be conducted by the City to remove roots and grease from the laterals throughout the City. There were only two segments where our operator encountered high flow levels. These segments are SSMH 17 to SSMH 18 and SSMH 19 to SSMH 20. This segment had flow levels of up to 90% while our inspectors were conducting the inspections. The flow was so high that in order to complete the inspection, a contractor had to vacuum out the water near the CCTV transponder to prevent the camera lens from being submerged. We recommend performing a flow study in this area to see the required size for the pipes in this basin. Additional segments had water level marks up to 90%. These marks were most likely left behind from rainfall events where the flow within the system peaked by three or four times.

Fortunately most of the mains are in great structural condition. There are only two pipeline repairs that are of concern. One defect was a broken pipe on segment SSMH 3 to SSMH 4. The break occurs just downstream of SSMH 3 and is at the connection of pipe to SSMH 3. This repair will require installing approximately 8-feet of new pipe and reconnecting to SSMH 3. The other repair of importance is due to infiltration at a joint in segment SSMH 11 to SSMH 12. The defect is occurring at a joint 45-feet downstream of SSMH 11 and there is evidence of water infiltrating into the system at this location. The inspection showed water infiltrating into the pipe even though there had not been any rain events for months. Since this segment is located near a soccer field, perhaps the source is from water that is used to irrigate the lawn for the field. This defect will be an access point for even more water during rain seasons, which will increase the flow during these times.

2. PACP Repair Cost Estimate

Below is a table showing the costs for performing the two suggested repairs. See Appendix B for cost breakdown. Cost estimate includes labor and installation.

Table 3 – Recommended Repair Cost Estimate								
Mar	nhole			Pipe	Total Amount			
Upstream	Downstream	Location	Length (LF)	Diameter (in)	Type	Total Amount		
3	4	Kern Street	8	24	PVC SDR26	\$14,600		

Table 3 – Recommended Repair Cost Estimate								
Mar	nhole			Pipe	Total Amount			
Upstream	Downstream	Location	Length (LF)	Diameter (in)	Туре	Total Amount		
11	12	Sun Way	8	24	PVC SDR26	\$13,800		

3. MACP Results

The MACP inspections found many minor defects throughout the manholes. The most common issue was the corrosion and deterioration of the frames and covers. Other issues were the deterioration of the channel and walls. In one severe case, we recommend that one entire manhole be replaced. In other cases, Mark Thomas, along with the City maintenance workers, were unable to find manholes that were part of the original scope. The manholes were found via the PACP inspections, but the entry points were not found because they were overlaid with asphalt or buried in agricultural fields. Since the areas of concern all overlap with the manholes, please see Table 4 below for the recommended repairs for each of the manholes from the project.

A lot of the frames and chimney areas of the manholes have heavy corrosion and rust that should be replaced within the next two to three years. In some severe cases, the frame is so corroded that the City maintenance workers weld the lids onto the frame so the cover will sit flush against the frame. This means that every time the manhole needs to be accessed for inspection or maintenance, a crew needs to cut the welds and then re-weld the lid onto the frame. In other instances, it took Mark Thomas operators and City staff a long time to locate manholes in unpaved areas. Mark Thomas recommends installing markers to facilitate the locating of manholes.

Several manholes showed cases of deterioration, and one was so severe that we recommend completely replacing the existing manhole with a new manhole. The area of concern was the area downstream of Salinas Valley Memorial Hospital. There were 4 manholes inspected in this area and they all had issues with the deterioration of the concrete within the structure. These manholes are SSMHs 19, 20, 21, and 22. Salinas Valley Memorial and a medical office on the corner of East Romie Lane and Pajaro Street discharge into these segments. All four of these manholes were rehabilitated in the past with an epoxy or fiberglass lining. SSMH 22 is the most severe out of the four. All of the concrete is chipping and large chunks break off simply from the removal and replacement of the manhole cover.

Mark Thomas recommends performing a chemical analysis of the waste water discharge from the hospital and the medical offices to see if their waste had high concentration solution which produced heavy gas concentration caused these manholes deterioration so severely. Another possibility could be chemical runoff from the agricultural fields that is damaging the concrete in the system. Since our investigation only covered a small area and a small sample size, we can assume that the cause may be from the medical facilities or from agricultural runoff that is located upstream of these deteriorated manholes.

4. MACP Repair Cost Estimates

Below is a table showing the costs and the recommended repairs for each of the manholes from these inspections. See Appendix B for cost breakdown. Cost estimate includes labor and installation.

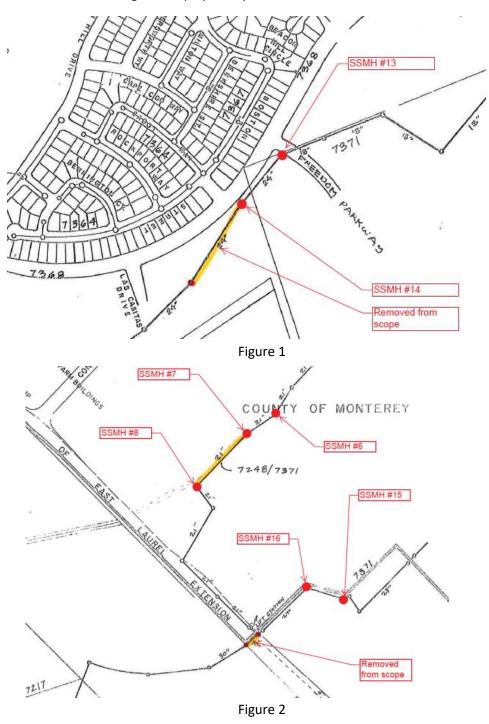
	Table 4 – Manhole Repair & Cost Estimate	
Manhole #	Description of Repair & Recommendation	Amount (\$)
1	New Frame & Cover. Lining interior of manhole	\$9,800
2	New Frame & Cover. Lining interior of manhole	\$9,800
3	No Work	\$0
4	Expose and Raise Manhole to Grade. Manhole is currently buried	\$4,800
5	Expose and Raise Manhole to Grade. Manhole is currently buried	\$4,800
6	New Frame & Cover with PCC collar slope away from MH lid to prevent I/I and install marker.	\$5,800
7	Expose and Raise Manhole to Grade. Manhole is currently buried	\$4,200
8	New Frame & Cover with PCC collar slope away from MH lid to prevent I/I and install marker	\$5,800
9	New Frame & Cover with PCC collar and install marker. Lining interior of manhole	\$9,000
10	New Frame & Cover, replace exist cone with eccentric cone to avoid the conflict with the existing fence	\$6,500
11	New Frame & Cover with PCC collar slope away from MH lid to prevent I/I and install marker	\$5,800
12	New Frame & Cover with PCC collar slope away from MH lid to prevent I/I and install marker	\$5,800
13	New Frame & Cover	\$4,500
14	New Chimney area (3" grade rings"), PCC collar slope away from MH lid to prevent I/I, and Grouting of bricks, or lining, and install marker	\$9,000
15	New Frame & Cover with PCC collar slope away from MH lid to prevent I/I and install marker. Lining interior of manhole in 5 years	\$9,000
16	New Frame & Cover with PCC collar slope away from MH lid to prevent I/I and install marker. Lining interior of manhole in 5 years	\$9,000
17	Relining manhole in 2 years	\$7,600
18	Relining manhole, new bench, and re-channelize	\$8,500
19	Relining manhole, new bench, and re-channelize	\$8,500
20	New Frame & Cover	\$5,300.
21	New Frame & Cover. Relining manhole, new bench, and rechannelize, or (New Manhole)	\$12,500
22	New Manhole	\$12,000
23	New Frame & Cover. Lining interior of manhole	\$9,800
24	New Frame & Cover. Lining interior of manhole	\$9,800

25	No Work	\$0
26	PCC collar slope away from Manhole lid to prevent I/I, New bench and re-channelize	\$5,200

Appendix

1. Appendix A: Location Maps

Segments colored in yellow were part of the original project scope. Inability to locate or access manholes resulted in change of scope per City's direction.



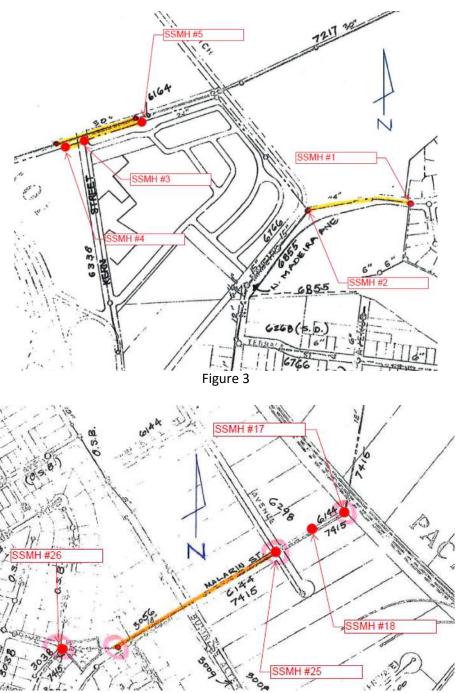
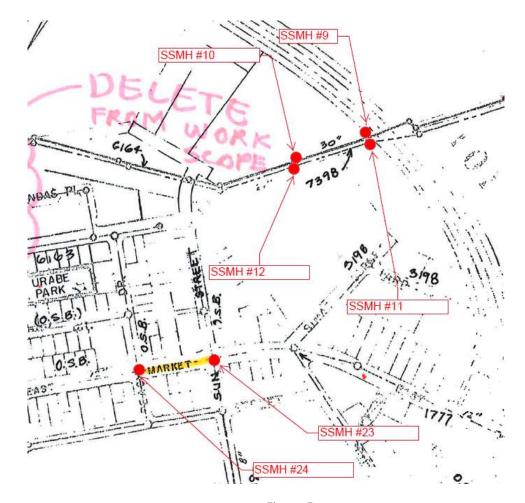


Figure 4



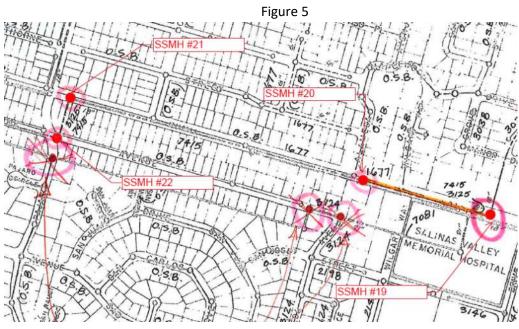


Figure 6

2. Appendix B: Cost Estimate

SSMH 3 to SSMH 4

Item Description	Quantity	Unit	Unit Price	Total Amount
24" PVC SDR25	8	LF	\$975	\$7,800
24" Plastic to Clay Coupling	1	EA	\$2,800	\$2800
Reconnect Pipe to MH	1	EA	\$2,000	\$2,000
Temporary Bypass	1	LS	\$2,000	\$2,000
			TOTAL	\$14,600

SSMH 11 to SSMH 12

Item Description	Quantity	Unit	Unit Price	Total Amount
24" PVC SDR25	8	LF	\$775	\$6,200
24" Plastic to Clay Coupling	2	EA	\$2,800	\$5,600
Temporary Bypass	1	LS	\$2,000	\$2,000
			TOTAL	\$13,800

Manhole Rehabilitation Cost Estimate

Item Description	Total Amount
New Frame & Cover	\$5,300
Lining Interior of manhole	\$7,600
Expose and Raise to Grade	\$4,200
New Bench & Re-channelize	\$5,200
New Chimney	\$4,000
New Manhole	\$12,000

3. Appendix C:

PACP & MACP Reports

CUES, Inc.

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/12/2017 10:36:31 AM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Additional info:				

Observations

Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0		START WITH FLOW	No	/				
0.0		AMH	No	/				Start of inspection.



0.0 MWL No



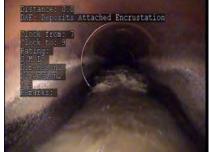


Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	DAE	No	3 / 5			O&M	



0.0 DAE No 7 / 9 O&M





5.0 MWLS No Structural





Distance	Length Code	Reversed	Clock Pos.	Severity F	Rating Ca	tegory	Comment
13.6	MWLS	No	/		Str	uctural	
Distance MMIS: We Clock fr Clock to Rating: S/M/L: Dimensic Dimensic % 35 Remarks:	s: 13.6 ster Level Sag com: s:	P					
61.7	MWLS	No	/		Str	uctural	
Distance MMDS. No. Ruck to Tuest to Falsings Summer Lumensu C 48 Femarks:	constant						
66.9	MCU	No	/		(O&M	
Distance MCU: Car Clock fr Clock tc Rating: S/M/L: Dimensic Dimensic Remarks:	on1 on2	9					



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
66.9	MWLS	No	/			Structural	
Distance: 66.9 MWLS: Water Level Clock from: Clock to: Rating: S/M/L: Dimension1 Dimension2 % 60 Remarks:	Sag						
98.6	MWL	No	/				
Distances 68.6 PTI: Macer Level PLOSE Security PLOSE SECURI		2					
105.7	MWL	No	/				
Distance: 105.7 MWL: Water Level Clock from Clock tos Rating: S/W/L5 Dimension1 Dimension2 8 35 Remarks:		A					



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
Distance: 102.2 MML: Water Level Slock from: Clock fro: Rathing: S.W.E. Dimension1 Dimension2 % 25 Remarks:	MWL	No	/				
Distance: 174.8 DAE: Deposits Attac Plock from: 3 Plock to: S Rating: S/MY/L: Dimension1 Uimension2 1 S Remarks:	DAE	No	3 / 5			O&M	
174.8 Distance: 174.8 TAE: Deposits Attac Clock to: 9 Rating: S:W/L: Dimension1	DAE	No	7 / 9			O&M	



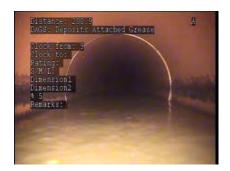
Distance Length	Code	Reversed	Clock Pos.	Severity Rating	Category	Comment
174.8	DAE	No	7 / 4		O&M	



200.9	DAE	No	7 / 4	O&M
200.9	DAGS	No	3 /	O&M



200.9 DAGS No 9 / O&M





Distance Le	ngth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
230.1	MWL	No	/				
Distance: 23 MML: Water 1 Clock from: Clock to: Rating: S/M/L: Dimension1 Dimension2 % 15 \ Remarks:		B					
230.1	LL	No	/			O&M	
Distance: 22 LL: Alignmer Clock from: clock to: Rating: S.M.L. Dimension1 Dimension2 t S Remarks:		9					
241.7	JSM	No	/			Structural	
Distance: I JSM: Joint: Clock from Clock to: Rating: S.M.L: M Dimension1 Dimension1 B Remarks:	ii.] Separate: Medium						



Distance Len	gth Code	Reversed	Clock Pos.	Severity Rating	g Category	Comment
277.9	JSM	No	/		Structural	
Distance: 277 JSM: Joint SE Plock from: Clock to: Rating: S.M./D. M Limensiona Limensiona Remarks:	GEST Medium	Upat Town	/2017 10:58 2N 9 FT Trem mainhole No Sigtéam mainhole No Dir: Ismustream			
302.0	CC	No	7 / 5		Structural	
Distance: 302 CC: Crack Circ Clock from: 7 Clock to: 5 Rating: S/M/L: Dimension1 Dimension2 8 Remarks:	The second secon	302. Upst	2/2017 11:07 AP O FT Tream manhole New Istream manhola Ya Dir: Dewnstream		9/12/2017 BIS 302.0 FT Upstream manhol Downstream manh Cam Dir: Downst	
9/12/2017 IB 302.0 FT Upstream manh Downstream mai Cam Dir: Downs	Hands Back	Upst Down	2/2017 11:07 AN O PT ream manhole Nost stream manhole No Dir: Downstream		The second and the se	Gle New 10
200 0 FT Decream manh Dinnappeam mah	1107 AM Ole No.21 India Wood Tare an		CIRC 11:07 AM OFT THE AM MARKET NO. 15 THE AM MARKET AM			



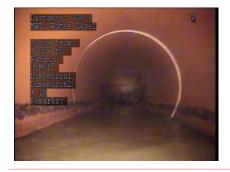
Distance Le	ength Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
302.0	IS	No	9 / 12				
	102. D						



302.0 IS No 1 / 3



309.8 MWL No /





Distance	Length Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
320.5	AMH	No	/				End of inspection.
Clock in Clock to Rating: S/M/D: Dimension	on1 on2	À					
Remarks:	End of inspection.						

320.5	DAGS	No	3 /	O&M
320.5	DAGS	No	9 /	O&M
320.5	STOP	No	/	

CUES, Inc.

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment Project Name: 3 to 4 Salinas CCTV Project		Start date/time: 9/12/2017 12:46:37 PM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Additional info:				

Observations

Distance L	_ength	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0		START WITH FLOW	No	/				
0.0		AMH	No	/				Start of inspection



0.0 MWL No





Distance	Length C	Code Reve	ersed Clock Pos	. Severity Rating	Category	Comment
0.0	В	No	7 / 5	6 444	Structural	@ USMH
Br Brok Tlack t Work t		Service Control	6.4 FT Upstream manhole Wo Downstream manhole N Cam Dir: Downstream			
E DO TO						
Pemarks	OSMA.	1000		於漢稱		
	(d) 31			attition.		
0.0	DAE	No	7 / 5		O&M	
Distanc DAE: De Olock I	e: 0.0. posits Attached Encr rom: 7	ustation .				
Clock t Rating: S M/L: Dimensi	or 5					
3 5 Remarks						
History						
126.2	АМН	l No	/			End of inspection.
Distanc AMH: Ma	e: 126.2 nhole	Į.				
Clock f Clock t Rating: S/M/L:	ron:					
Dimensi Dimensi k Remarks	on2 on2 : End of inspection.					
WATER BOOKING	CONTRACTOR OF THE PARTY OF THE					

7 / 5

No

No

0&M

DAE

STOP

126.2

126.2

CUES, Inc.

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/13/2017 9:27:46 AM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Additional info:				

Observations

Distance Length	n Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				Start of inspection.



0.0 MWL No





Distance	Length Code	Reversed	Clock Pos. Severity	Rating Category	Comment
9.4	DAE	No	10 /	O&M	
	ests Appropriate Encrustation	P Class Cases	anne: 8 4 Tempositor Advanced Encoustation 2 Francia 2 tea 10 control 25 control 25 control 25 control 25 control 26 control 26 control 27 control 28 cont	P ENERGO ESTADA	P B MODEL TO THE PARTY OF THE P
17.6	DAE	No	3 /	O&M	
Distance DAE: Description Clock In Cloc	zone B 11 1				
18.9	DAE	No	10 /	O&M	
	e: 18.9 posits Attached Encrustation com: 10 po: on1				



Distance	Length Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
72.5	MWLS	No	/			Structural	
Distance MTLS: Te Clock fi Clock-fi Climension B 195 Remarks:	or onl onl onl						
98.7	MWL	No	/				





Distance	Length Cod	de Reverse	ed Clock Pos.	Severity	Rating	Category	Comment	
177.4	DAGS	No	12 /			O&M		
	Opini Province Procusti	ation E	Inches 2:41 AU 2549 FT corrected markets No corrected markets No corrected markets No corrected markets No corrected No. 10 Markets No.		P	S'AS MEN ES 18 19 19 1 Un basan perun I computer an mai Computer au mai	SE SAI HE MORE STORE TOWN	A
9/20/200 1909 PU Trestean 1900/1902 1900/1902	Description of the second seco	P	27.2 FE STATE ON STATE OF STAT		P	Distance 144. LAGS: Deposits Dick from 12 Aleck from 12 Filing: SYNT: Exmension Unension Filmarks:	ACCEPTAGE OF THE SECOND OF THE	
198.0	MWLS	No	/			Structural		
Distance MMLS: Wa Slock in Clock of Hating: S/M/L: Dimensid % 35 Remarks								



Distance Length			Clock Pos.	Severity R		Comment
238.3	MWLS	No	/		Structural	
Distance 188 1. Miss Vaces from Plock from P		9				
244.3	DAGS	No	3 /		O&M	
Instances 444.8 Light Deposits Associated to the strong of	REGISTRE ESSE	g magazi				
244.3	DAGS	No	9 /		O&M	
Elstander 244.8 LAGS: Deposits As Plosk Erome 9 Plosk brow Batings S N/D: General Immension2 P Produkts:	EN RODE COSE	P AND A STATE OF THE STATE OF T				



Distance Length	n Code	Reversed	Clock Pos. Severity	Rating	Category	Comment
261.0	RBC	No	7 / 5		O&M	@ DSMH Connection



264.2 AMH No / End of inspection.



264.2	DAGS	No	12 /	O&M
264.2	DAGS	No	3 /	O&M
264.2	DAGS	No	9 /	O&M
264.2	STOP	No	/	

CUES, Inc.

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

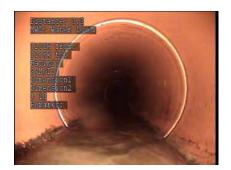
Pipeline segment ref:	Salinas CCTV Project		7	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream m	anhole No: Depth DS:	Total length:	Extra:	
Additional info:					

Observations

Distance Lengt	th Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				Start of inspection



0.0 MWL No





D					5		
Distance Length 0.9	Code DAGS	Reversed No	5 /	Severity	Rating	Category O&M	Comment
0.9	DAGS		5 /			Odin	
Tistance: 0.9 DASS: Deposits Atta Flock to: Fl	ched Grease						
0.9	DAGS	No	7 /			O&M	
Distance: 0.9 DASS: Deposits Atta Slock from: 7 Tlock to: Eaching: SLW.U: Dimension1 Dimension2 E E	ched Grease	The state of the s					
32.7	MWLS	No	/			Structural	
Distance: 32.7 UNIS: Water level S Disck factor: Files factor: Spring: Spring: Simension1 Discension2 8 20 Semarks:							



Distance Length	n Code	Reversed	Clock Pos.	Severity Rating	Category	Comment
63.6	SSS	No	9 /		Structural	



81.4 MWL No /



93.6 MWLS No / Structural





Distance Leng	_		Clock Pos. Severity		Comment
104.5	CL	No	3 /	Structural	
Distance: 109. CL. Crack Lone clock from: 3 Clock to: Rating: S.M.L: Dimension1 Dimension2	S u tudunal	Clo Clo Rat. S/M Dim Dim	tance: 104% Crack Longitudinal ck from: 3 ck to: Ing: //L: ansion1 ansion2 arks:		
117.0	MWL	No	/		
Distance: 197. NML: Water Lev Diock from: Clock to: Hating: SOM/L: Dimension1 Dimension2 % 10 Hemarks:					
170.9	MWLS	No	/	Structural	
Distance: 170. MWLS: Water Le Flock from: Flock fo: Fating: S:M/L: Dimension1 Dimension2 9 25 Remarks:	g vel Sag	9			

9



Distance	Length Coc	le Reversed	Clock Pos. S	everity Rating	Category	Comment
262.1	SSS	No	2 /		Structural	
Distances SS: Su Clock F Clock to Rating: S/M/L: Dimensi Dimensi Remarks	an1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Cl Cld Rati S/N Din Din	stance: 262.1 : Surface Spalling ock from: P ock to: ing: t/L: tension2 marks:		Distance: 262.1 SSS: Surface SI Clock from: 2 Clock to: Rating: S/M/L: Dimension1 Dimension2 Remarks:	nalising
301.2	MWL	No	/			
Distance MND: Wa Plock f Clock f Rating: S/M/L: Dimensi Linensi 1 151 Remarks	e: 301.3 Ger Lavel gom: 0: 1	34 10 10 10	13/2017 1054 PM			
372.9	DAE	No	9 / 3		O&M	
	STEE S OSENS Abrached Encrusta STEE S	tion				



				- II			
Distance 376.2	Length Code MWLS	No	Clock Pos.	Severity	Rating	Category Structural	Comment
Elstance MTDS: Wal Slock fr plock to Habing: S.M/L: Timensio D. 25 Remarks:	ni N						
399.8	SSS	No	3 /			Structural	
Distance SSS: Sur: Clock fr Clock to Rating: S/M/L: Dimension Dimension Remarks:	face Spalling cm: 3 : nl nl	y c					
400.0	RPR	No	/				Pipe looks to be replaced.
Elistance RPPC Pip. Slock fr Plock to Hating: SNM/L: Dimension Dimension Remarks:	ony ni	Alexander de la companya de la compa	Anse: 400,0 Blue Replaced : trans: - train -	o be replaced.		Distance: 400.0 RPR: Pipe Repkas Clock from: Clock to: Rating: S/M/L: Dimension1 Dimension2 & Remarks: Pipe 10	oks to be replaced.

CUES, Inc. 3600 Rio Vista Avenue Orlando, FL 32805 Phone: 407-849-0190

Fax: 407-425-1569



Distance Length	Code	Reversed	Clock Pos. Severity Rati	ing Category	Comment
410.0	DAGS	No	10 / 3	O&M	



416.7	STOP	No	/	
426.8	DAGS	No	10 / 3	O&M
461.2	RPR	No	/	looks like a point repair





472.1 MWLS No / Structural





Distance		Code		Clock Pos.	Severity	Rating	Category	Comment
507.7		MWL	No	/				
/ Sloss of	on2							
553.0		DAGS	No	5 /			O&M	
Distante DAGS: De Clock fi Clock to Rating: S/M/L; Dimension 5 Remarks.	e: 959-0 eposits Attach zom: 9 o: on1 on2	ed Grease						
553.0		DAGS	No	7 /			O&M	
Distance DAGS: De Clock frolock frolock frolock frolock front Rating: S/M/LI Dimension Dimension B S Remarks:	on1 on2	ed Grease						



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
553.0	AMH	No	/				END OF INSPECTION
Distance: 553.0		DISC	anse: 553.D		A		





3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref: 9 TO 10	Project Name: Salinas CCTV Project	Start date/time: 9/18/2017 8:03:34 AM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Additional info:				

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF



0.0 MWL No





Distance Leng	gth Code	Reversed	Clock Pos. Seve	erity Rating	Category	Comment
0.0	DAGS	No	7 / 5		O&M	
Distance: -U.c. DASS Deposits Plock strong 7 Plock strong 7 Plock strong 1 Plock	Attached Grease	Tist Tues Micro Page Solve Unife Actual	ance: -1. Telepoits Attached Great K. Erom: 1 K. to 2 F. to 2	ise	Distance: 0.0 DAGS: Especits DIOCK: From: 7 Phick to: 1. District 1.5 SIAY D. 1. Undersion1 Undersion2 0.5 Remarks:	Artached Grease
Distance: 15.5 DAGS: Deposits Flock from: 7 Flock to: 12 Rabing: 8 M/L: Dimension1 Dimension2 1 S Remarks:	Attached Grease	9/18 96.0 Upst Down Cam	/2017 8:11 AM FT ream manhole Wo:9 stream manhole No:10 Dir: Downstream		9/18/2017 8:1 95.0 FT Upstream manhol Downstream manh Cam Dir: Downst	1 AM A e No:9 ole No:10 ream
9/18/2017 8: 36.0 FT Upstream manho Downstream man Cam Dir: Downs	11 AM le No:9 hole No:10 tream	\$ 9/18 96.0 U.S. 18 95.0 U.S. 1	FU FU ream manhole No.8 stream manhole No.10 Dro-Townstream		9/18/2017 8:1 95.0 FT Upstream manhol Downstream manh Cam Dir: Downst	ble Mo.10
9 18/2017 8: 174-1 FT Destream manks Downstream man Cam Dir: Downs	hole Mosta		TI ESTA AN EST			

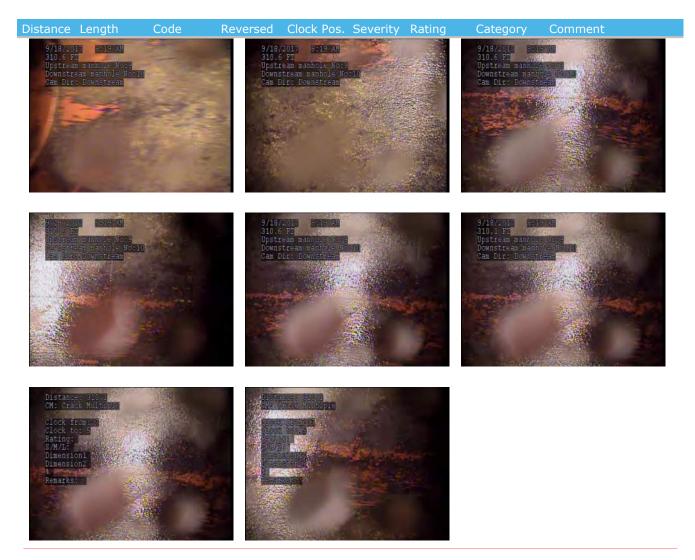


Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
5.0		MWL	No	/				
Distant MML Wa Clock t Clock t Rating: SWM/L: Limensi P 15 Remarks	onl #							



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
310.7	C	M	No	7 / 5			Structural	
Distance CC; Crac Clock to Clock to Pating: S/M/L: Dimension i Remarks:	on1 on2	al	Clock Clock Ratin S M/I Dimer Limer	ance: 310.7 Prack Circumferen s trom: 7 s to: 5 ug: 1 Sistem sistem cks:	tial			
Temperus	emanical No.9 am tanical No.1 (om.obj.am		9.748 310 10.55 10.00 2am (FIT EST AND FIT OF THE PROPERTY OF THE PROPERT			97487:017 8:1 93007 FT United manhar Longited math Tambur, Transt	Ale Notes
Upstream Downstre	manhole No:3 am manhole No:3 commanhole No:1		9/18, 310. Upsti Downs Cam I	/2017 8:19 AM 5 PT ream manhole No: stream manhole Mo bir: Downstream			9/18/JUT 001 310 c PT Upstream mento/ Downstream mento/ Cam Dir: Jownst	NE WELL
Down state	n menhole West em menhole West em methole West		Upstr Downs	/2017 8:19 AM 5 FT ceam manhole Wo:5 stream manhole Wo oir: Downstream			9/18/2017 8:1 310.6 FT Upstream manhol Downstream manh Cam Dir: Downst	E Nove







Distance Len	gth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
376.3	АМН	No	/				END OF INSPECTION. FOUND DAGS THROUGHOUT LINE SEGMENT AND FOUND CM @ 310 FT.





376.3	DAGS	No	7 / 5	O&M
376.3	STOP	No	/	

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref: Project Name: Surveyed by: Start date/time: Weather: 11 TO 12 Salinas CCTV Project 9/18/2017 Justin Young 8:53:15 AM Total length: Upstream manhole No: Depth US: Downstream manhole No: Depth DS: Extra: 12 11 Additional info:

Observations

Distan	ce Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0	0	START WITH FLOW	No	/				
0	0	AMH	No	/				START OF INSPECTION





0.0 MWL No





51.						5		
Distance 35.7		Code I WM	Reversed No	Clock Pos. /	Severity	Rating	Category O&M	Comment
Distance Tive rec	er 35.7 Ger Hark	9						
45.1	IR		No	3 /			O&M	AT J.C.
Distance IR: Info Clock for Clock to Rating: S/M/UL Dimension Dimension Remarks:			Clock Clock Rating S/M/L: Dimens Dimens	e: 45.1 iil Runner ikom: 3 an: 		8	Distance: 45.1 IR: Infil Runner Clock from: 3 Clock to: Rating: S/M/L: Dimension1 Dimension2 Remarks: AT J.C.	
9/18/30/ 45.9 FQ Upstream Downstre Cam Dis:	17, 9:00 AM m manhole Wooll am manhole Wooll Lounstream							



Distance Length	Code	Reversed	Clock Pos. Severity	Rating	Category	Comment
64.1	DAGS	No	12 /		O&M	



70.7 MWL No



78.6 MWLS No / Structural



CUES, Inc. 3600 Rio Vista Avenue Orlando, FL 32805 Phone: 407-849-0190

Fax: 407-425-1569



Distance Length	Code	Reversed	Clock Pos. Severity	Rating Category	Comment
80.3	DAGS	No	12 / 12	O&M	



119.3 DAGS No 12 / O&M





162.7 DAGS No 12 / O&M 167.5 MWL No





Distance Len		Reversed	Clock Pos.	Severity	Rating	Category	Comment
184.0	DAGS	No	7 / 3			O&M	
District 112 Dept. Temp. 1	S attached Grease	A					
202.8	DAGS	No	9 / 3			O&M	
249.0	MWM	No	/			O&M	
Distance: 249 MMM: Water Ma Plock From: Clock to: Bating: S.M.L: Dimension: Dimension: 1 90 Remarks:		9					
253.8	DAGS	No	12 /			O&M	
Planare Parama I Planare Parama I Planare Parama I Planare Parama Parama Parama Parama Parama Parama Parama Parama Parama	S Actached Grease	P					

O&M

DAGS

No

12 /

281.1



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
295.4	DAGS	No	12 /			O&M	
THEOTOMS - 2 SEVE OLDER - WE DUSCOSE - AND PURSE - ATRENO - 12 PURSE	Pasting Greate						
296.8	MWLS	No	/			Structural	
Distance: 296.8. MWLS: Water Level- Clock from: Clock to: Raying: SYM/D: Dimension1 Dimension2 % 15 Remarks:	Sag						
305.4	DAGS	No	12 /			O&M	
330.0	LL	No	/			O&M	
Distance: 330.0 LL; Alignment Left Clock from: Clock to: Hating: S/M/L: Dimension1 Dimension2 & 5 Remarks:							



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
364.4		MWL	No	/				
	on1 on2	9						
384.7		АМН	No	/				END OF INSPECTION. FOUND DAGS THROUGHOUT LINE SEGMENT. MULTIPLE MWLS AND MWM @90%. ALSO FOUND IR @ J.C. OVERALL PIPE STRUCTURE GOOD
Distance Affi: Ma Ricos i Clock to Cloc	rom: S: Gn1 Gn2	A. PECTION, FOUND DAGS MENT, MULTIPLE MWLS FOUND IR & J.C. URE GOOD						
384.7		STOP	No	/				

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/18/2017 10:31:19 AM	Weather: Surveyed by: Justin Young
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:
Additional info:			

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF



0.0 MWL No





Dieteras	Lawath	Codo	Daylana d (Clark Dan Cavavity	Datina	Cahanami	Community
Distance 0.0		Code DAGS	No No	Clock Pos. Severity 7 /	Rating	Category O&M	Comment
		57.00				ou.	
9/18/201 0.0 FT		12	Distanc DAGS: D	e: 0.0 eposits Attached Grease			
Downstre Can Dir	m manhole No:1 eam manhole No : Downstream	0:14	Clock f	rome 7	Luck		
			Haring:				
		A Comment	Dimensi Dimensi 9 5	100000000000000000000000000000000000000	Cont.		
	1		Remarks				
0	30						
1000		the state of the	Mari d				
0.0		DAGS	No	5 /		O&M	
				- ,			
Distance DAGS: De	e: 0.0 eposits Attach	ned Grease					
Floor di Floor di	ron: 5						
Rating: S/M/L:	nerile in the second		4				
Dimensil	n2		1				
Remerks	10)						
	11		7				
39.6		MWM	No	/		O&M	
33.0			_	,		OCIT	
Distance MWM: Wat	e: 39.6 ter Mark	9					
Plock fi	rom:						
Rating: S/M/L:			78				
Dimensio Dimensio t 39	on2	STATE OF THE PARTY.					
Remarks							
73							
A COLUMN							



Distance Length			Clock Pos.	Severity	Rating	Category	Comment
Distance: 46.8 MWL: Water Level Slock from: Clock for Rating: S/M/L: Dimension1 Dimension2 % 15 Remarks:	MWL	No	/				
Distance: 121.4 Will: Water Nark Flock from: Flock f	MWM	No	/			O&M	
Distance: 182.7 WMES: Water Level: Clock from: Dlock to: Rating: S/M/L: Dimension1 Dimension2 1 25 Remarks:	MWLS	No	/			Structural	



Distance Length	Code	Reversed	Clock Pos.	Severity Ratir	g Category	Comment
297.2	DAE	No	7 / 5		O&M	



406.8 MWL No /



424.9	DAGS	No	7 /	O&M
424.9	DAGS	No	5 /	O&M
424.9	DAE	No	6 / 5	O&M
424.9	AMH	No	/	END OF INSPECTION.

DAGS THROUGHOUT LINE SEGMENT. FOUND MINOR MWLS AND MWM, ALSO DAE STARTING AT 297 FT





424.9 STOP No /



3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref: Project Name: Start date/time: Weather: Surveyed by: 15 TO 16 Salinas CCTV Project 9/18/2017 Justin Young 11:43:53 AM Depth DS: Upstream manhole No: Depth US: Downstream manhole No: Total length: Extra: 15 16 Additional info:

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF INSPECTION



0.0 MWL No







Distance Lengt	th Code	Reversed	Clock Pos.	Severity Ratir	ng Category	Comment
0.0	DAGS	No	7 /		O&M	
Distance: 0.0 DAGS: Deposits / Clock from: 7 Clock to: Pating: S.M.U: Dimension1 Dimension2 3 5 Remarks:	Attached Grease					
0.0	DAGS	No	5 /		O&M	
Distance: 0.0 DAGS: Deposits A Clock from: 5 Clock to: Rating: S.M.V.E. Dimension1 Limension2 8 5 Remarks:	Attached Grease					
7.9	MWM	No	/		O&M	
Distance: 7.9 MWH: Water Mark, Clock from: Clock to: Rating: S/M/L: Dimension1 Dimension2 3 25 Remarks:						



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
182.6	DAE	No	9 / 3			O&M	



185.9 MWM No / O&M



318.0	DAGS	No	7 /	O&M	
318.0	DAGS	No	5 /	O&M	
318.0	DAE	No	9 / 3	O&M	
318.0	АМН	No	/		INSPECTION. DAGS, DAE,

FOUND DAGS, DAE, AND MWM @ 75 %. OVERALL PIPE STRUCTURE GOOD.



No /	STOP No /		
------	-----------	--	--

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/18/2017 1:54:37 PM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Additional info:				

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref: Project Name: Surveyed by: Start date/time: Weather: 17 TO 18 Salinas CCTV Project 9/18/2017 Justin Young 1:56:09 PM Depth US: Depth DS: Total length: Upstream manhole No: Downstream manhole No: Extra: 17 18 Additional info:

Observations

Distance Ler	igth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	АМН	No	/				START OF INSPECTION





0.0 MWL No



of



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0		RFC	No	11 / 3			O&M	@ USMH
Distance Report In Control of the Co		/ b						

26.1 DAGS No 7 / 0&M



26.1 DAGS No 5 / 0&M





Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
Distance MWLS: Wa Clock fr Clock to Rating: S/M/L: Dimensic Dimensic 3 45 Remarks:	e: 54.7 ster Level Sa com: on1	MWLS	No	/	Seventy	Rating	Structural	Сонтепс
152.1	VISC 1	MWLS	No	/			Structural	
152.1	PSC 1 Hera Indernat Time:	MCU	No	/			O&M	



Distance Ler	ngth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
220.4	MGO	No	/				WATER LEVEL BEING PULLED DOWN BY VACTOR TRUCK. WATER LEVEL NOT ACCURATE TO FLOW



236.5 MCU No / O&M FOUND DAGS AND

FOUND DAGS AND MWLS. MCU
THROUGH MOST OF LINE BUT WAS ABLE TO USE VACTOR TRUCK TO PULL DOWN WATER LEVEL. INSPECTED TO AND FROM DSMH.



236.5	DAGS	No	7 /	O&M
236.5	DAGS	No	5 /	O&M
236.5	STOP	No	/	



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
350.1	АМН	No	/				DSMH REACHED, CLEANING LENSE THEN WILL INSPECT GOING UPSTREAM.



3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref: Project Name: Surveyed by: Start date/time: Weather: 17 TO 18 Salinas CCTV Project 9/25/2017 Justin Young 12:58:54 AM Total length: Upstream manhole No: Depth US: Downstream manhole No: Depth DS: Extra: 17 18 Additional info:

Observations

Di	stance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
	0.0	START WITH FLOW	No	/				
	0.0	AMH	No	/				START OF INSPECTION



0.0 MWL No





Page



Distance Leng	th Code	Reversed	Clock Pos. Severit	ty Rating	Category	Comment
0.0	MGO	No	/			EXPOSED REBAR @USMH. PIPE UNDERCUT. 9-1 O'CLOCK
Assence III Moo. General of Moo. Seme Plack the Bathman Std Lo Assence III Remarks of Assence Willeston 2-10	SEFVELON E REBAR WUSHH. PIPE VALUERY	CLOCK	nosk 180 Benekal Observation Benekal Observation Bee Page 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	IPE .	Ilevance: 10.0 Ilevance: 10.0 Plock Scame Plock Scame	SERVATION SERVAT PUSHH. PIPE
0.0	DAGS	No	7 / 5		O&M	
Checkens and Check		July July July July July July July July	meter 8.0 Decreases Angeled Greases Books 9 Jack 1 Signal Signal Signal Ks:		Distance: 47.3 DAGS: Deposits Clock from: 7 Clock to: 5 Rating: 9/M/L3 Dimension1 Dimension2 1 S Bemarks:	strached Grease
9/25/2017 1:2 307.2 FT Upstream manhol Downstream manh Cam-Diss Downst	2 AM E-No.13 Die No.13 Feam	9/25, 307. Upstr Downs Cam-E	2017 1021 AD FT eam manhole Wash tream manhole Woshin Les Downstream			



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
15.7		MWL	No	/				
Listence To Manager To	e: 15.7 ter Level							
82.4		MWM	No	/			O&M	
	e: 82.4 ter Mark rom: o: on1 on2		±					
107.5		MWLS	No	/			Structural	
Pustano NTDS: 2108 / Ratino: S/M/L: Uniensi Dimensi Radass	oni							



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
127.9		MWM	No	/			O&M	
Distance NWN: Wai Clack to Rativo: Dimensio Undersio Selection	commission of the commission o							
155.0		MWLS	No	/			Structural	
Clock if Flock to Rating: S/M L:	ater Jewel Sa rom: b: on1 on2							
158.8		MWM	No	/			O&M	
VA.	e: 15.80 Cer Mari							



Distance	C I-	Developed	Clark Dara	Constitution	Dakina	Cahanan	Community
Distance Le	ength Code MWL	No	Clock Pos.	Severity	Rating	Category	Comment
Distance: NML: Water FLOSE from Clock to: Rateing: S.NWL: Ulmension1 Limension2 Loss Pamarks:	126.7 Level						
226.7	MWM	No	/			O&M	
Uistance: CIMM: Fater Flow Flow Flow Flow Flow Flow Flow Flow	Nark						
276.3	MWL	No	/				
Distance: MML: Water MML: Water Clock for Rating: S.W./L: Ulimension2 25 Remarks:							



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
276.8		MWM	No	/			O&M	
Distance MTM: Wat Clock if Clock trains: S.M.L. Limensi 4.55 Remarks	o:							
311.3		MWM	No	/			O&M	
	e: 311.3 ter Mark: rcm: 001 con1 con2							
315.0		MWLS	No	/			Structural	
Clock to Clock to Rating: S/H/L Dimensi Dimensi	e 805 m ancer Towar Ham some of oni oni							



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
327.3		MWL	No	/				
Distance MML: Wa Plock f Clock f Rating S.M/L: Dimensi Himmensi R SS Remarks	on1 on2							
327.3		MWM	No	/			O&M	
Distance MTM: Wa clock for Rating: S.M.A.: Dimensi P. 159 Remarks								
348.0		MGO	No	/				DSMH CHANNEL
Distant MGO: GB Clock t Rating: S/M/L: Dimensi Dimensi	oni oni oni oni oni oni oni oni oni		Dista MGO: Plock Plidck Patin S/W/M Dimen Timen	nce: 340.0 Seneral Observat from: to: g: s:on1 s:on2 ks: OSMA CHANNED				



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
349.1	AMH	No	/				END OF INSPECTION
Distance: 349.1							



349.1	DAGS	No	7 / 5	O&M
349.1	STOP	No	/	

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:	Salinas	Project Name: Salinas CCTV Project Depth US: Downstream manhole No:		e/time: .7 PM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US:			Depth DS: Total length:		Extra:
Additional info:						

Observations

D	istance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
	0.0	START WITH FLOW	No	/				
	0.0	AMH	No	/				START OF



0.0 MWL No





Page



Distance Length	Code	Reversed	Clock Pos. Severity	Rating	Category	Comment
2.3	MCU	No	/		O&M	
Coepanda v 2 8 Cour Camera Untervat Clock Stamp Clock Ges Restage Restage State Coepand Comeras	ter	TLGG RAGE ReitA RAGE TANGE TANGE B	eners I. 3 Camara Underwater 3 CCCC 3 CCC 3 CCCC 3 CCC 3 CCC 3 CCCC 3 CCCC 3 CCC 3 CCC 3 CCC 3 CCC 3 CCC 3 CCC 3 CCC 3 CCC 3 CCC 3 C	P		
8.9	DAGS	No	11 /		O&M	
Clock Deposits Atta Olock Semi: 11 Deposit Sel Selmo: Selm	A See Grease					

40.7 MSA No / WATER LEVEL TO HIGH. WILL RE-INSPECT THIS AND UPSTREAM SEGMENT AS WELL.



3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:
Project Name: Start date/time: Weather: Surveyed by:
19 TO 20 Salinas CCTV Project 9/25/2017
2:05:10 AM

Additional info:

Observations

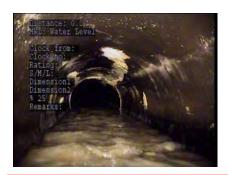
Distan	ce Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0	0	START WITH FLOW	No	/				
0	0	AMH	No	/				START OF INSPECTION







0.0 MWL No



3



Distance	Length C	ode Reve	ersed Clock Pos.	Severity	Rating	Category	Comment
5.0	DAG	S No	7 / 5			O&M	
Figure 1 and	c 4.6 mostrs Atracks 1998 pm: 7 c 5		Distriction d. 8 Mark Tron: 7 Clock from: 7 Clock for 5 Salana: 10 Dimension: 1 Remarks:				
20.3	MWM	1 No	/			O&M	
Distance MUN: Wat Clock for Clock to Habing: SiM/DD Dimensio 70 Remarks:	om: : n1 n2						
309.6	MWL	S No	/			Structural	
Distance MWLS: Wa Clock fr Clock to Rating: S/M/E: Dimensio Dimensio Remarks:	nl	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					



Distance	Length Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
310.5	MWM	No	/			O&M	
MWM: Wat		The state of the s					
351.3	MWL	No	/				
Distance MWL: Wat Clock to Rating: S/M/L: Dimensic Dimensic 1 25	com :						
434.9	DAGS	No	7 / 5			O&M	
434.9	AMH	No	/				END OF INSPECTION
Listance SHH: Man Plock fr Flock tr Flock tr Flo	com:						

STOP

No

434.9

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

1	Pipeline segment ref:	Project Name: Salinas CCTV Project	9/	Start date/time: /14/2017	Weather:	Weather: Surveyed by: Justin Young		
1	Upstream manhole No:	le No: Depth US: Downstream manhole No:		32:49 AM	gth:	Extra:		
Addi	tional info:							

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance	Length Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
O.7 Distance SSS: SU Clock N Repling S M/N: Limensi Remarks:	SSS	No	4 /			Structural	СМІ
O.7 Distance CL: Crac Clock to Clock t	CL	No	3 /			Structural	СМІ
O.7 Distance CL: Crac Clock fr Clock tt Rating S/M/E: Dimensic Q Remarks:		Clock Clock Rati; S/M/ Dimer Dimer	5 / ance: 0.7 Track Longitudins & from: 5 & to: ng: insion1 nsion2 eks: CMI			Structural	CMI



Distance Length	Code	Reversed	Clock Pos. Severity Rating	Category	Comment
0.7	SAV	No	12 / 12	Structural	CMI
Distance: 0.7 SAV: Surface Aggre clock from: 1.2 Clock to: 1.1 Rating: S/M/L: Dimension1 Dimension2 Remarks: CMI	gate Visible				
5.0	ISSR	No	2 / 10	O&M	COI
Distance: 4.5 1888: Introducing Selections from: 9 11.58 to: 1 1.58 to: 1 1.5	aluno Rino	Dista ISSR: Plock Pablick Rabin S/M. D Under Dimen 8 S Bemark	nce: 7.2 Introducy Sealing Form from: 0 to: 10 3: 5: 001 Sec 701		
7.2	SSS	No	1 /	Structural	WI
Distance: 7.2 SSS: Surface Spall Clock from: 1 Clock to: Rating: S M./5: Dimension: Unmension: 8 Remarks: VI					



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
7.2		SSS	No	4 /			Structural	WI









8.7 AMH No / END OF MACP INSPECTION



5



Distance	Length Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
8.7	ISSR	No	2 / 10			O&M	
Distance ISSE: Im Clock in Clock in Clock in Clock in Clock in SAN-UE Dimension & S Remarks:							
8.7	STOP	No	/				

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

2	Pipeline segment ref:	Project Name: Salinas CCTV Project		Start date 9/14/201 11:25:28	7	Weather:	Surveyed by: Justin Young
2	Upstream manhole No:	Depth US:	Downstream manhole No:	Depth DS:	Total length:	E:	xtra:
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance Leng	th Code	Reversed	Clock Pos. S	Severity Rating	Category	Comment
0.5	SAV	No	12 / 12		Structural	CMI
Distance: 0.5 SAV: Surface Ag Block Brow: 12 Subject to: 11 Setting: S.W.D: Dimension1 Dimension2 Bemarks: CMI	gregate Visible					
4.0	ISSR	No	12 / 12		O&M	COI
Distances 4.0 usse: Introding Plock from: 18 Plock from: 18 Plock for: 10 Rating: 8/M/L: nimension: 18 Plock for: 10 Plock for:	Sealing Sing					
4.0	MGO	No	/			COI- APPEARS TO BE PATCHED.
Distance 4.0 x60: General ob Plock from: Tiock to: Rating: S/N D: Timension 1 the Remarks: COI- A	SERVACION	Mede Clos Ratii Exme Dime	ance: 4.0 General Observations 5 trom: 5 to: 10: 10: 10: 10: 10: 10: 10: 10: 10: 10			



Distance Len	gth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
13.8	AMH	No	/				END OF MACP INSPECTION



13.8	SAV	No	12 / 12	Structural
13.8	ISSR	No	12 / 12	O&M
13.8	STOP	No	/	

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

3	Pipeline segment ref:			Start date 9/14/201 8:47:15 /	7	Weather: Surveyed by: Justin Young	
3	Upstream manhole No:	Depth US:	Downstream manhole No:	Depth DS:	Total length:		Extra:
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				Start of MACP



0.0 MWL No / MACP INSPECTION





Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
13.9		АМН	No	/				END OF MACP INSPECTION
AMH: Ma Clock f Clock t	from:							
Rating: S/M/L: Dimensi Dimensi * Remarks	on1	No 12 Aug.	*					
13.9		STOP	No					

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

6	Pipeline segment ref:	Salinas	Project Name: CCTV Project	Start date 9/14/201 1:51:45	7	Weather:	Surveyed by: Justin Young
6	Upstream manhole No:	Depth US:	Downstream manhole No:	Depth DS:	Total length:	E	xtra:
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance I	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0		MGO	No	/				SURROUNDING CONCRETE COLLAR BROKEN FROM 12 TO 12











Tax. 407-425-1509						
Distance Lengt	h Code	Reversed	Clock Pos. S	Severity Rating	Category	Comment
0.5	HSV	No	12 / 12		Structural	CMI- SEAL BETWEEN CONE AND FRAME BROKEN .
Mistand: 0.5 HSV: Hole Soil V Mistand: 12 Vigok bb: 12 Signal Sig	THEEN CONE LANG FRAME		ance: 0.5 Hole Soil Visuble : from: 12 : to: 12 : grid : sion1 :Sion2	NE AND FRAME	Tistance: 0.5 HSV Hole Soll V Compared to 12 Display to 1	TREET SONE AND FRAME
Clock Escap de nick Escape de nick E	isible		Hore U.S. Hole Soil Visible Loui 12 Hole I.S. Hole Soil Visible Hole I.S. Ho	NE AND FRAME	STATION LISS 0.5 PI Upstream mannol Constream manno Pan Dir: Davist	
9/14/2017 1095 D.S.FT Upstream_mankr16 Downstream_mankr Cam Dir? Townstr.	PM No:6 Le No:6 eam	9 14 0.5 Ugst Lown Pan	2010 1:55 PM		So 24m2010 1:55 BUS TOTAL TOWNSTERM MAINTA TOWNSTERM MAINTA	PN NGCD Le NOTE Eam
8/14/2010 1:56 0.5 FT Upstream manhole Downstream manhol Cam Dir: Downstr	FM No.6 Le No.5 aam					



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
3.5	IS	SSR	No	12 / 12			O&M	
Distance ISSR: In Clock in Clock to Rating: S.M/L: Dimension Dimension Dimension Dimension Dimension	truding Sealing	Rung - No.	9/14/2 3.5 PT Upstre Downst Zam Di				9/14/2017 250 G.S. PP. Urstream menhol downstream menh Dam Dir: Townst	D PR 5 Not6 ole Not6 ream
9 14/015 9.5 FT Profite I to note ham Tale	mannels West am mathols Ness Teamstream		BVISTO S.S. FO I Street Covide Cam Ol	am manhole Nose ream manhole No ream manhole No ream manhole No			\$71,2000 E20 8,5 FV Usstram main Can Duss Taxas	
21.8	Al	МН	No	/				END OF MACP INSPECTION
Distance ANH: Mar Clock fr clock to Rating: S/M/L: Dimensic But arks:	com:							INSTECTION
21.8	IS	SSR	No	12 / 12			O&M	

4

STOP

No

21.8

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

8	Pipeline segment ref:	Salinas	Project Name: CCTV Project	Start date 9/14/201 12:59:36	7	Weather:	Surveyed by: Justin Young
8	Upstream manhole No:	Depth US:	Downstream manhole No:	Depth DS:	Total length:		Extra:
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0		MGO	No	/				SURROUNDING CONCRETE COLLAR BROKEN FROM 9 TO 3 O' CLOCK



0.5 12 / 12 No Structural















Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
9.0	IS		No	7 / 4				
Distance IS: Infi Clock to Rating: S.W.E. Dimension Remarks:	e: 0.0 1. Staum 2000: 1 1		Distriction of the control of the co	Time to the state of the state			Distance 2.0 IS: Info! Stain Ploce irone of Ploce irone of Ploce irone Ploce i	
Distance IS: Infi Plock in Plock in Plock in Remarks Inference Inference Remarks	9.1 O Steam		Distored in the control of the contr	ndil Scaln irom: 7 to: 4 ig:				
13.4	AN	1H	No	/				END OF MACP INSPECTION
Distance AMH: Mar Clock fr Clock tr Rating: S/M/L: Dimensic Dimensic Remarks:		PECTION						
13.4	ST	ОР	No	/				

3

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569

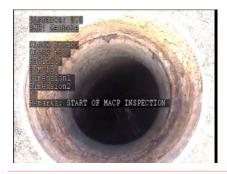


Observation Report with Still Images and Scores

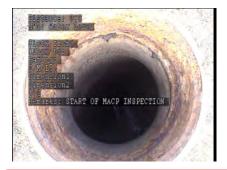
9	Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/15/2017 8:10:53 AM	Weather: Surveyed by: Justin Young
9	Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:
Addit	cional info:			

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance Len	gth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	IS	No	12 / 12				FRAME- CMI - HEAVILY CORRODED
Cistances C.O.	in the same of the						



0.0 STOP No



Distance Leng	gth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.8	SAV	No	12 / 12			Structural	
Service Control of the Control of th	10291513 (2513)/4		STATES OF STATES	S WESTER		STATE OF THE STATE	
P/45/2011) B: Q. B FC Disturant manage double from man lam Dist (Duni	18/AM Le Misse Mole More Cream	9/1 0.8 0.8 0.0 0.0 0.0 0.0 0.0 0.0	5 2017 8014 AM FT tream manhole No. netream manhole N Dir: Osynstream			Proprieta Branch (1995) Proprieta mendo (1995	
9/15/2017 8: 0.8 FT Upstream manho Downstream man Cam Dir: Downs	14 AM le No:9 hole No:9 tream	E 1 I	6/2007 Grid AM FT tream manhole Nove nstream manhole No Dic: Downstream			9/15/2017 83 0.8 FT Upstream manhal Downstream manh Pam Dira Downst	S No.9 Ole No.5 Restill
8/15/2017 8: D.8 FP Dystream Medical Dyvistream med Sam Dire Cavis	14 Arts Le Nicos nole Vinco trean		SVIDE BRUC AND THE WAR AND T			BYAS SOUTH BEST OF THE STATE OF	



Distance	Length Cod	de Reversed	l Clock Pos.	Severity	Rating	Category	Comment
17.9	AMH	No	/				END OF INSPECTION
	only only only only END OF INSPECTION						
17.9	SAV	No	12 / 12			Structural	

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

10	Pipeline segment ref:	Project Name: Salinas CCTV Project		Start date 9/15/201 11:31:02	7	Weather: Surveyed by: Justin Young	
10	Upstream manhole No:	Depth US:	Downstream manhole No:	Depth DS:	Total length:	E:	xtra:
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance Leng	gth Code	Reversed	Clock Pos. Severity Rating	Category	Comment
0.0	SCP	No	12 / 12	Structural	FRAME - CMI - HEAVILY CORRODED AND BUBBLING
Comments of the state of the st	E - CMI - HEAVILY		Main Divisi AM PA	Topic to make the second of th	a Moito ole Moito dean
0.0	MGO	No	/		MORTAR SEAL LOOSE
Olose Tron: Glose Tron: Glose Tron: Glose Stron: St	ISSET FORES	Dist MGC: Olice Rati S.M. Dime B. Rese	ance: 0.0 General Observation K from: K'ton: K'to: Dgy I: Island ReichZ RESS MOREAR SEAL LOUSE	Distance: 0.0 MGO: General Obs Clock from: Clock to: Rating: S/M/L: Dimension1 Dimension2 Remarker MORTER	
Distance: U.O MGO: General O Slock from: Classification: Classification: Classification: Classification: Classification: Classification: Classification:	bservation	MILES AND	ance; 0.0 Beneral Observation F John K de: 10 De: 1		



Reversed	Clock Pos.	Severity	Rating	Category	Comment
No	7 / 9			Structural	
7/100					
MMM:	nce: U.U Mortar Missing M	ledium			
Clock	from: 7 to: 9	MARKET AND THE PARTY NAMED IN			
THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	Hereita (Miles	MAN HA			
AT ITS		· 大型合			
Remark		1000			
	A KAR		1		
	金米				
THE REAL PROPERTY AND ADDRESS OF THE PARTY AND	No Dista MMM: Clock Clock Ratium S/M/L Dimen	No 7 / 9 Distance: 0.0 MNM: Mortar Missing M	No 7 / 9 Distance: 0.0 MNM: Mortar Missing Medium Clock from: 7 Clock to: 9 Rating: S/M/L: M Dimension1	Distance: 0.0 MMM: Mortar Missing Medium Clock from: 7 Clock to: 9 Rating: S/M/E: M	No 7 / 9 Structural Distance: 0.0 MMM: Nortar Missing Medium Clock from: 7 clock to: 9 Rating: 8/M/L: Mulmension)



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
4.0		DAGS	No	12 / 12			O&M	POSSIBLE EVIDENCE OF SURCHARGE
Clock fr Clock to Rating: S/M/L: Dimension	on1 on2 : POSSIBLE EVI		9 15 \$ 0. 10 15 10 16 10	ACC PERSON AND THE PE			9/15/2017 PLS 3.0 FT Upstramm markt Downstream namk Cam Dirry Townst	ar Air ang arang ang arang
Downsairs	P MISST AND MISSISSIPPING TO STATE OF THE PROPERTY OF THE PROP		9 15, 5.0. Upst: Com: Cam:	2010 MicCo Al Michael Markette MicCo Communication of MicCo Micco MicCo Annual Micco Micco MicCo Annual Micco MicCo Annual Micco MicCo Annual Micco Micco Annual Micco Micco Micco Micco Micco Annual Micco Micco Micco Mi			9/15/2017 11: 6.8 FT Upstream manhol Downstream manh Cam Dir: Downst	OB AME THE NOTION TEAM
6.8 FT	n mannole Wes am manhole Wes am manhole Me Downstream		3/15 6.8 Ugst. Com	DOD - LEGGE RE-				



Distance L	ength Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
9.5	MGO	No	/				APPARENT FREQUENT SURCHARGE BASED OFF OF HEAVY GREASE LINE.
Distances MGO: Gener Plack deam Files des	es di un se avere en la companya de	Orst NGO: A NICE	ance: 9.8 General Observat 2 Econs y	ion,		9/15,2017 15: 9.5 FT Upstream mannel Townstream man	AN A











7



Distance Ler	igth Code	Reversed Clock Pos. Severity Ra	ating Category	Comment
9.5	MGO	No /		HEAVY DEBRIS ON SHELF DUE TO SURCHARGE
Distance: 9.9 MGO: General Clock from: Clock to: Rating: S/MY II: Dimension: Dimension: See arms: HEAL SUSCHARGE:	Observation To Deerus of Sheet Out to	Distance: 8.85 MCQ: General Observation Picck stems Clock its Rating: S.M.L: Dimension: Dimension: Remarks: HEAVY DEERIS ON SHELF DUE TO SURCHARGE	Distance 1.6 MGC: General 05: Plack Stone Plack Her Rating: S/M/L: Dimension1 Dimension2 Hemarks: HEAVY 1 SUBCHARSE	SERVES ON SHEET DUE 10
Distance: 9.6 MGD: General Clock trom: Clock to: General Spang S/M/D: Dimension: Dimension: Remarks: HEA SURCHARGE	Observation	9/15/0010 10/00 AD 12/0 50 Upstream manhole Westin Upstream manhole Westin Tam Dury Dewistream	9/15/2017 11: 12:0 PT Upstream manhol Obwistream manh Cam Dir: Oswisti	No:10 cle No:10 ceam
3/15/com 11:0 FT Upstream man Counstream in Tam Old: Cown		9/15/2017 11:45 AM 19.9 FT Upstream manhole No:10 Downstream manhole No:10 Cam, Dir: Downstream	9/15/2017 11: 19/8 FT Upstream manhol Icynstream manh Pam Turs Icynst	S AM No:10 No:10 eam
9/15/2017 19:9 ZT Upstream mani Itwistream me Pam Disk Itwi	iole No:10 inhole No:10			

19.9



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
9.5		DAGS	No	12 / 12			O&M	
Distance DigS. De Tions of Tio	e: RELS	ched Grease						
19.9		АМН	No	/				END OF MACP INSPECTION
Listance AMH: Mar Clock fr Clock the Rating: S.M./D. Dimension Remarks:	nhole com: com: com: com: com: com: com: com:	P INSPECTION	ge ge					

STOP

No

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

11	Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/15/2017 8:49:31 AM	Weather: Surveyed by: Justin Young		
11	Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:		
Addit	ional info:					

Observations

Distan	ce Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0	0	START WITH FLOW	No	/				
0	0	AMH	No	/				START OF MACP INSPECTION



0.0 MWL No / START OF MACP INSPECTION





Distance Length	Code	Reversed	Clock Pos. Severity Rating	Category	Comment
0.0	IS	No	12 / 12		FRAME - CMI - HEAVY CORROSION









0.0 STOP No /



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.8		SAP	No	12 / 12			Structural	
9/15/20 0.8 FT Upstrea Lownstr	17 8:51 AM m manhole No: eam manhole N : Downstream	11 0:11	C.S.S. O. 0. B. II Upstr Iowns Cam I				eris 2011 Oss De PE Operosem meddel Operosem medde Dem Dars Johns	CONTROL CONTRO
	ET EVEL AN M'ARMONIE MOS ARM MECHANIS A N. GROWNSELES	ii 00111	(9.15) 0.8 F Destr Downs Cam I	2019 8:52 AV T eam mannole No.1 tream mannole No. ir: Dovnstream			8/15/2017 8:9 9.8 FT 19stream manhol comstream manh Tam Dir: Downst	
9/15/20 0.8 PT Unnstr Pan Dir	m manhole No eam manhole No eam manhole N	11 6890						
0.8		ISSR	No	12 / 12			O&M	
DistancissR: I	o: 12 on1	ing Bing						



Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
15.9	SAP	No	12 / 12			Structural	
15.9	ISSR	No	12 / 12			O&M	
15.9	АМН	No	/				END OF MACP



3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

12	Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/15/2017 10:08:41 AM	Weather: Surveyed by: Justin Young	
12	Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Addit	ional info:				

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0]	IS	No	12 / 12				FRAME - CMI - HEAVY CORROSION





Distance Le	ength Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	SAP	No	12 / 12			Structural	
EASTELIGET SAFE BUZZE FOR SAFE BUZZE FOR SAFE SAFE SAFE SAFE SAFE SAFE SAFE SAFE	al Projecting		5/2019 10:11 AN FR Tream manhole No: stream manhole N Dir: Downstream			2/15/2017 10: 0.8 61 Tostream manifol Townstream manifol Tam Dir. Towns	11-AH c Nosia ole Nosia dead
9 15 U017 0.8 PT Unstream Immstream Tam Dir: D	10:11 AN aninole No:10 maninole No:11 ovnoiream		DOT DOLL AND THE COMMENT OF THE COME			The state of the s	DE ANTE
P15/2017 0 6 PT Upstream m Covistream Pam Direct	INTIL AT annote Novil manhole Vivila constrain		TO DESIGN THE TOTAL CONTROL OF T			D S TO D S TO D S TO D S TO S IN USE	THE RESERVE AND THE PROPERTY OF THE PROPERTY O
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADRIA AM sankole No:12 manhole No:12 avnstream	92 115 115 126 126 126 127 127 127 127 127 127 127 127 127 127	Tellin Ministralia Tellin merrirolla Nessis are aminina nicible Mi Ulick district tellin	(中		S, US/2010 May 15 5 S 201 USS TO MARKET MARKET TO VISITE SAME MARK THE DUTE THE VISITE	a Nague Cle Nague Caru



Distance Le	ength Code	Reversed	Clock Pos.	Coverity	Dating	Catagory	Comment
4.4	SAM	No	6 /	Severity	Kating	Category Structural	AGGREGATE MISSING AROUND INCOMING 4" VCP
Flock irons Flock to: Sabiles S.W.E. Ilmersions Timersions	A AIRTHUR WISSING	Olor Flor S 10 Cime Cime	Since: 0.8 Success Agreeds Sicross 6 Sing: D: Sing:	3		Distance: 0.8 BAD: SUSSEC ES Clock Scone: 6 Dick Scone: 6 Dick Scone: 6 STORE SCONE Dimensional Commensional Commensional Commensional Commensional Commensional	TREEFE MISSING
8.4	MGO	No	/				EVIDENCE OF SURCHARGE
Distance: 8 NGO: General Duck from: Clock to: Rating: S NUO: dimension: Otherstone Characks, Ed.	i disenzacion	Distriction of the control of the co	ance: 6 1 General observat 12 from 12 from 13 from 15 from 15 from 15 from 16 from 17 from 18			District (0.4) MGO: General Ob MIGO: Economic MIGO: Toom MIGO: Too	SECONDATION

8



Distance Length	n Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
8.4	IS	No	1 /				COMING FROM JOINT









8



Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
10.0		DAGS	No	7 /			O&M	
Estamos Dass. Cer Plost toc Alberta S/M Le Universion Limension 1 S Remarks:	100 OSAUS PARA OSAUS P	ne i Grese	OLST CARS SIGN Fath S.M. S.M. S.M. S.M. S.M. S.M. S.M. S.M	angs 1000 Deposits 2009 Organis 1000 1000 Scotte			Distances NO.3 LIGHT Denosits Distant I Tubel To Section Section Compassion Compassion Table Section	Carter Blood (Gr. Pass)
Description of the control of the co		ned Seess	Fire of Tables And Tab	CHES & SULD ASSESSED TO THE SECOND SULD SUBJECT SUBJEC	ed Grease			



Distance	Length (Code Re	versed Cloc	ck Pos.	Severity	Rating	Category	Comment
15.6	MGC) N	0	/				EVIDENCE OF SURCHARGE ON BENCH
Distance MSO: Ge Clock i Clock t Rating: S/M/L: Dimens: Dimens: Remarks BENCH	neral Obsessation		Distance: 15 MGO: General Clock from Clock to: Rating: S/M/L: Dimension: Dimension: Remarks: EVI BENCH	S I Diserva			9/15/3020 10:2 15.6 99 Upstream manifole Doins ream banif Dam Dir: Townstr	
Commette	The property of the property o		9/15/2017 15-6-7 Upstream man DevistVermy Cam Dit: Do				9 29 m. 2 27 6 5 1 11 Store am mannau 12 m. 5 r. am manna 13 m. 6 r. Town 5 au	Monte Monte Sam
	n mannole Necli am manhole Nocli Downstream							



Distance Ler	ngth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
17.6	SAP	No	12 / 12			Structural	
CLECTIVE : 17 SER DUCTOR CHARLE ES NO T CHARLE ES							
17.6	АМН	No	/				END OF MACP INSPECTION
Clevence in ANA Mendels Charles he message in ANA Charles he message in ANA Charles he message in ANA Charles i	OF MARRY INSPECTION						

8

STOP

No

17.6

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

13	Pipeline segment ref:	Project Name: Salinas CCTV Project		Start date, 9/15/201 1:42:30 F	7	Weather:	Surveyed by: Justin Young
13	Upstream manhole No:	Depth US: Downstream manhole N	0:	Depth DS: Total length:		E	extra:
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF INSPECTION



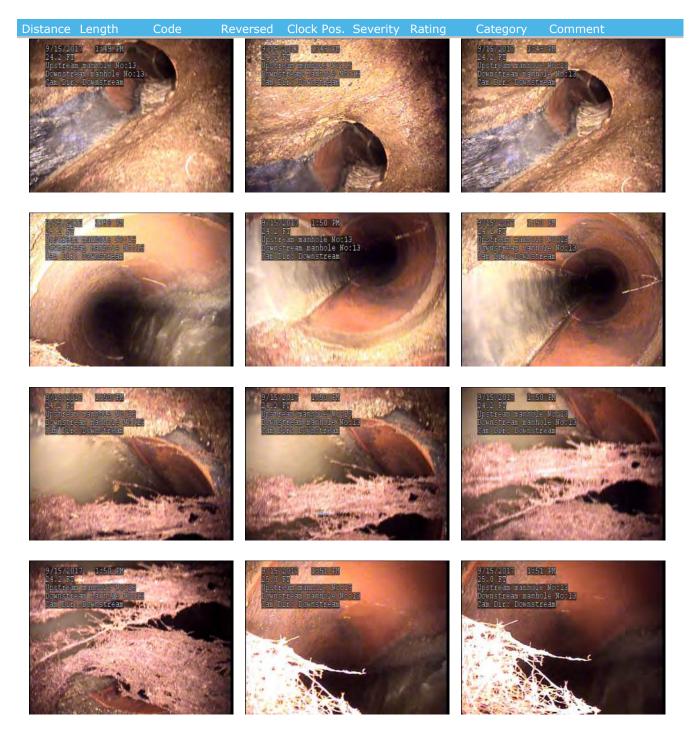


Distance	Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.5		В	No	12 / 12			Structural	RING BROKEN
Custom Cu	er Bull promy 12 of 12 of 12 en1 en2 : Ring Broken			DOMES 0.0 DOMES 12 DOMES 12 SIGNI 12 SIGNI BROKEN			emismool7 1:4: 0.0 FT Testream manhole Downstream manh Cam Dir: Downstr	
er 15 val G. G. FR Districts Cam Cir	17 1:44 PW m manhole Wood em manhole W S Downstream		9/15/ 0.0 F Upstr Downs Cam 0	Oran 1994 03 T Temmanitale No.2 Treem manitale No. Treem manitale No.			Evis acon List	: Vo.12 No.13
9/15/20 0.0 FT Upstrea Downstr Cam Dir	17 1:44 PM m manhole No: eam manhole No : Downstream		9/15/ 0.0 F Upstr Downs Cam D	2017 1:44 PM T eam manhole No:1 tream manhole No ir: Downstream	313			



Distance Length	Code	Reversed	Clock Pos. Severity	Rating Catego	ory Comment
0.5	RMJ	No	12 / 12	O&M	1
Titanues 0.0 RMJ: Roots Madamm Clock from: 12 Check from: 12 Chec		Clock Clock Ratir S/M/I Dimer	ance: 0.0 Roots Medium Joint t from: 12 t to: 12 ig: ission1 ission2	PARCE IN LINE OF THE PARCE IN	manhole No:13 mm manhole No:13 (Synatream)
9 2572027 1245 P	10000	Hosto	/2017 1:48 PM FT ream manhole Wool9 tream manhole Wool9 hr: Downsteam	Upstream Downstrea	manhole Moole am manhole Moole Downstream
9/15/2017 1:48 P 19.7 FT Upstream maintole N Downstream maintole Cam Dir: Downstweam	1.13 (1.0)	9/15, 19.7 Upstr Down Cam F	(2017 1:48 9) FT cam manhole Kovis tream manhole Kovis dir Dongetream	9/15/2017 24.2 FT Ugstream 10vnstre Cam Dig:	manifole No.13 in manifole No.13 Constream
9/15/2017 1549 B 64.20 FU Upstream manhous Bu Ochistzam manhous Tam Dur: Upstream	5013 Wokus		enot 1:45 PM PS east menhole Novis the menhole Novis the Poets Crean	9/15/2011 24.0 FTP Upstream Iownstree Dam Dir:	manhole Movid no manhole Movie Townstream





25.0

STOP



25.0 RMJ No 12 / 12 O&M END OF MACP INSPECTION 25.0 AMH No OF MACP INSPECTION

No

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

14	Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/15/2017 2:28:56 PM	Weather: Surveyed by: Justin Young
14	Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:
Additi	onal info:			

Observations

Dist	tance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
	0.0	START WITH FLOW	No	/				
	0.0	AMH	No	/				START OF MACP



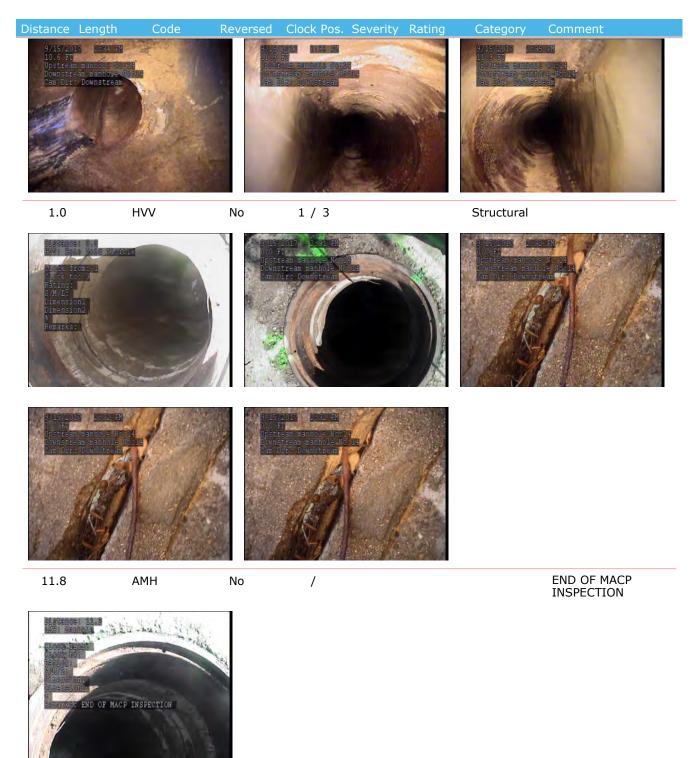
0.0 MWL No / START OF MACP INSPECTION





Distance	Lenath	Code	Reversed	Clock Pos.	Severity R	ating	Category	Comment
1.0		MGO	No	/	oovene, n	acg	- Catago. y	CMI - GRADE RINGS NOT SEALED
Clask fi Clack to Rating: S/M/E: Dimension	on1 on2	INGS NOT SEALED		/2017 2:32 9N PT ream manhole No:14 Stream manhole No: Dir: Dornstream			9/15/2017 2:32 0.0 FT Ustream manhole Downstream manho cam Dir: Downstr	Notice
U.U FT Upstream Downstre	17 2:32 PM m manhole No:14 eam manhole No: Cownstream		Down	7.2017 2332 PM FT ream manhole World stream manhole Wo Dir: Downstream			6715/2017 2:32 0.0 PT Upstream manhols Opinstream menho Cam Dir: Downstr	No:14
9,15/20) 0.0 FT Upstream Downstr Sam Dir	17 2:31 PM m manhole No:14 eam manhole No: 0 Downstream		9/15 0.0 Upst Down Cam	/2017 2:32 PM FT ream manhole No:14 stream manhole No: Dir: Downstream	19		9/15/2017 2:32 0.0 FT Upstream manhole Downstream manho Cam Dir: Downstr	PN No:14 le Nosis eam
0.0 FT Upstream Downstre	17 2:32 PM m manhole No:14 eam manhole No: : Downstream	1	2 / 19 6 - 6 7 19 - 6 7 19 - 6 7 19 - 7 7 19 - 7 7 19 - 7 7 19 - 7 8 19 - 7	Total Transition of the Control of t		Sec.	9/15/2010 Exect 10.6 Fg Upstream manhade Dewnstream manha Cam Dury Dewnstr	Marie Control of the







Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
11.9	STOP	No	/				

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

15	Pipeline segment ref:		Project Name: as CCTV Project	Start date 9/22/201 8:35:38	.7	Weather: Surveyed by: Justin Young		
15	Upstream manhole No:	Depth US:	Downstream manhole No:	Depth DS:	Total length:	E	xtra:	
Additi	ional info:							

Observations

D	istance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
	0.0	START WITH FLOW	No	/				
	0.0	AMH	No	/				START OF MACP INSPECTION



START OF MACP MWL No 0.0 **INSPECTION**



of

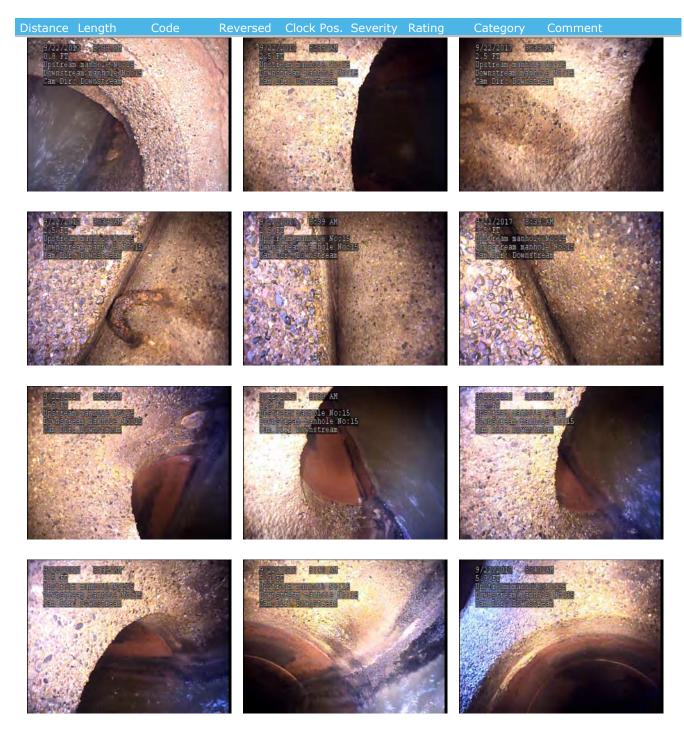


Distance	Length	Code	Revers	sed Clock Pos.	Severity	Rating	Category	Comment
0.0		MGO	No	/				FRAME HEAVILY CORRODED
4 12 1	Onl onl : FRAME HEAVII						PROBLEM BY THE PROBLEM OF THE PROBLE	

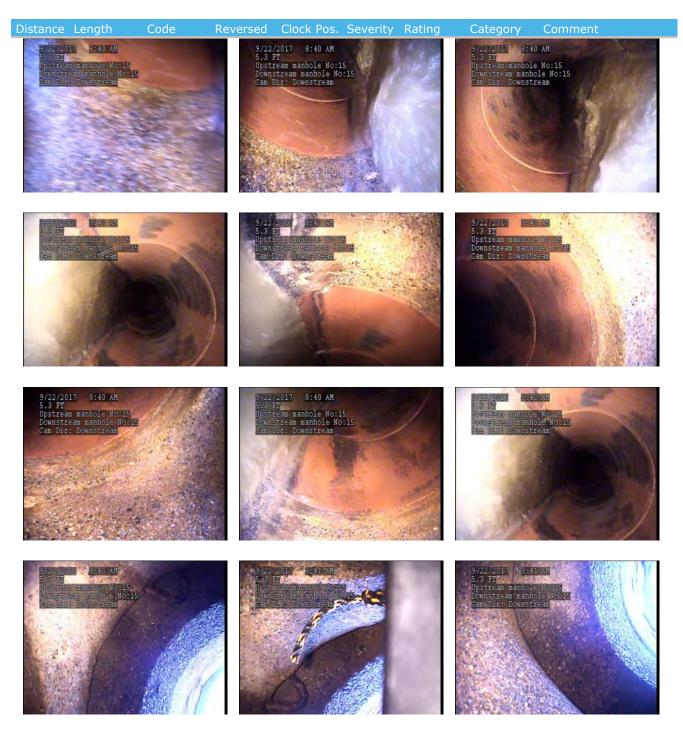


Distance	Length	Code	Reversed	Clock Pos.	Severity Rating	Category	Comment
0.8	S	SAP	No	12 / 12		Structural	CMI
messense sold sub- place of the college sold : the college sold : the college remarks:	on2		Raily Raily S.W.I Limer Limer	ines; t.9 Surface Apprenat frame in toc 12 ig: issaon1 issaon2		Cletanie, 8,8 848/Surface Ag Flock from: 12 Flock to: 12 Fating: 8/W/L: Dimension1 Dimension2 8 Remarks: CMI	gregate Projection
9/22/201 0.8 FT Upstrean Downstre Cam Dir:	17 (8:38 AN m manhole No:15 eam manhole No: : Downsbream		9/22/ 0.8 E Upstr Down Cam E	/2017 8:38 AM TT deam manhole Worl tream manhole Wo dir: Downstream		Brachech Bas D. S. FT D. S. FT D. S. FT D. S. FT D. S. C.	Mosis Die Mosis
Upstream Downstre	17 8:38 AM m manhole No:15 eam manhole No: Downstream		Downs	TOTAL SEAS AND THE CAME MAINTAINE MOUNTS TEAM MAINTAINE MOUNTS TEAM OF THE CAME AND		9/22/2009 Bos 0.8 FT Upstream manhol Downstream manh Cam Dirz Downst	No. 19 ole No.19 cean
9/22/20) 0.8 FT Upstrean 1 Downstre Cam Dir:	17 .8:38 AM m manhole No:1S eam manhole No: Downstream			SOLT GRAS AM THE STATE OF THE	5:15	S. S. 2015 B. S. 2015 Description marined Description marined Pair DACS (SOUTH)	THE TIE THE THE TIES AND THE TI





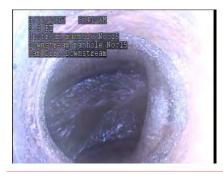












5.3	SAP	No	12 / 12	Structural	CMI - CHANNEL
5.3	AMH	No	/		END OF MACP



5.3 STOP No /

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569

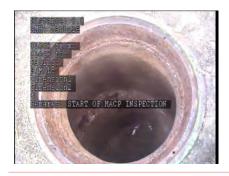


Observation Report with Still Images and Scores

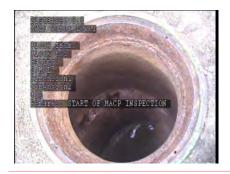
16	Pipeline segment ref:	Salinas C	Project Name: CCTV Project	Start date 9/22/201 7:50:44 /	7	Weather: Surveyed by: Justin Young	
16	Upstream manhole No:	Depth US: Downstream manhole No:		Depth DS: Total length:		Extra:	
Addit	ional info:						

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



0.0 MWL No / START OF MACP INSPECTION





Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	MGO	No	/				FRAME HEAVILY CORRODED
Ciscinst Q.B Not Signal Observa Diesk firm: Diesk for Signal Signal Chemston Chemston Chemston Chemston			nil Manhole Noti				
8.0	DAGS	No	12 / 12			O&M	GREASY FILM COVERING ENTIRE MANHOLE.
Distance: 0.8 DAGS: Deposits Attas	Heat Exerces	Distan DAGS:	ice: 0.8 Deposits Attach	60 G2885E			

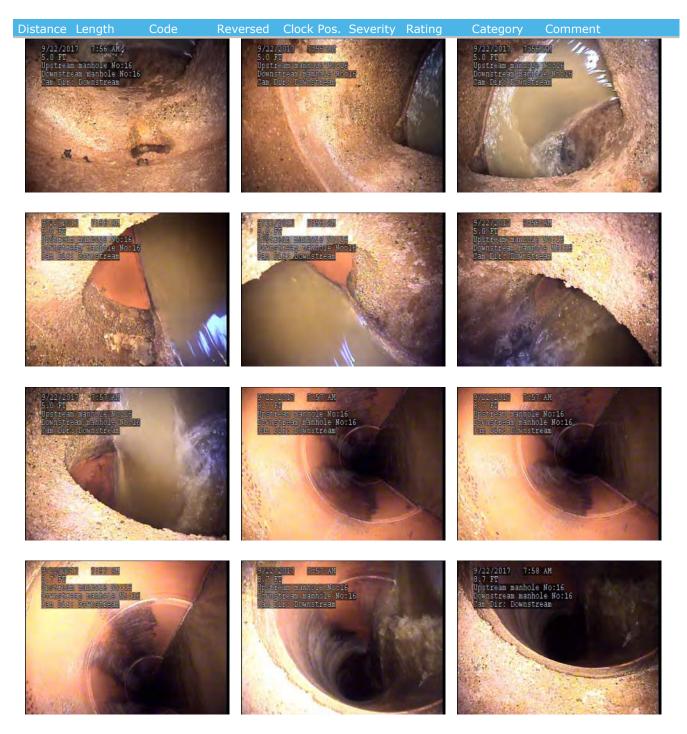






Distance	Length	Code	Reversed	Clock Pos.	Severity Rating	Category	Comment
0.8		SAV	No	12 / 12		Structural	
Distance SAV: Sur Plock to Plock to Patrick S.M.St. Dimensi S. Remarks:		e Visible	Cloc Cloc Rati S/M/ Dime Dime	ance: 0.6 Surface Aggregat & from: 12 k to: 12 ng: L: nsion1 nsion2		Clarances B. B. SAV: Surface A Clark Surface A Clark to: 10 Figure	ggregate Visible
SWEETEN	Table 20 a manitole W Bur manitole W Townstream		新田田	CHAIR SEC. AND CHAIR SEC.	10	9/22/2019 PS D.8 PT Upstream banks Downstream bank Pam Dukk Downs	SS SA
Upstream Tourstone	residue for an maintie for an maintie for constream		Trans	COLOR SESSION PT CENTINE THE TOTAL TOTAL PT CENTINE THE TOTAL PT CENTINE		9/22/2017 FT 0.8 FT Upstream mainte Downstream mai Cam Directions	ule 1960 us Noue Notus
S.O FO	G 1:95 AU maintile Nos am maintile W Hownstream		Host	ADDO TOSS AND TO THE TOSS AND TO THE TOSS AND THE T		9/22/2017 F: 5.0 FT Upstream mann Downstream man Dam Diz: Javns	ne ne ne nele usen





of



Distance Length Code Re

9/22/3017 2:58 AM
8:7 FT

Extrem manifole No:16
Comstream manifole Mos16
Tam Dir: Downstream



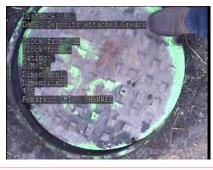




8.7 DAGS No 12 / 12

O&M CN

CMI - CHANNEL



8.7 SAV No 12 / 12

Structural

CMI - CHANNEL

8.7

STOP

No



Distance	Length Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
8.7	АМН	No	/				END OF MACP INSPECTION
Clock t Rating: S/M/L: Dimens: Dimens:	rem:						

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

Pipeline segment ref:	Project Name: Salinas CCTV Project	Start date/time: 9/21/2017 2:09:25 PM	Weather: Surveyed by: Justin Young	
Upstream manhole No:	Depth US: Downstream manhole No:	Depth DS: Total length:	Extra:	
Additional info:				

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP



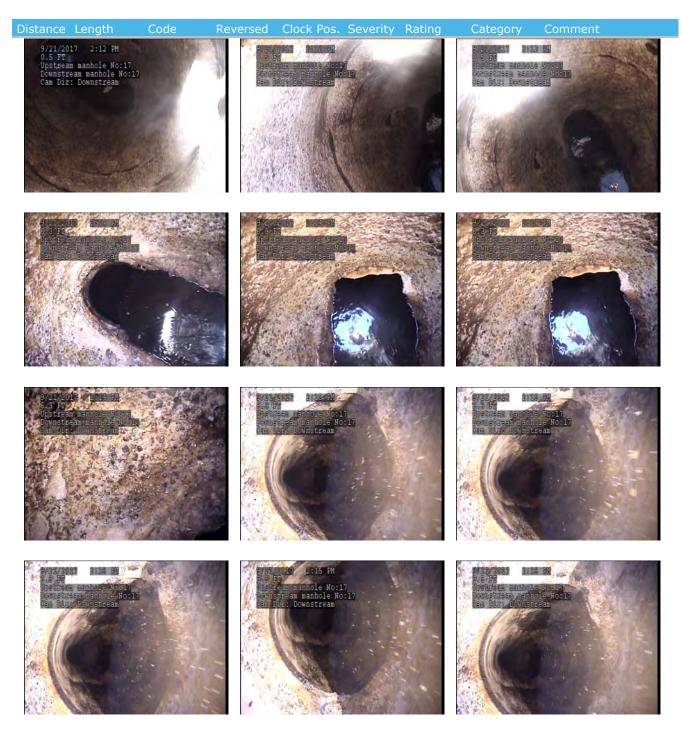
0.0 MWL No / START OF MACP INSPECTION



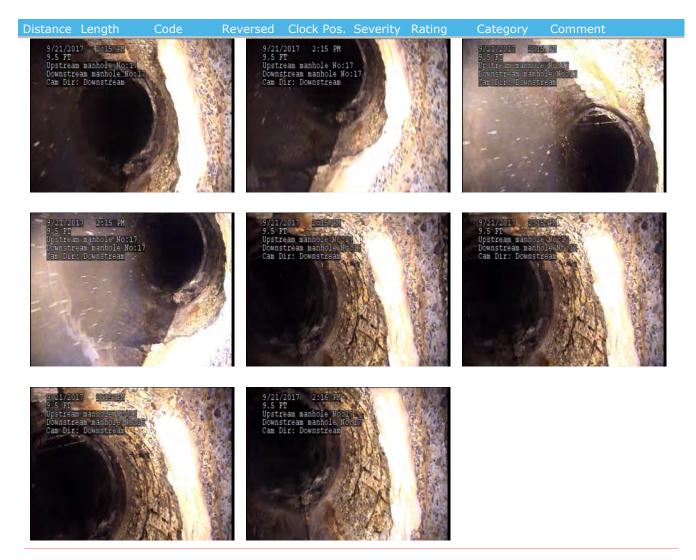


Distance Le	ength Code	Reversed	Clock Pos. Severity	Rating	Category	Comment
0.5	SAM	No	12 / 12		Structural	COI TO CHANNEL
Ustance: Sen: Surface Usego Irom Office to: String: Sill: Cimensional Limensional Hemarks: Co	S Aggregate Massing	CLEC PART CALL TEST TEST TEST TEST TEST TEST TEST TE	Surface to pre-pair No. Solution of the soluti		9/21 2017 E:10 0.5 FF Upstream manhole Downstream manh Pam Cir: Cownstr	
EVELVERION U.S. EN U.S. EN U.S. EXE	anhole No:17 manhole No:17 monstream	9/20 0.5 Upst Conn Pam	72017 2:11 PM FT ream manhole No:17 stream manhole No:17 Dir: Downstream		Process mentols of the control of th	MCNTO 1e Nosir em
9/21/2017 0.5 FT Upstream me LOWINSTRAM Cam Dire Dr	aval B anhols Mosli manhols Mosli whiteam		72017 1:22 BM EFF Mean manhole World Statem manhole World Daze Obonstream		9/21/2017 2:12 9/5 ET Upstream mainfold Cam Dir: Downstr	Principal Princi
	inhole No.17 manhole No.17 Winstram	Con Hage	Decid No. 12 196 198 Decam manhole No. 13 Socem manhole No. 13 Dure Joynstream		9/XACCOLT BILL 1.5 ER U. Serem menhole Govistreem menhole am Our: Covinst	Nooti









5



Distance Length	Code	Reversed	Clock Pos. Severity	Rating	Category	Comment
9.5	MGO	No	/			EXPOSED REBAR









9.5 AMH No / END OF MACP INSPECTION



9.5	SAM	No	12 / 12	Structural
9.5	STOP	No	/	

CUES, Inc.

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

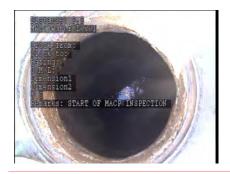
Pipeline segment ref: 20 Salin		Project Name: Salinas CCTV Project		Start date, 9/20/201 8:28:11 /	7	Weather: Surveyed by: Justin Young	
20	Upstream manhole No:	Depth US: Downstream manhole	No:	Depth DS:	Total length:	E	xtra:
Addit	ional info:						

Observations

D	istance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
	0.0	START WITH FLOW	No	/				
	0.0	AMH	No	/				START OF MACP INSPECTION



0.0 MWL No / START OF MACP INSPECTION



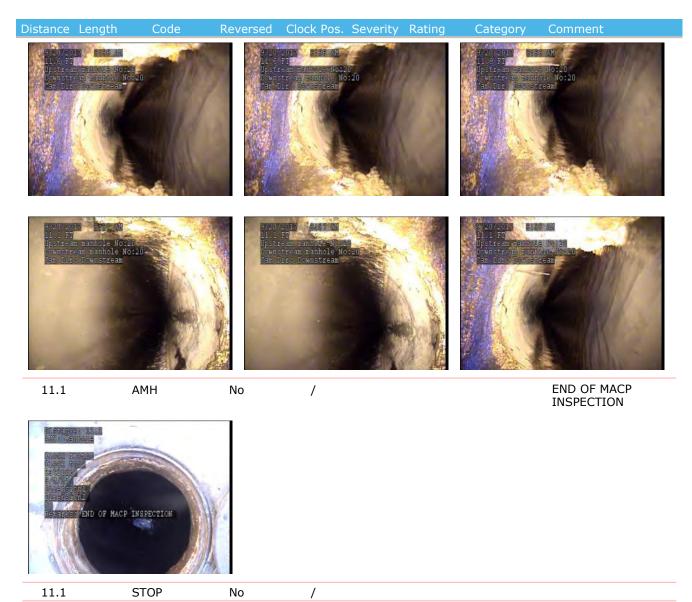


Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	В	No	2 / 3			Structural	FRAME BROKEN
Distance; 0.00 B: Bloken Diock from: 2 Clock to: 3 Esting: S'N/L: Othersion1 Dimension2 Benarks: FRAME BRO	KEN	0.0 Upst Down	/2017 8:33 AM FT ream manhole No. stream manhole No. lir: Downstream			9/20/2017 8:3 0.0 FT Upstream manhol Downstream manh Cam Dir: Downst	ole Mo:20



Fax: 407-425-1569						
Distance Leng	th Code	Reversed	Clock Pos	. Severity Rating	g Category	Comment
0.0	MGO	No	/			MANHOLE APPEARS TO HAVE AN EPOXY TYPE OF COATING.
Instance in the property of th	LE APPEARS TO HAVE AN	9/20 0.0 Upst Down Cam	/2017 8:32 AM FT ream manhole No stream manhole No Dir: Downstream	0:20	9/20/2017 9:3 0.0 FT Upstream mainful Downstream mainh Cam Dir: Downst	2 AM E No:20 Die No:20 Cean
9/20/2017 823 0.0 FT Upstream manhol Downstream manh Cam Dir: Downst	le Mo:20 tole No:20		PARTIE DE SE CENTRE DE SE		9/30/2021 023 0 0 TR 0 0 CR mm married 0 TR 0 0 CR TR	1 (80020 NG (06020
SASUASIS DES	GUE VIEWN	3(18)	ASSIS ONS AN OFFICE OF STREET		9/20/2010 8:8 2.9 FT Upstream manhol Downstream manh Cam Dics Townst	a AM : No:20 ceam
9/20/2017 B:S 2.9 FT Tystream manhol Downstream manh Cam Dic: Townst	e Wo:20 role Wo:20	Ipst Down	PI Traem medicule Versteem medicule V Streem medicule V Oli: Dornstylem		S OT bing S.S. S.FI Descream manned I'visteem mann Bam Glys I'viss	Notice





Page

CUES, Inc.

3600 Rio Vista Avenue Orlando, FL 32805

Phone: 407-849-0190 Fax: 407-425-1569



Observation Report with Still Images and Scores

26	Pipeline segment ref:	Salinas CCTV Project	Start date/t 9/22/2017 10:31:41	7	Weather: Surveyed by: Justin Young
26	Upstream manhole No:	Depth US: Downstream manhole I	No: Depth DS:	Total length:	Extra:
Addit	ional info:				

Observations

Distance Length	Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	START WITH FLOW	No	/				
0.0	AMH	No	/				START OF MACP INSPECTION



0.0 MWL No / START OF MACP INSPECTION





Distance Leng	gth Code	Reversed	Clock Pos.	Severity	Rating	Category	Comment
0.0	MGO	No	/				FRAME CORRODED / MANHOLE HAS FIBERGLASS LINER







Distance	Length	Code	Reversed	Clock Pos.	Severity Rating	Category	Comment	
0.5		DAGS	No	12 / 12		O&M	GREASY FILM	
	PROPERTY ACTOCK		Clock Clock Ratin S/M/L Dimen	nce: 0.5 Deposits Attach from: 12 to: 12 g: sioni ks: GREASY FIME	6	Distance: 0.5 DAGS: Deposits Clock from: 12 Clock to: 12 Rating: S/M/L: Dimension1 Dimension2 0 1 SHmarks: GREAS	Attached Grease	
9/21/201 0.5 FT Upstream Downstre Cam Dir:	n 1008 AN manhole No. am manhole No. Downstream		4 5 7	2017 10:35 AMS Family and the Most tream manhole No.1 tream manhole Most ic Downstream	Br 9-2 11 11	S.C. 1117 12 4.5 FIT Upstream marke Downstream mark Cam Dir: Downs	SS ARI * B Noza Ole Weze Teal	
Demoisons:	BUSS ALL ENHAUS VICE EN ASYROLS VI DO VISIASEN							



Distance	Length	Code	Reversed	Clock Pos. S	Severity Rating	Category	Comment
13.0		SAM	No	12 / 12	, 5	Structural	CHANNEL
Clock fi Clock to Rating: S/M/L: Dimension	o: 12	a Missing	Clock Clock Ratin S/M/I Dimer Dimer	nnce: 13.0 Surface Aggregate : from: 12 tb: 12 gg: ision1 ision2 ks: CHANNEE	Present of the second of the s		
9/02/201 10:0 TH Upstream Consider Date Gust	19 BOK 40 AM in menticule Migrac em menticule Migra Dovins Maream		Lot on the state of the state o	2019 10:40 AN- ean mannole Ne:26 tream manifole Ne:20 ir Lowesteean		9/22/2017 10s-	O AN PART OF PART OF GAN
9/22/201 13.0 FT Upstream Downstrr Cam Dir	17 10:00 eK		Downs	2017 10:31 AN FT eam manhole No.UE tream manhole No.UE (I.C. Lonstream		9/30/0000 1000 19/0 PU Upstream mathole Doviscream mathole Cam Circ Dovisco	
9/22/20 13.0 ST Unstream Committer Cam Jic	n manifold at the second and the second at t		g / 22 13, 10 10 str 1 str 1 str 2 str 2 str 3 s	DOT DORD EN POUR DE LA COMPANION DE LA COMPANI		SACCADING 1032	



13.0 DAGS No 12 / 12 O&M END OF MACP INSPECTION AMH 13.0 No rks: END OF MACP INSPECTIO

No

STOP

13.0

Sanitary Sewer Manhole Photos

Date 10/26/2017

Sheet No. 1

Jain	itary Sewer Mannoie Photos	Date 10/26/2017
Ref De	escription	Remark
1 SSMH - 1		No work need at pavement surface
2 SSMH - 2		No work need at ground surface
3 SSMH - 3		No work need at pavement surface
4 SSMH – 6		Recommend PCC collar and bring MH lid 6" up & install marker
5 SSMH – 8		Redo PCC collar around the rim and install marker
6 SSMH - 9		Recommend PCC collar and bring MH lid 6" up & install marker
		END
09/14/2017 08:31 RM	09/14/2017 09:47 RM	10/20/2017 DI:17 PM
Photo SSMH – 1	Photo SSMH – 2	Photo SSMH – 3
09/14/2017 (284S PM	09/14/2017 11:53 IN	09/15/2017 (06:39) RM
Photo SSMH – 6	Photo SSMH – 8	Photo SSMH – 9

Sanitary Sewer Manhole Photos

Date 10/26/2017 Description Remark Ref 1 SSMH - 10 Replace exist cone with eccentric cone, MH will be outside the fence 2 SSMH - 11 Recommend PCC collar and bring MH lid 6" up & install marker 3 SSMH - 12 Recommend PCC collar and bring MH lid 6" up & install marker 4 SSMH - 13 No work need at top surface 5 SSMH - 14 Recommend PCC collar and install marker Recommend PCC collar and bring MH lid 6" up slope away MH lid 6 SSMH - 15 to prevent I/I & install marker 09/15/2017 09:01 AM 09/15/2017 06:39 RM 09/15/2017 09:00 RM Photo SSMH - 11 Photo SSMH - 12 Photo SSMH - 10 10/20/2011 01:29 PM 09/15/2017 12:21 PM 09/15/2017 DI:26 PM Photo SSMH - 14 Photo SSMH - 13 Photo SSMH - 15

Sanitary Sewer Manhole Photos Date 10/26/2017

	ililiary Sewel Mailliole I lioto	Date 10/26/2017
Ref	Description	Remark
1 SSMH – 16		Recommend PCC collar and bring MH lid 6" up slope away MH lid to prevent I/I & install marker
2 SSMH – 17		Replace exist lid with new MH lid have an "S" stamp
3 SSMH – 18		No work need at pavement surface
4 SSMH – 19		No work need at pavement surface
5 SSMH – 20		No work need at pavement surface
6 SSMH - 21		No work need at pavement surface
	SCA-TICS GUID GENAL PARA INTERESTED Pa	
COZOVEOTI OLIEB PI	10/20/2017 DI:45 PM	MA SER DIOS/OS/OI
Photo SSMH – 16	Photo SSMH – 17	Photo SSMH – 18
U0/20/2017 01:52 PI	1 20/20/2017 DI:53 PM	10720/2011 DI:54 - PM
Photo SSMH – 19	Photo SSMH – 20	Photo SSMH – 21
1 110 to 3314111 - 13	1 11010 3314111 - 20	1 11010 3314111 - 21

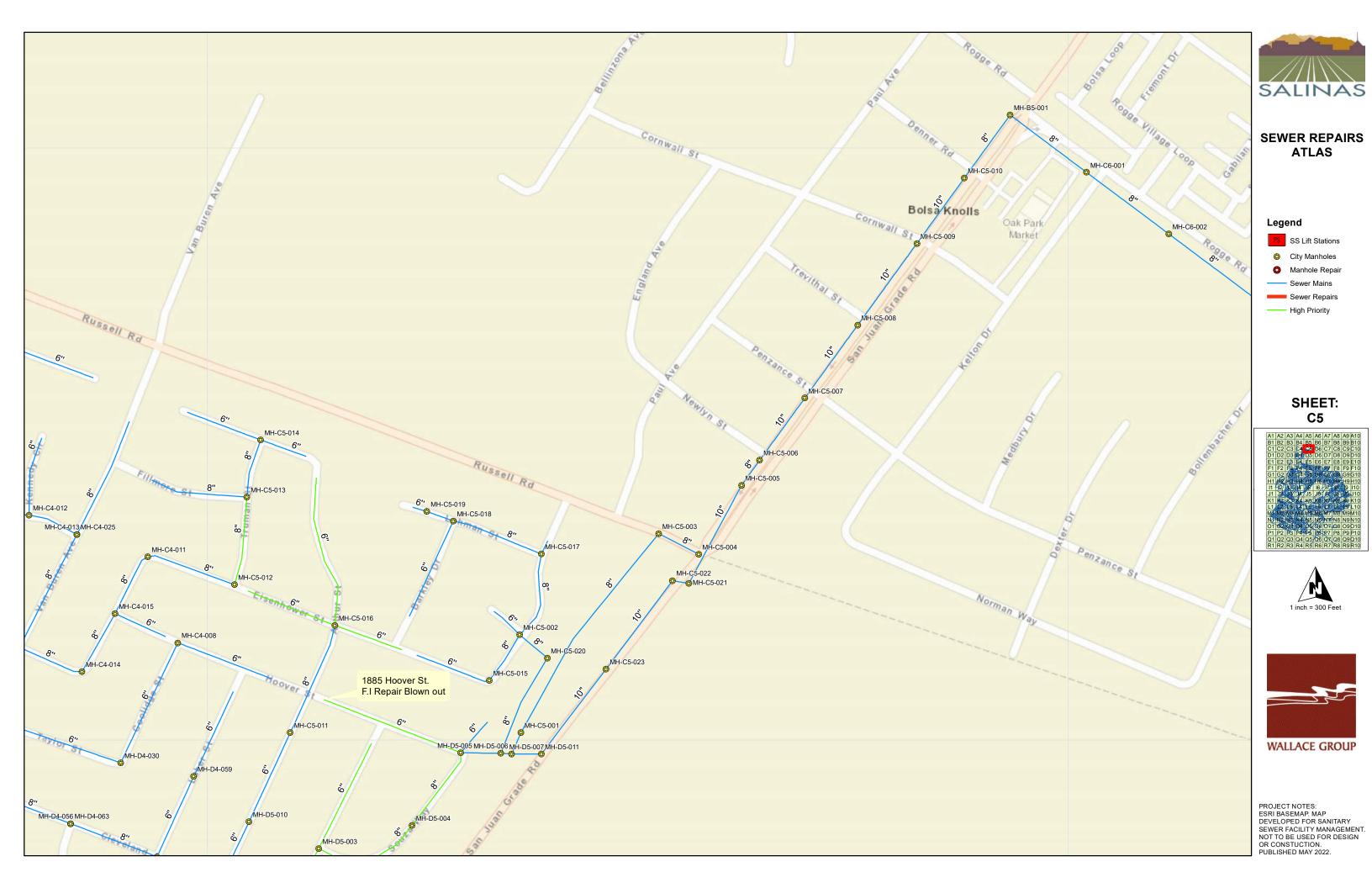
Sanitary Sewer Manhole Photos

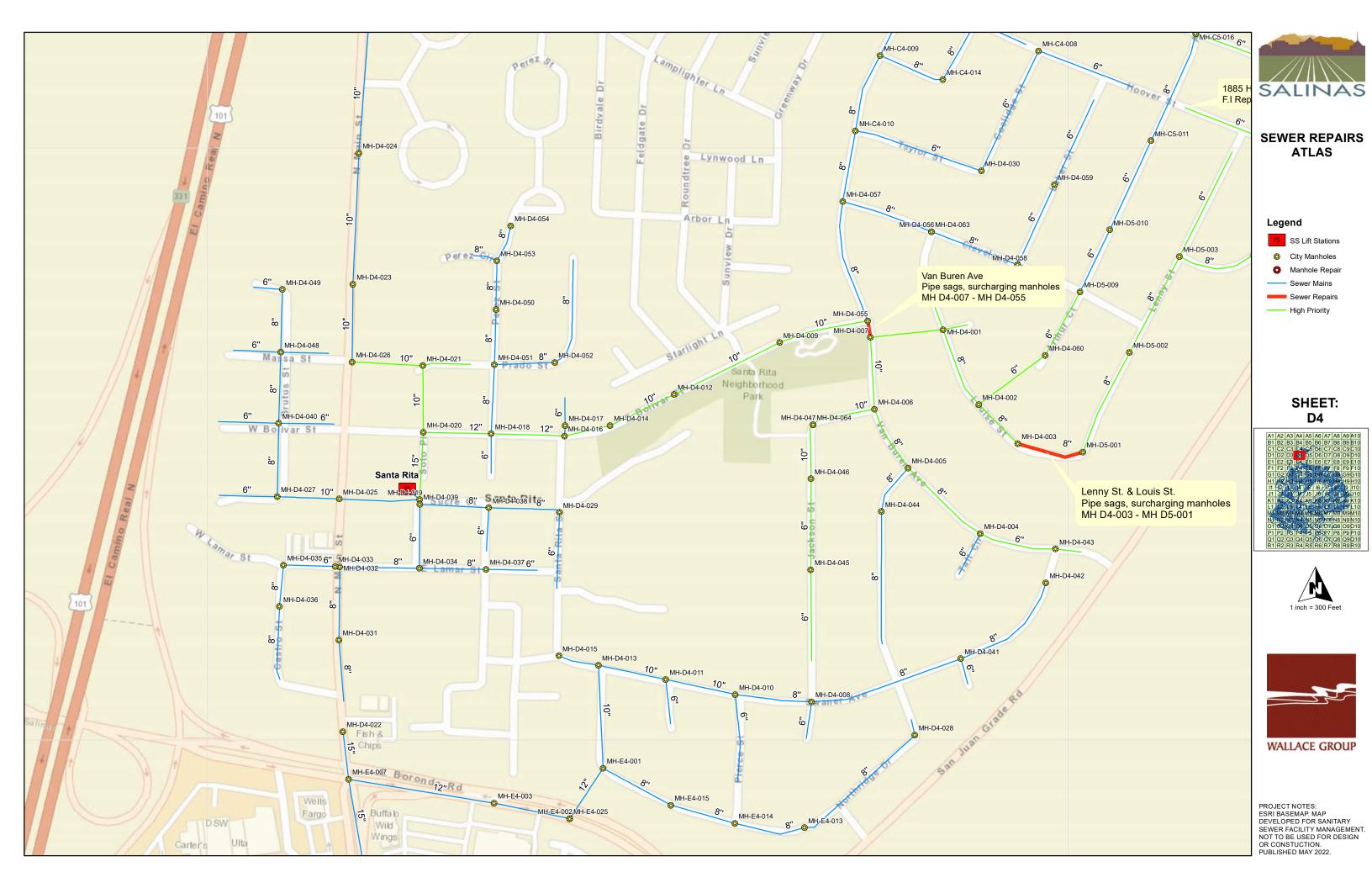
Date 10/26/2017

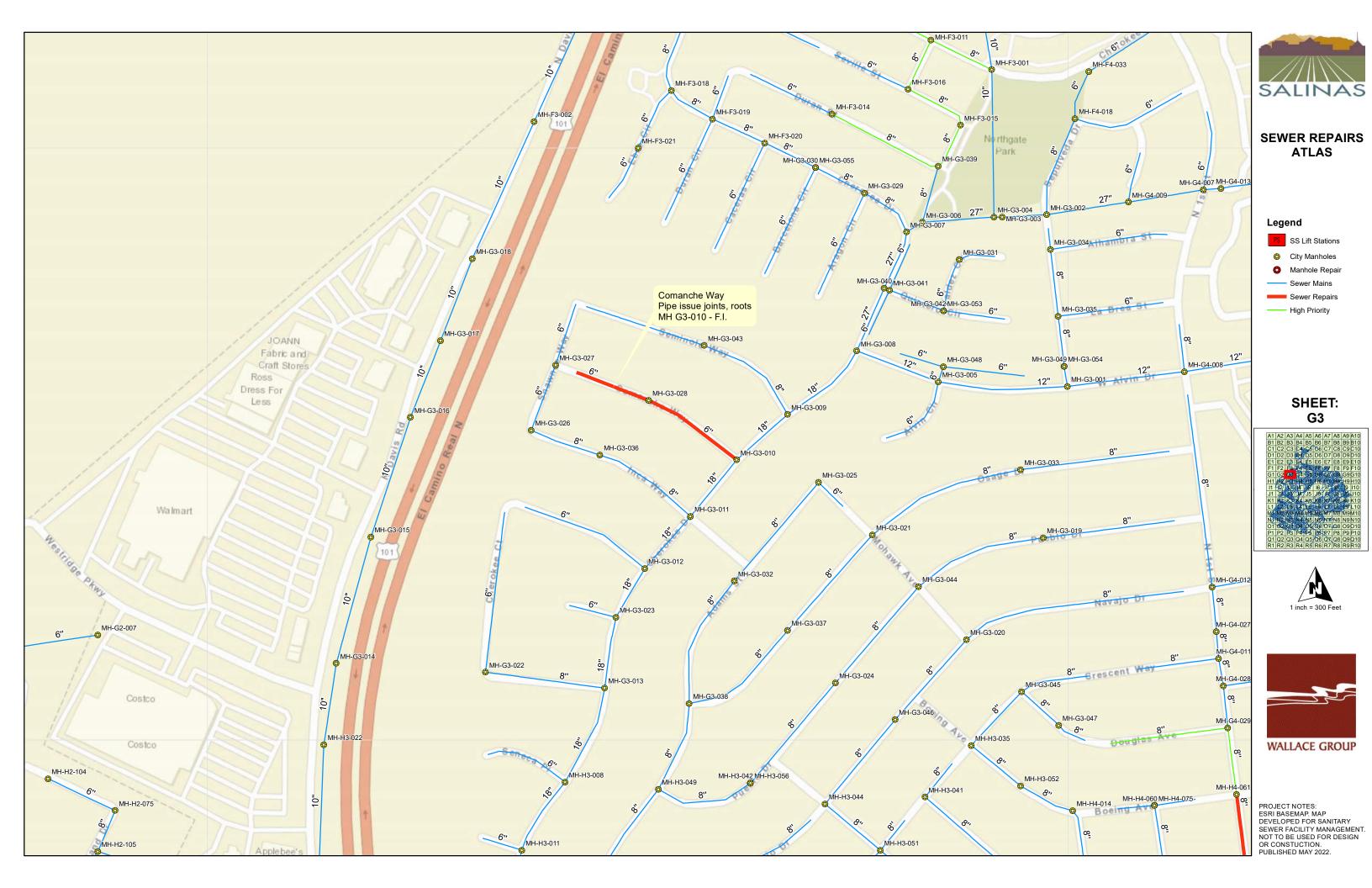
SSMII - 22	Jail	italy Sewel Mailliole I liotos	Date 10/26/2017
2 SSMH - 23 3 SSMH - 24 4 SSMH - 25 5 SSMH - 26 6 Provide PCC color slope away from MH lid prevent I/I 6 Photo SSMH - 22 Photo SSMH - 22 Photo SSMH - 23 Photo SSMH - 24	Ref De	escription	Remark
3 SSMH - 24 4 SSMH - 25 5 SSMH - 26 Provide PCC color slope away from MH lid prevent I/I 6 10/20/2011 01:55 PH	1 SSMH – 22		No work need at pavement surface, New Manhole
4 SSMH - 25 5 SSMH - 26 6 6 7 Provide PCC color slope away from MH lid prevent I/I 10/20/2811 01:55 PM	2 SSMH – 23		No work need at pavement surface
5 SSMH - 26 Provide PCC color slope away from MH lid prevent I/I 10/20/2011 01/55 PH 10/20/2011 01/55 PH 10/20/2011 01/52 PH 10/20/201	3 SSMH – 24		No work need at pavement surface
Photo SSMH – 22 Photo SSMH – 23 Photo SSMH – 24 Dazanzania (1) 470 470 10 10 10 10 10 10 10 10 10 10 10 10 10	4 SSMH – 25		No work need at pavement surface
Photo SSMH – 22 Photo SSMH – 23 Photo SSMH – 24 Photo SSMH – 24	5 SSMH - 26		Provide PCC color slope away from MH lid prevent I/I
Photo SSMH – 23 Photo SSMH – 24	6		
Photo SSMH – 23 Photo SSMH – 24			
10/20/2011 DISTER PM	10/20/2011 01:55 PM	10/20/2017 D1:09 PM	10/20/2011 DI:12 PM
10/20/2011 DISTER PM	Photo SSMH – 22	Photo SSMH – 23	Photo SSMH – 24
		MAPE PAIR CIT OF SALINS CONTRIBORATION DEPT. CLESIS SUBSET TO THROUGH NO POES ALLOWED	
Photo SSMH – 25 Photo SSMH – 26	2000年	THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL	
	Photo SSMH – 25	Photo SSMH – 26	

APPENDIX C: City Sewer Repair Atlas Map

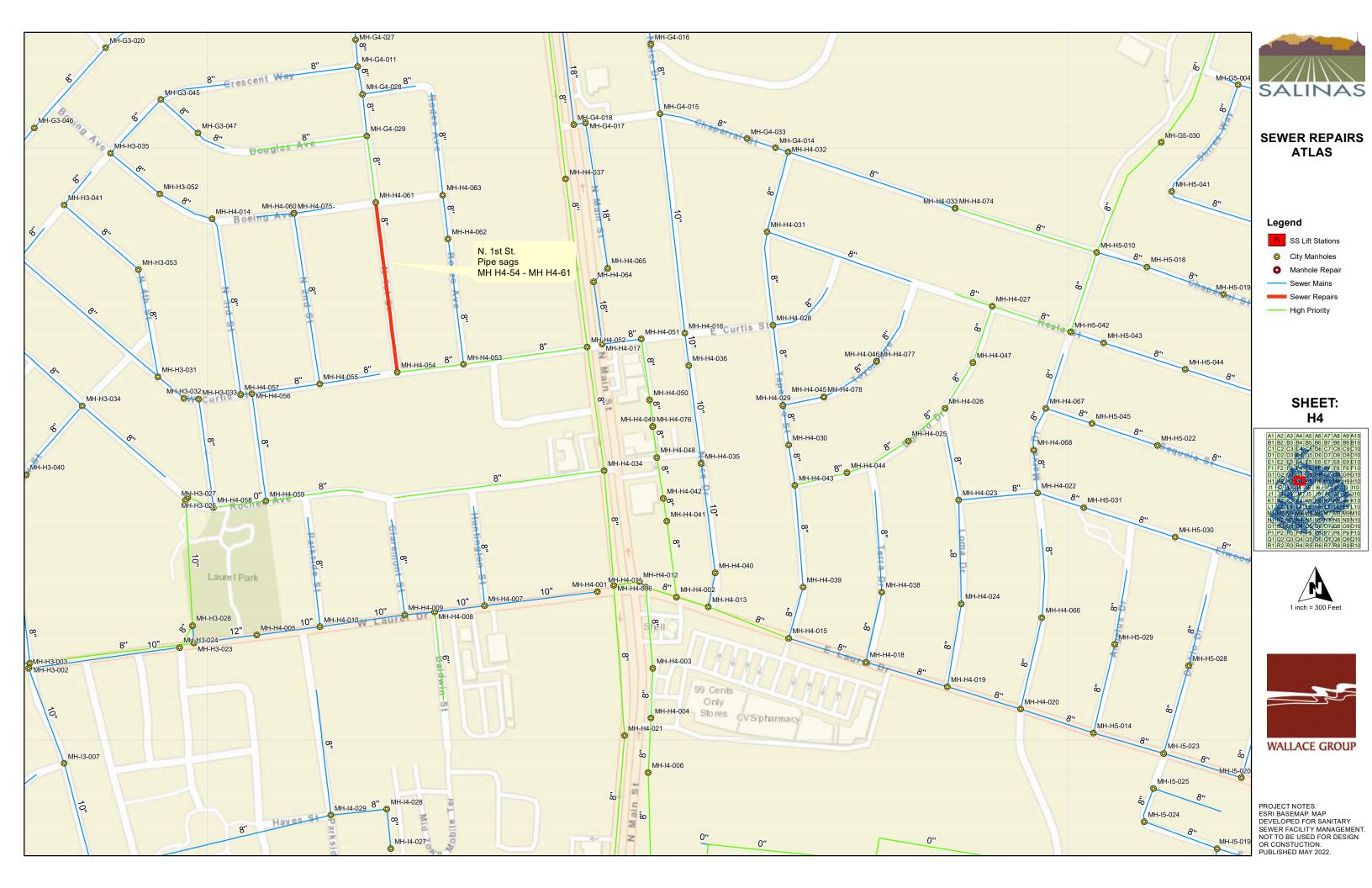




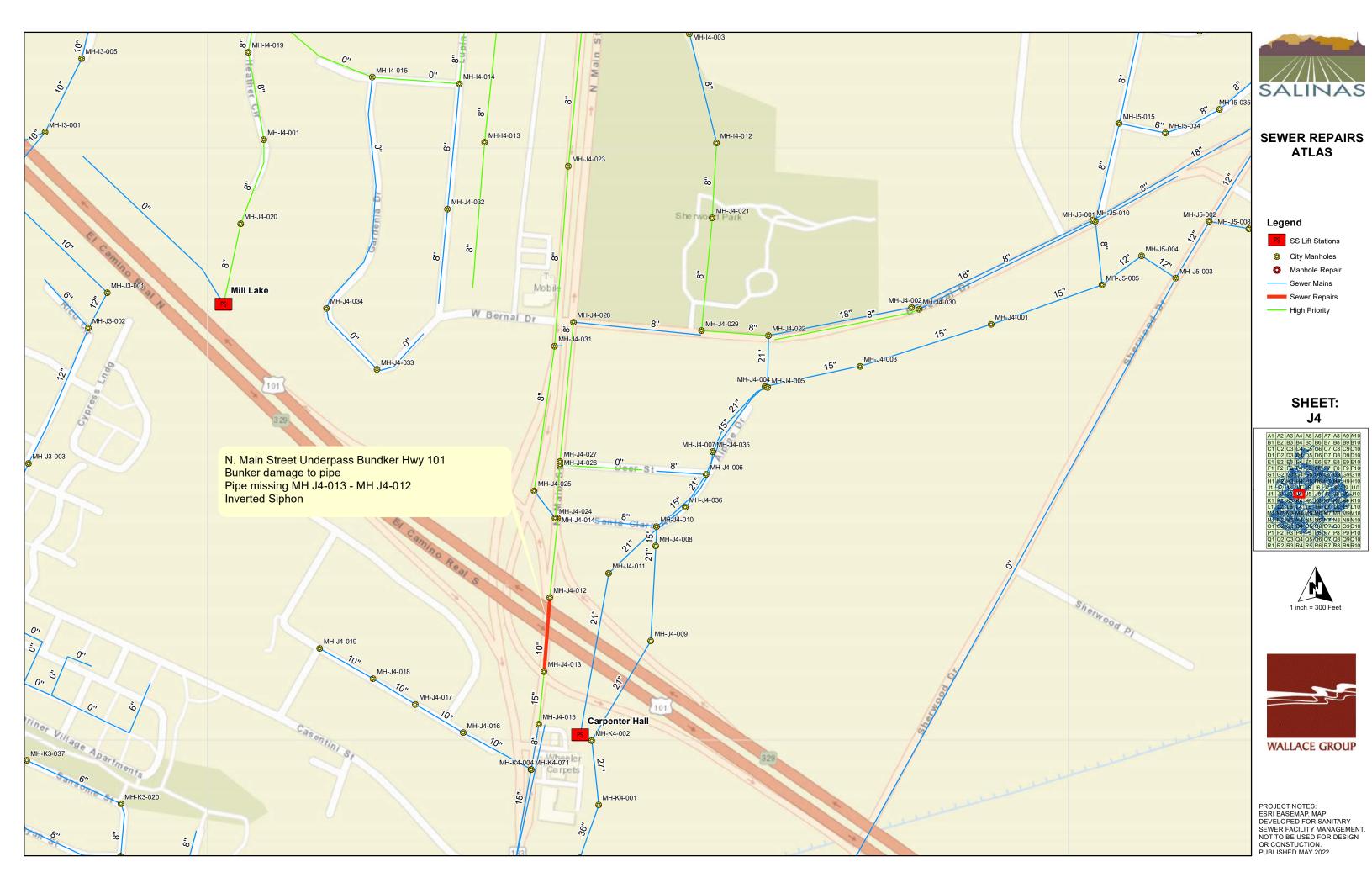


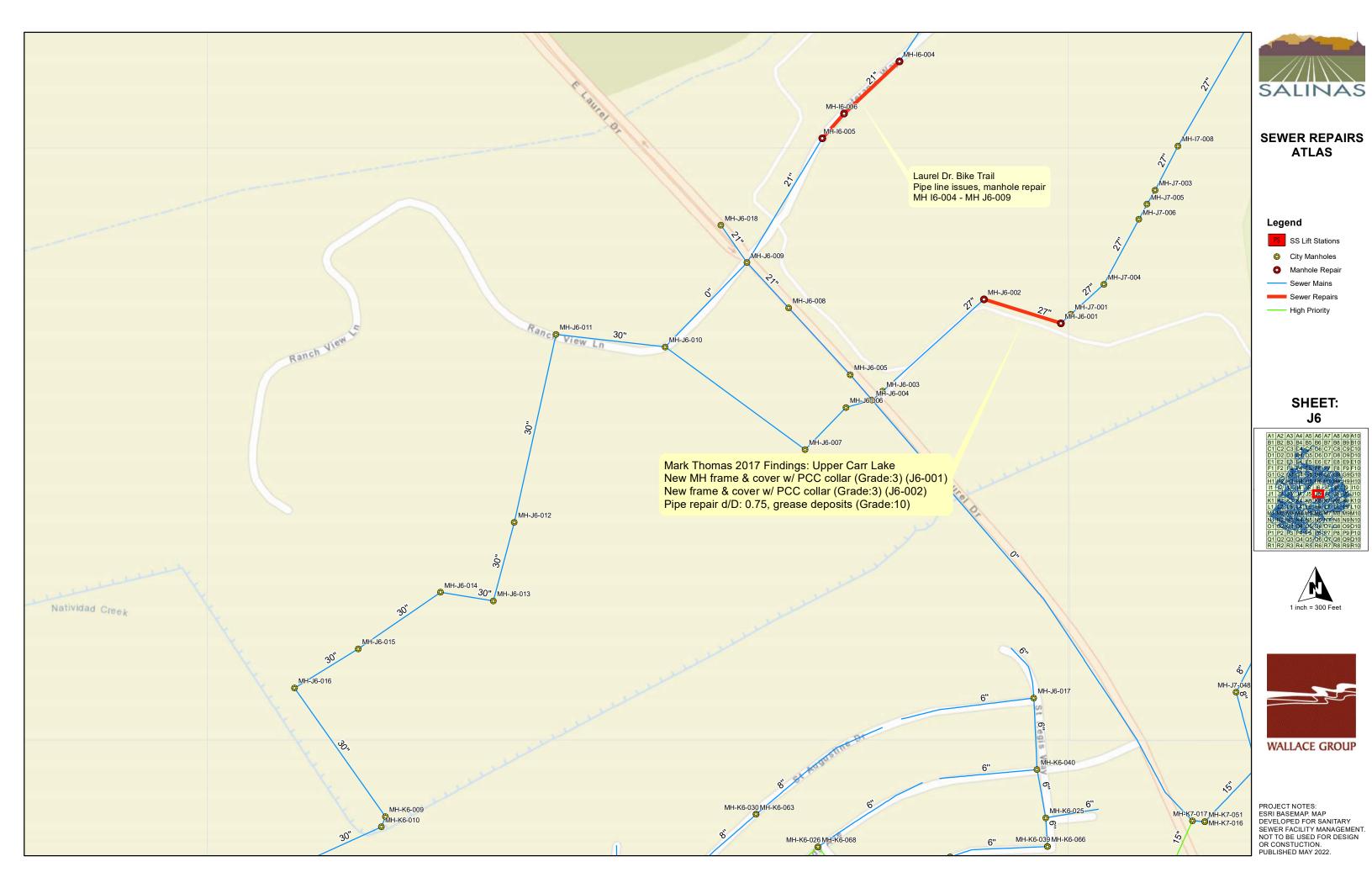


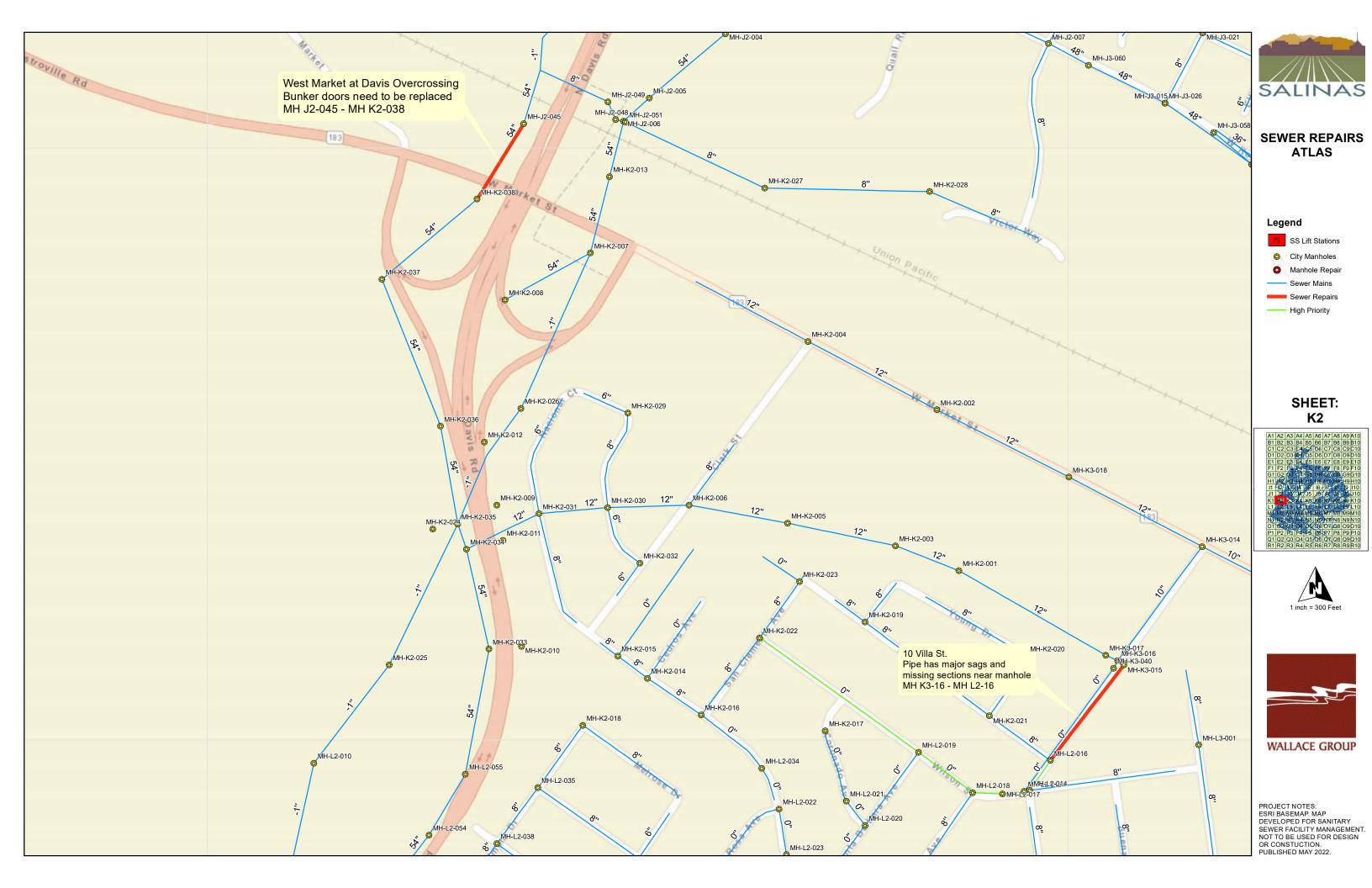


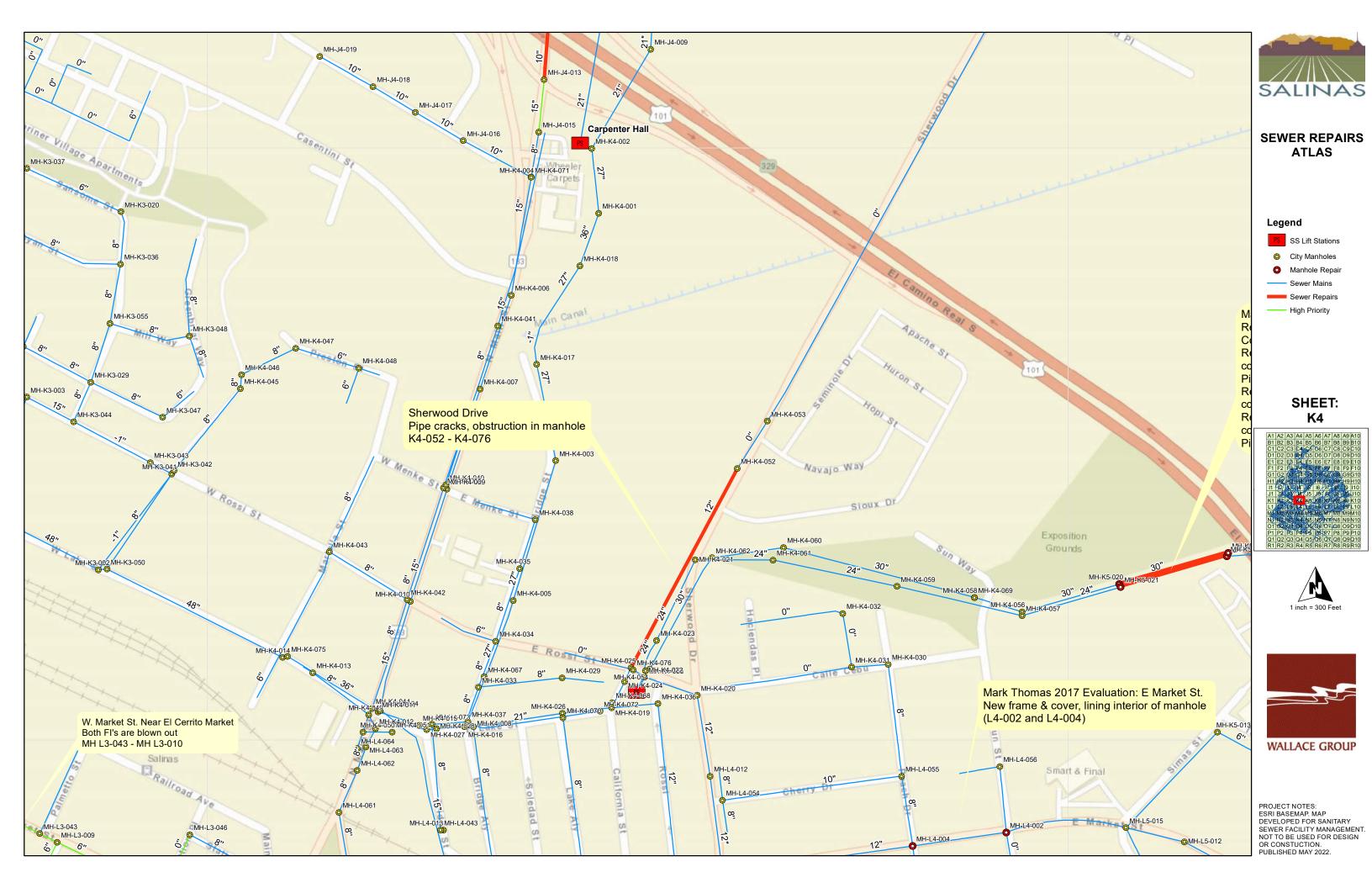


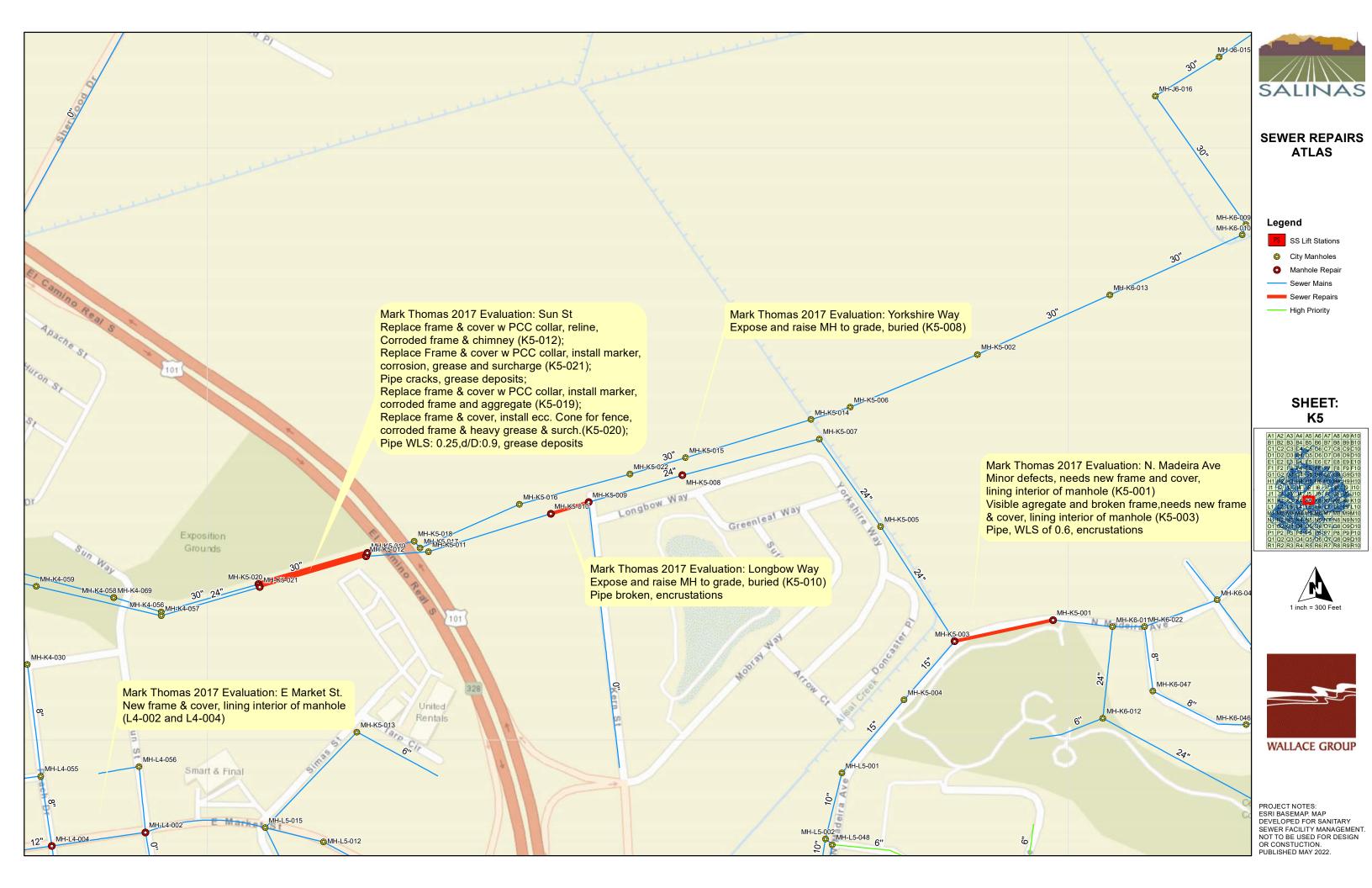




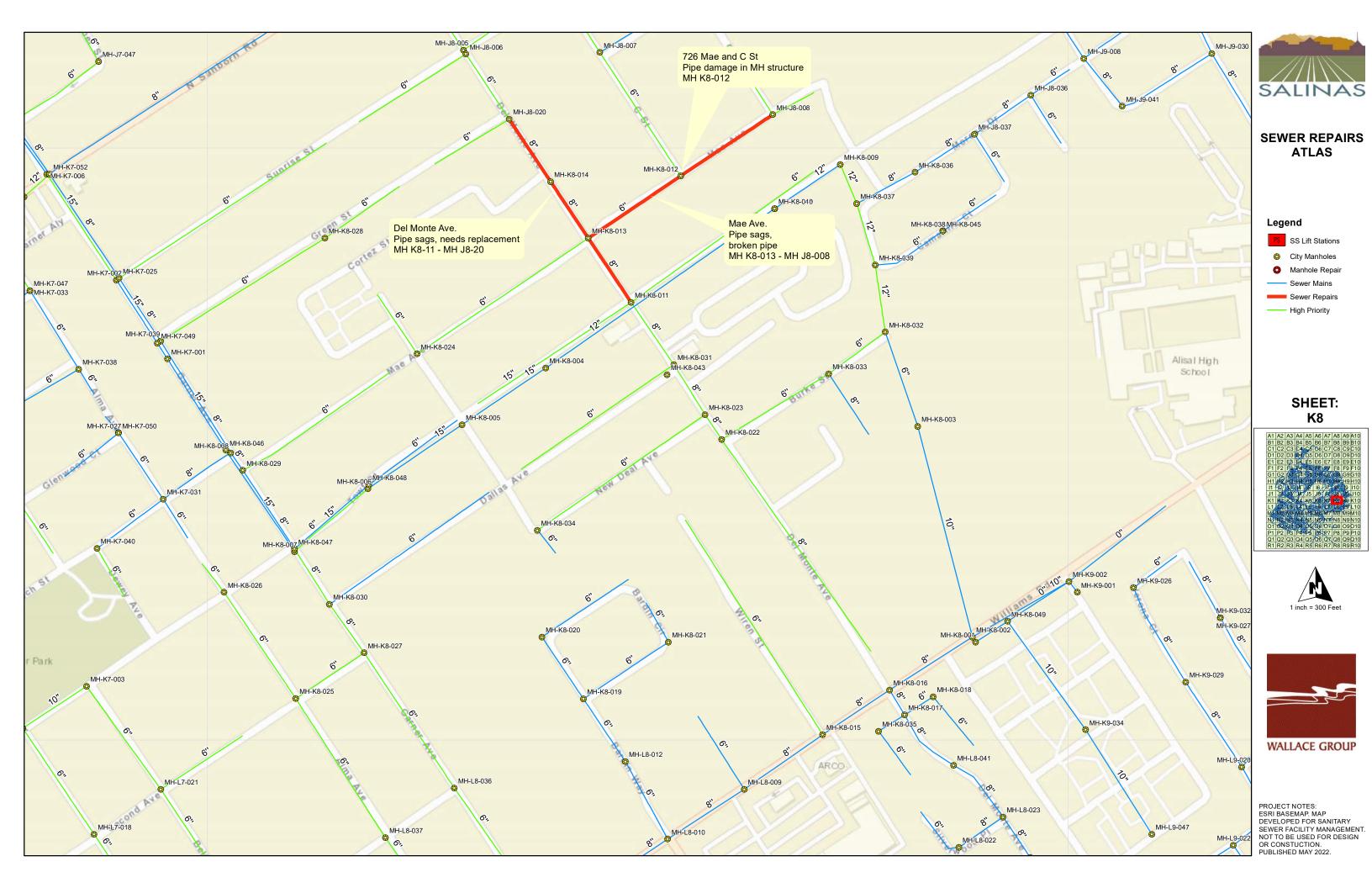


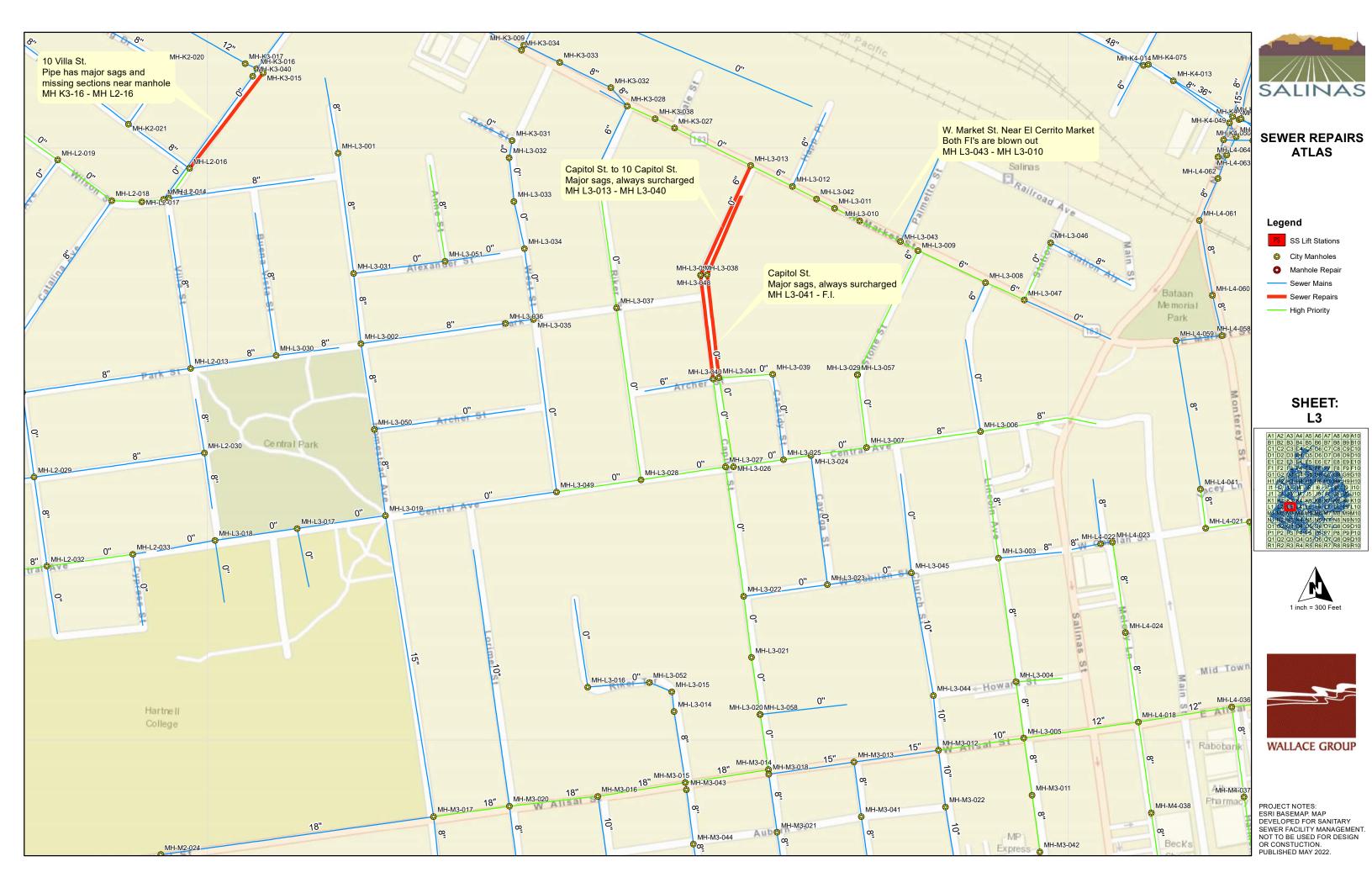






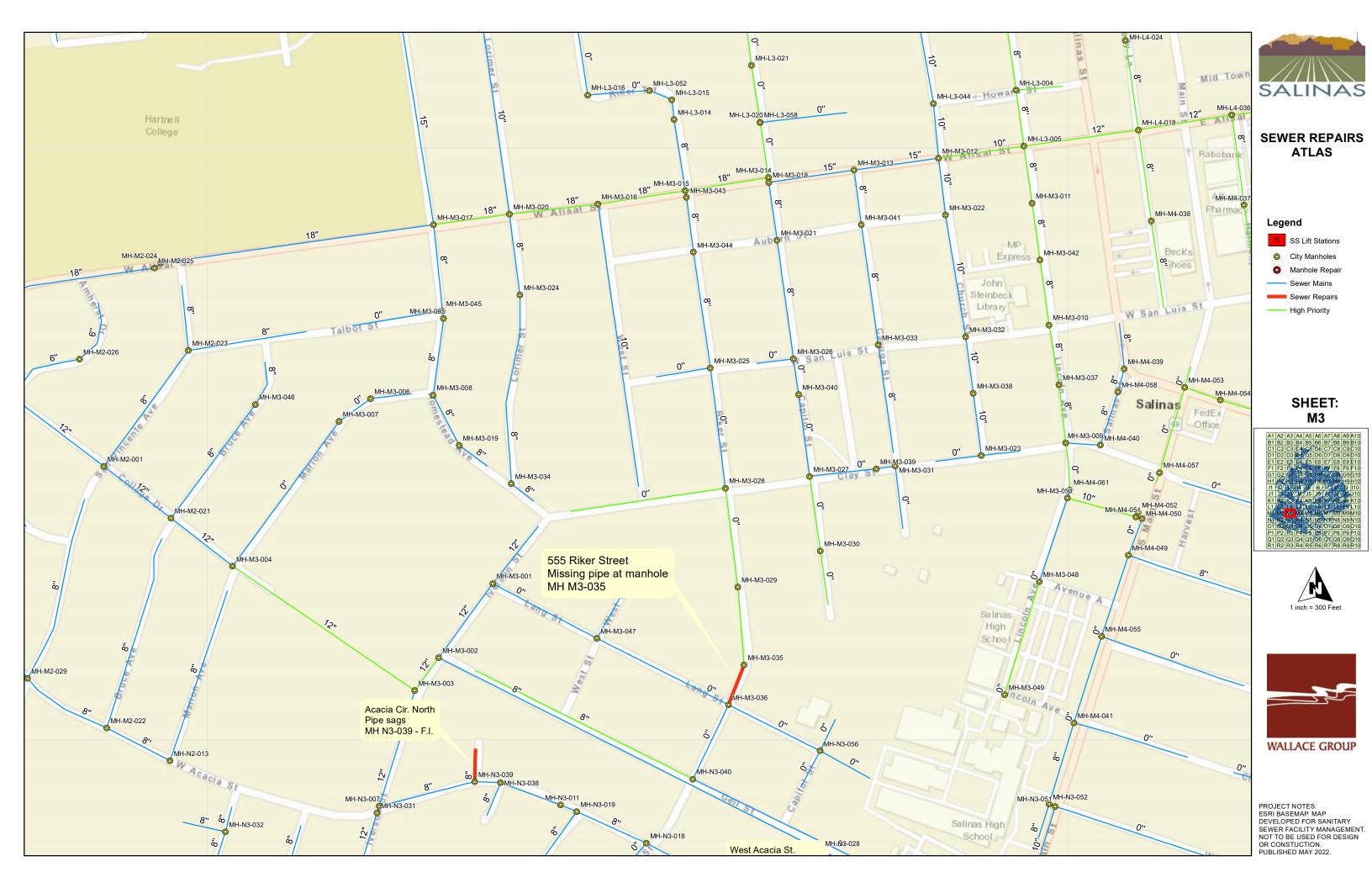




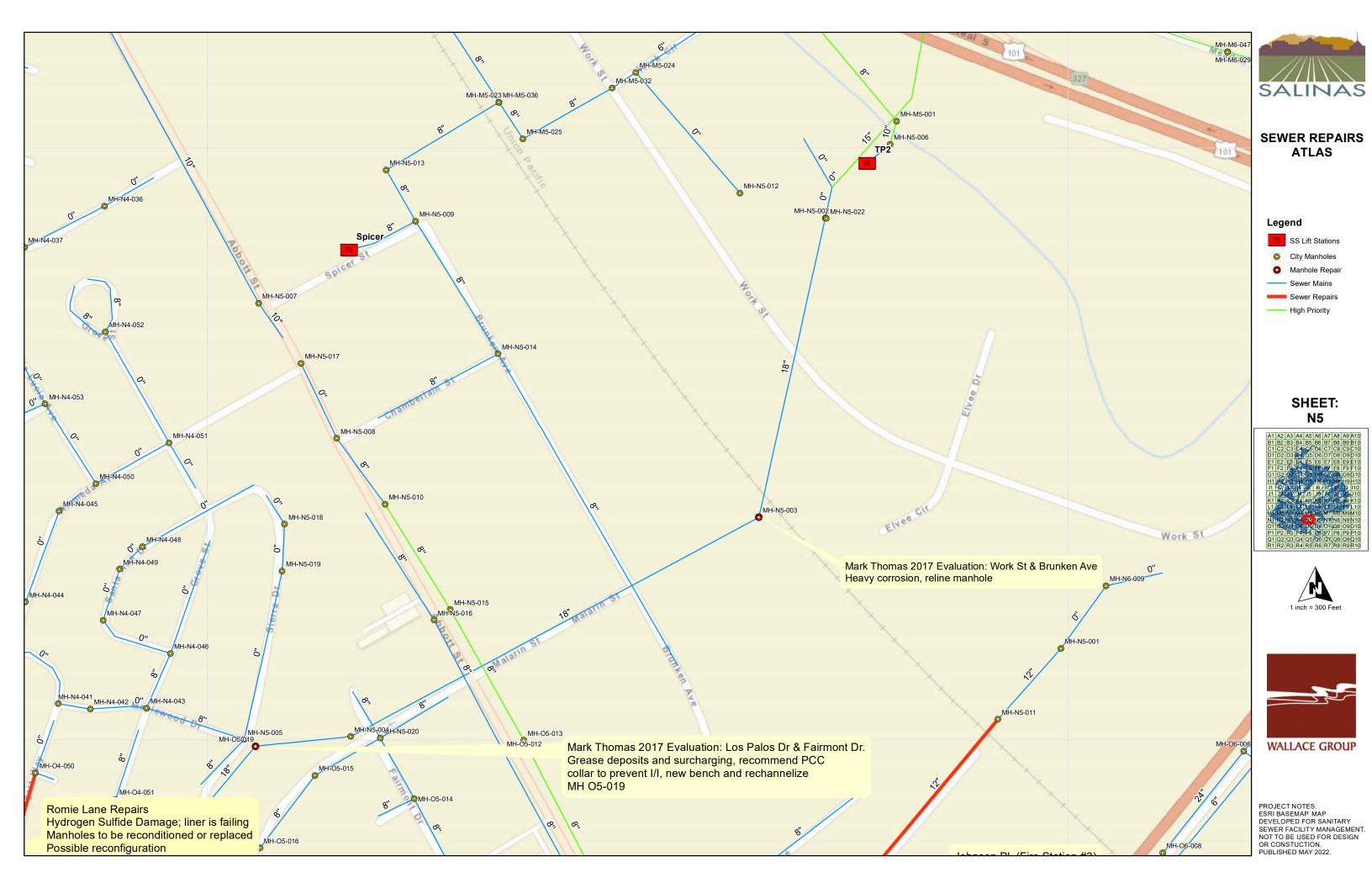


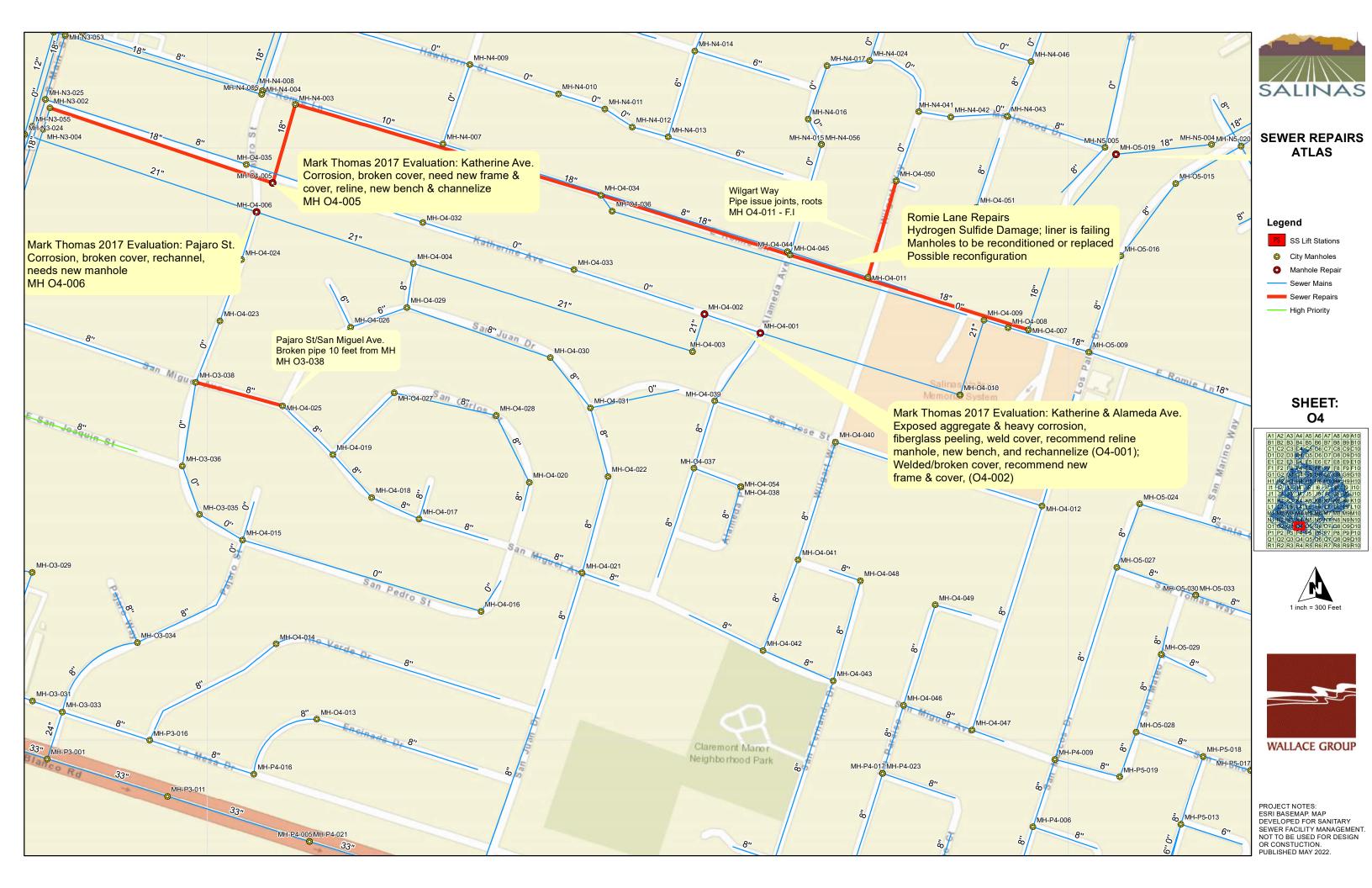


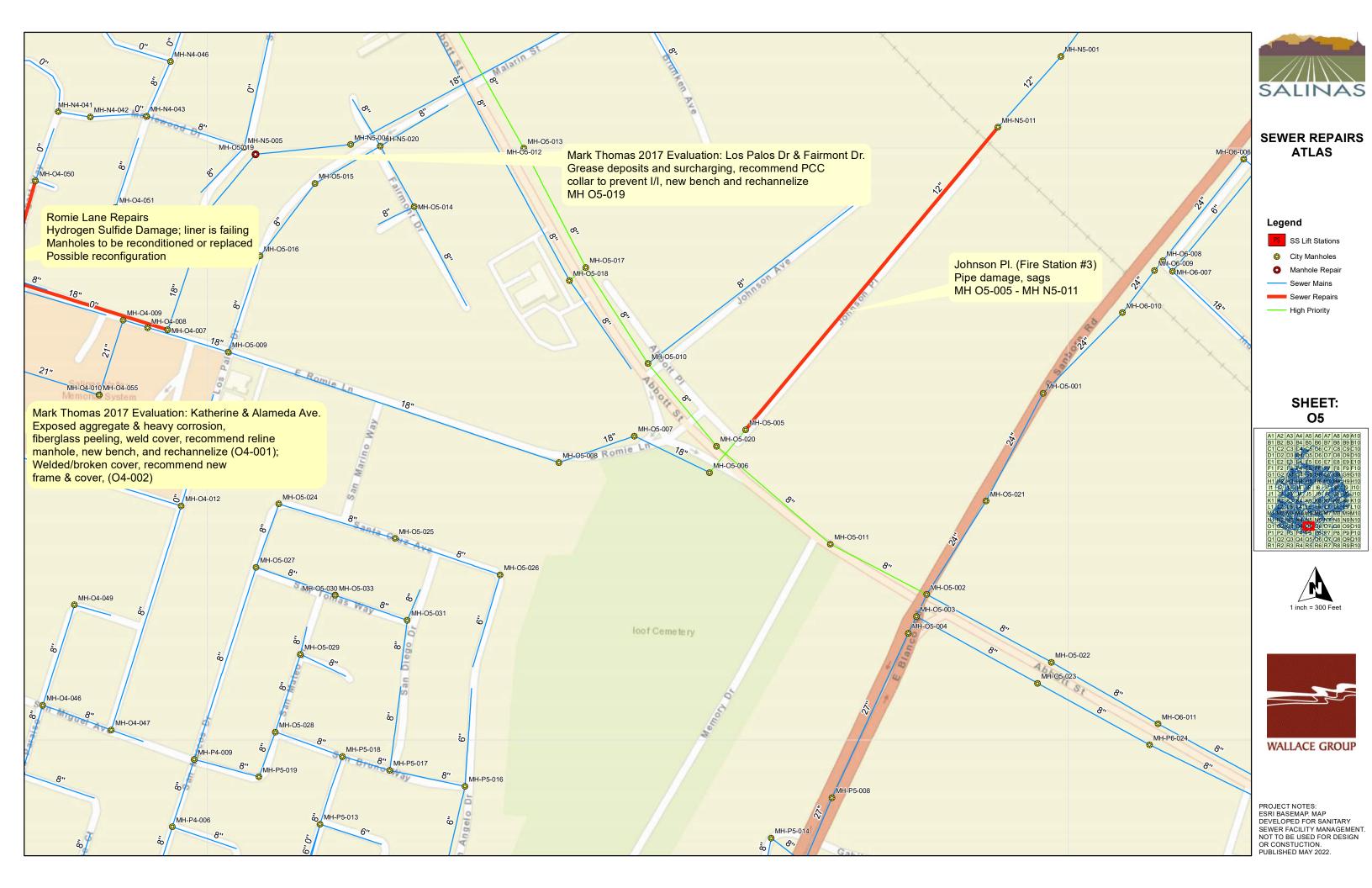








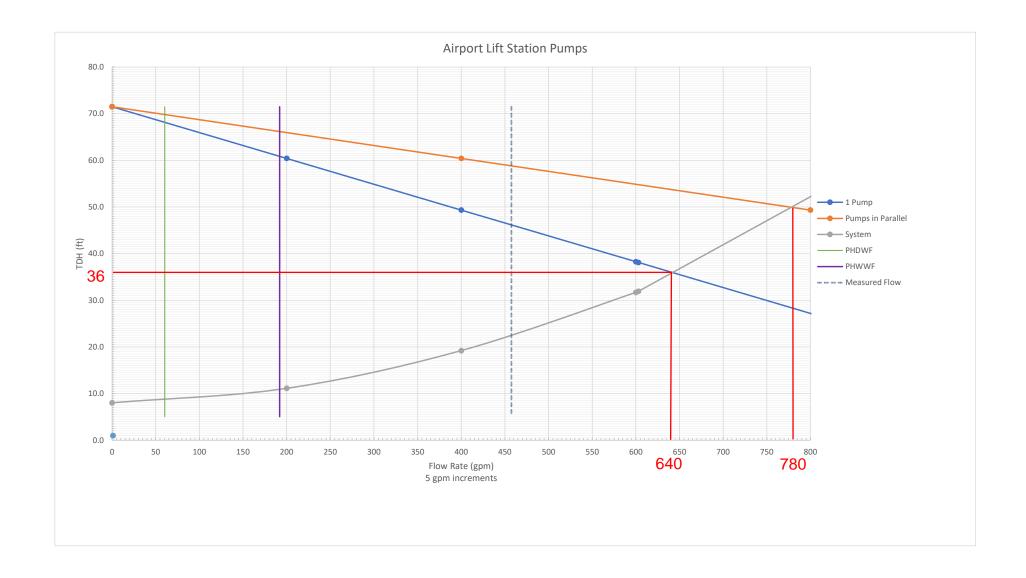




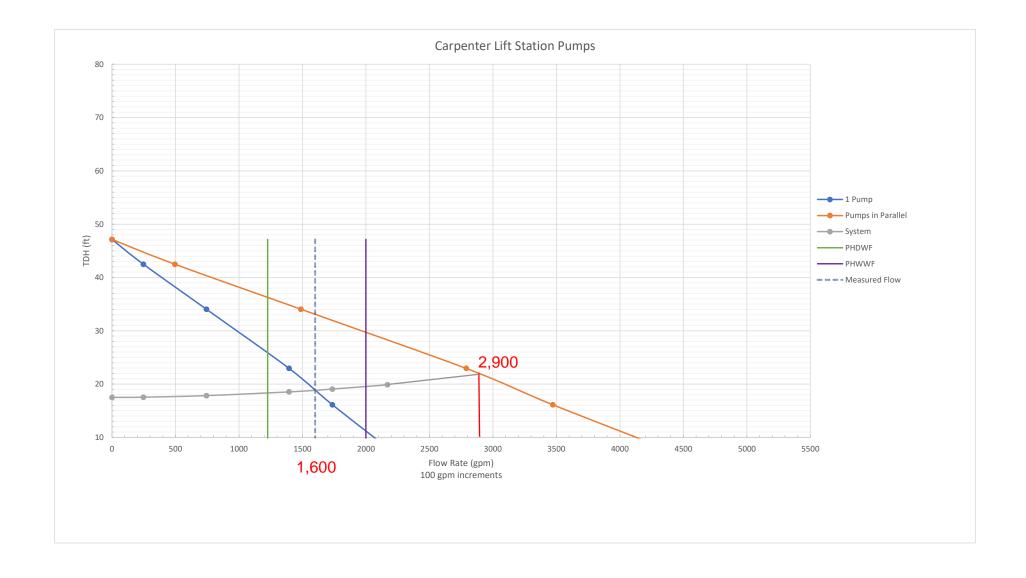
APPENDIX D: Lift Station Pump Curves



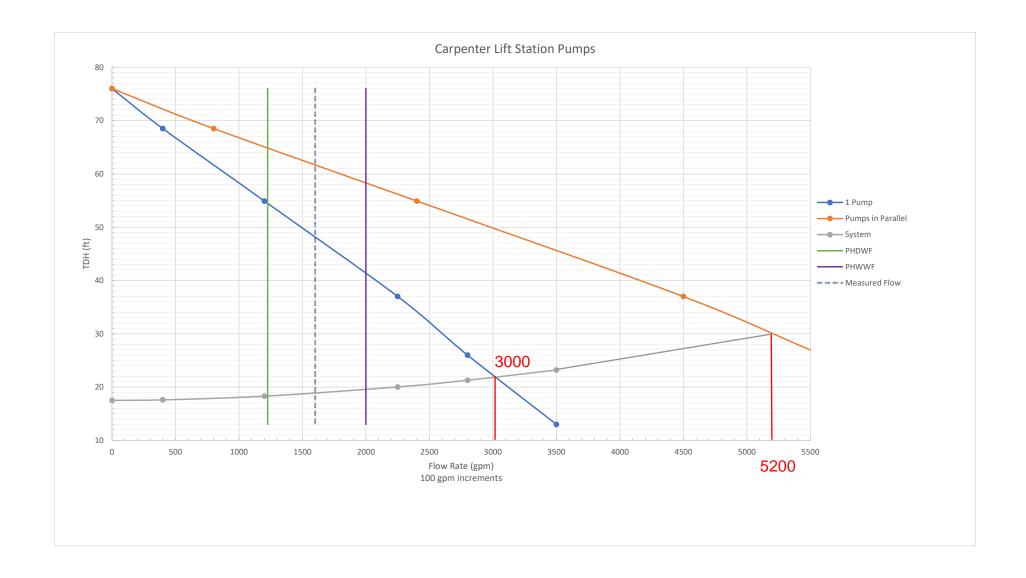
Airport LS Salinas Sewer Master Plan



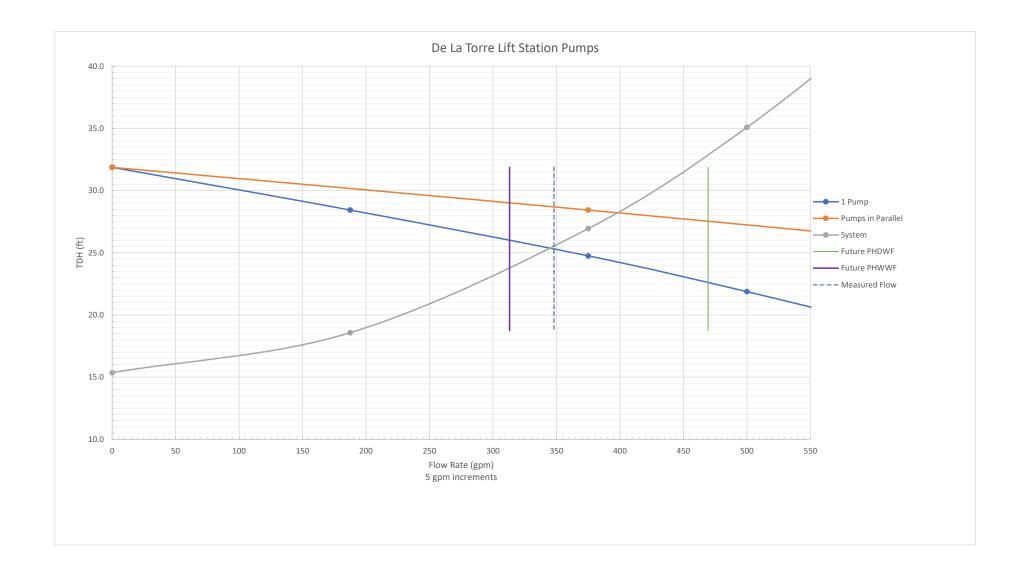
Carpenter Hall LS derated for VFD Salinas Sewer Master Plan



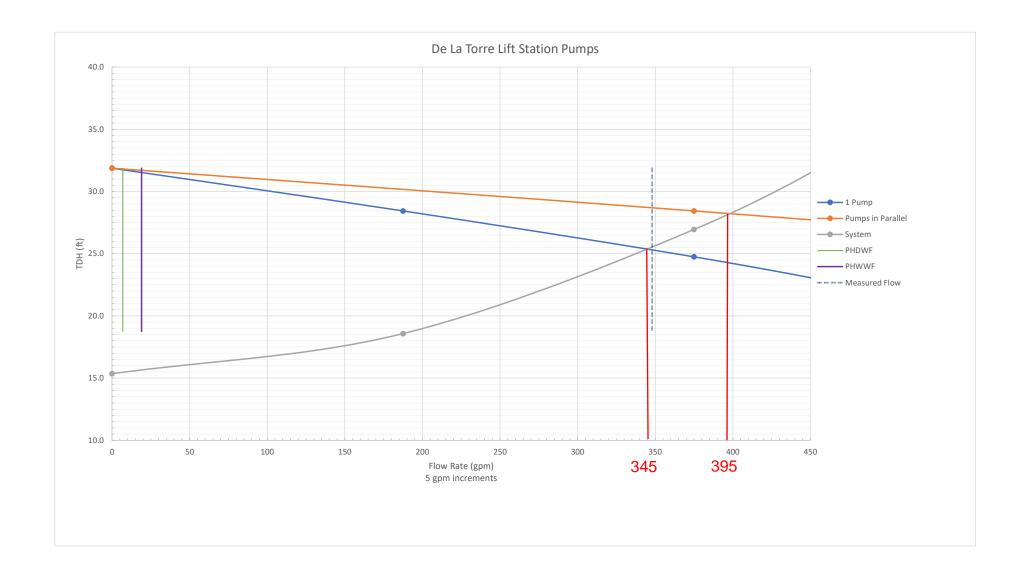
Carpenter Hall LS without VFD Salinas Sewer Master Plan



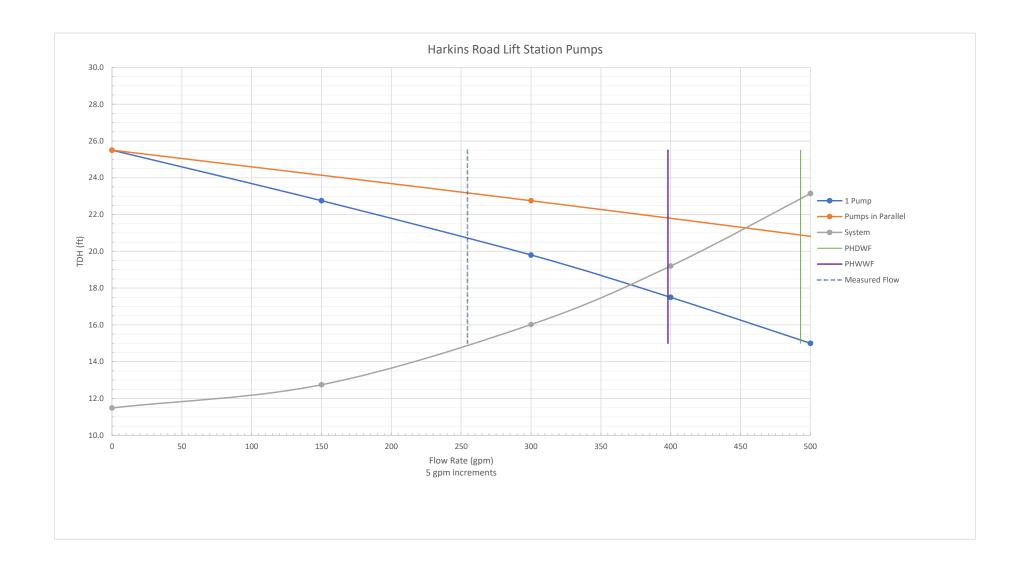
De La Torre LS - Future Flow Condition Salinas Sewer Master Plan



De La Torre LS Salinas Sewer Master Plan

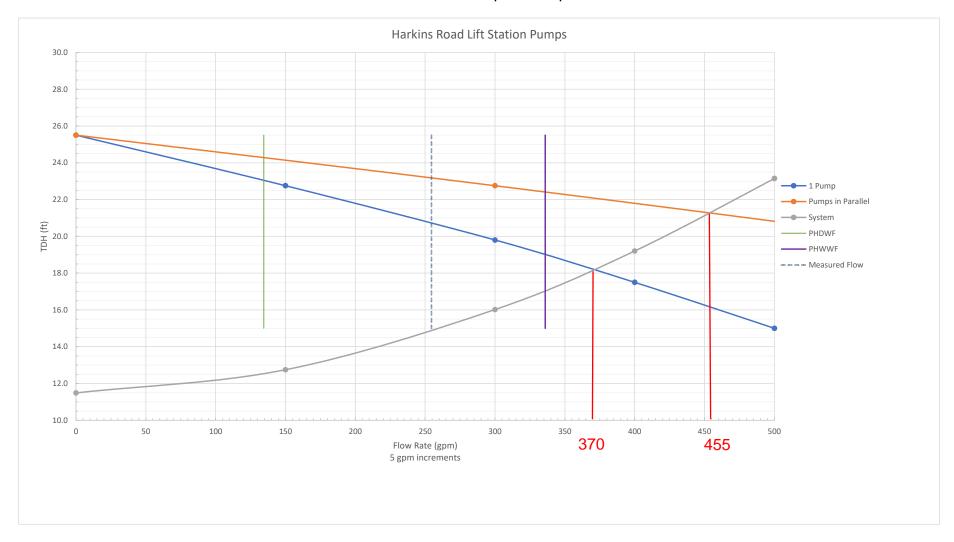


Harkins Road LS- Future Flow Condition Salinas Sewer Master Plan

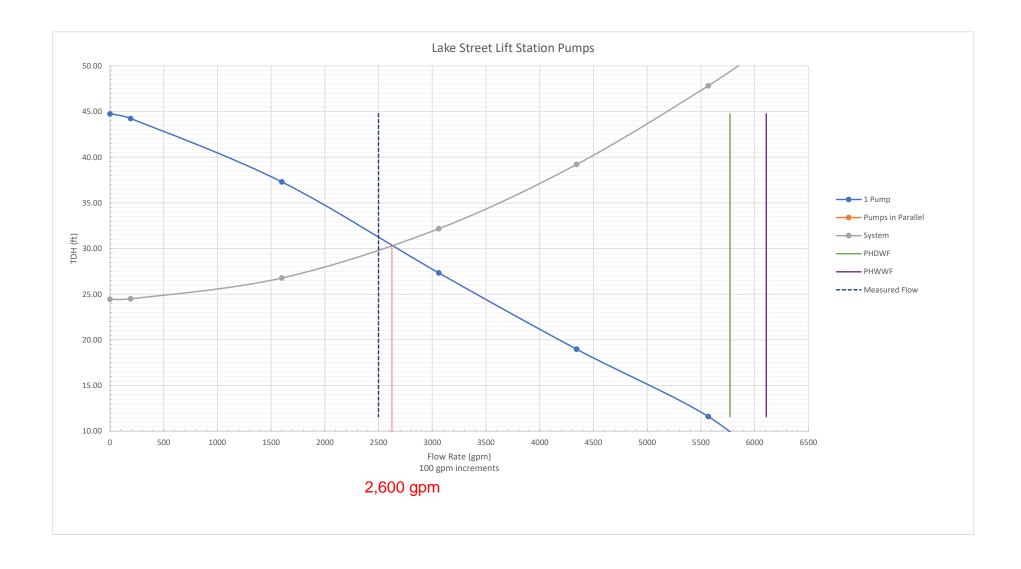


Harkins Road LS Salinas Sewer Master Plan

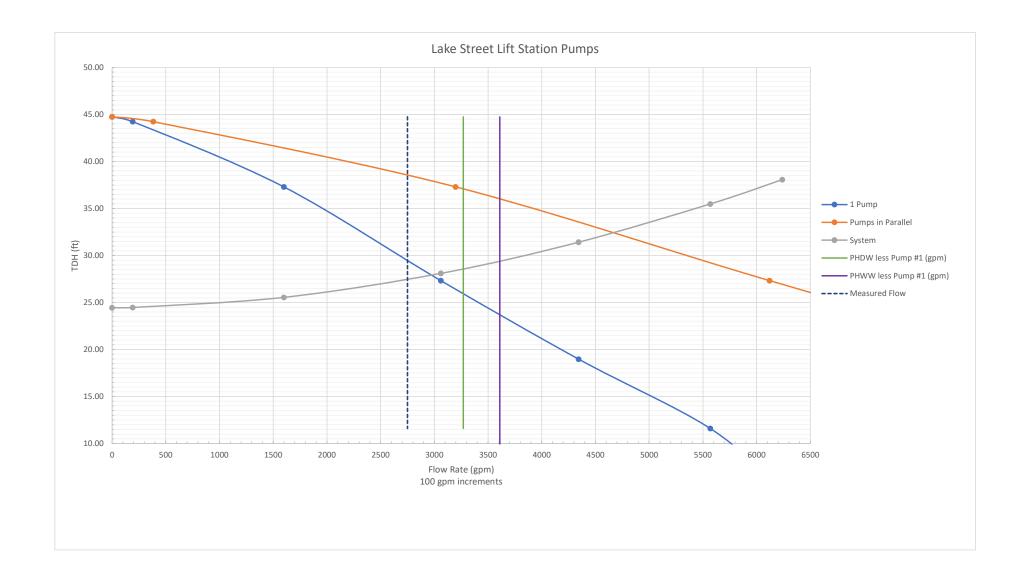
Note: the flow was measured when there were potential problems with the check valves



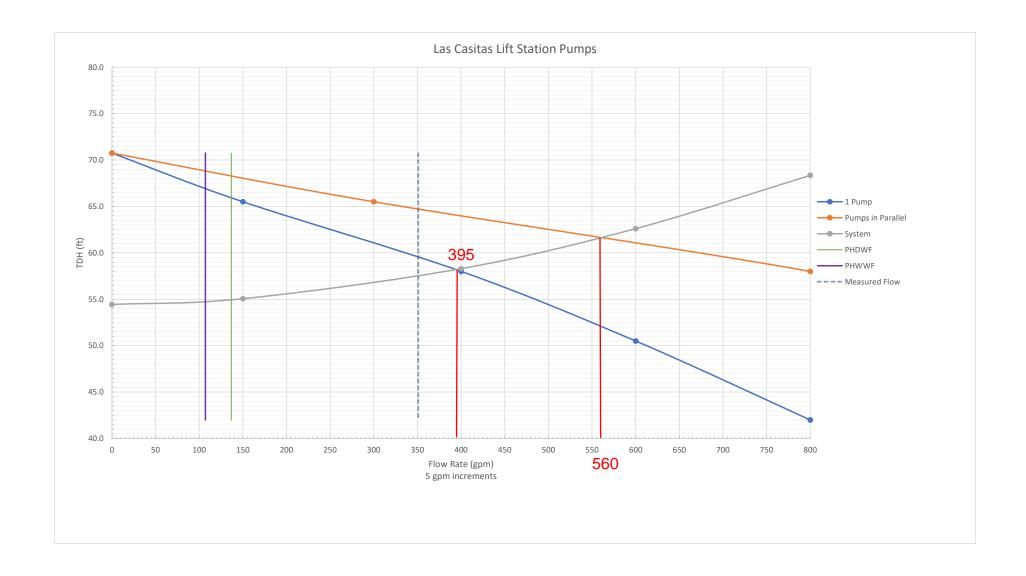
Lake St LS Pump #1 Existing Conditions Salinas Sewer Master Plan



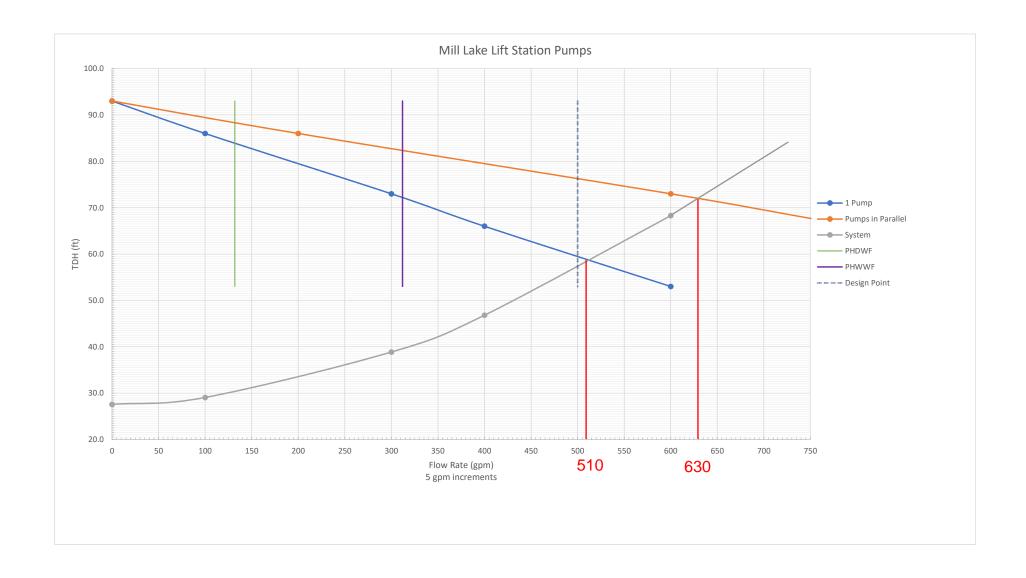
Lake Street Pumps 2 and 3 Existing Conditions Salinas Sewer Master Plan



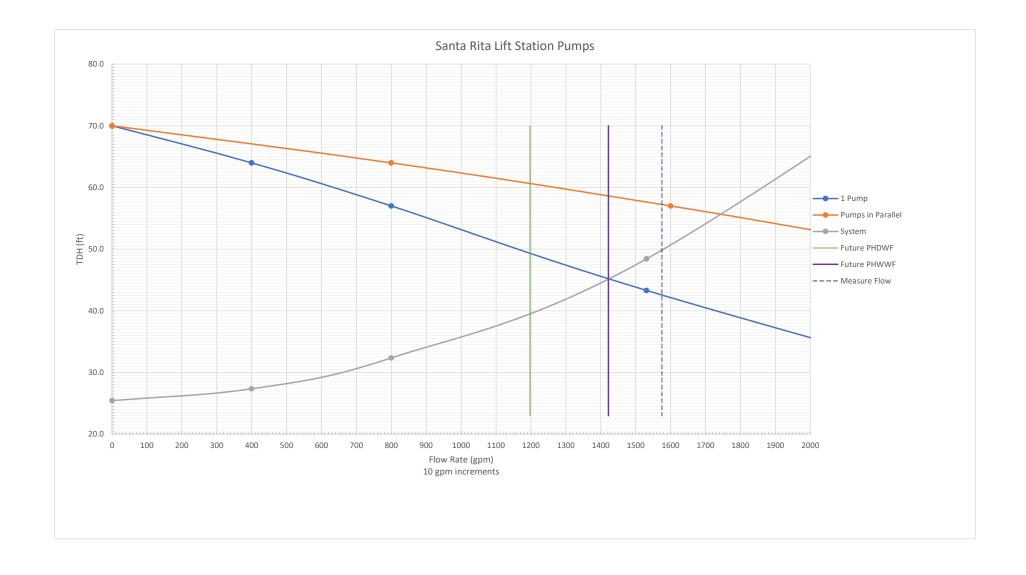
Las Casitas LS Salinas Sewer Master Plan



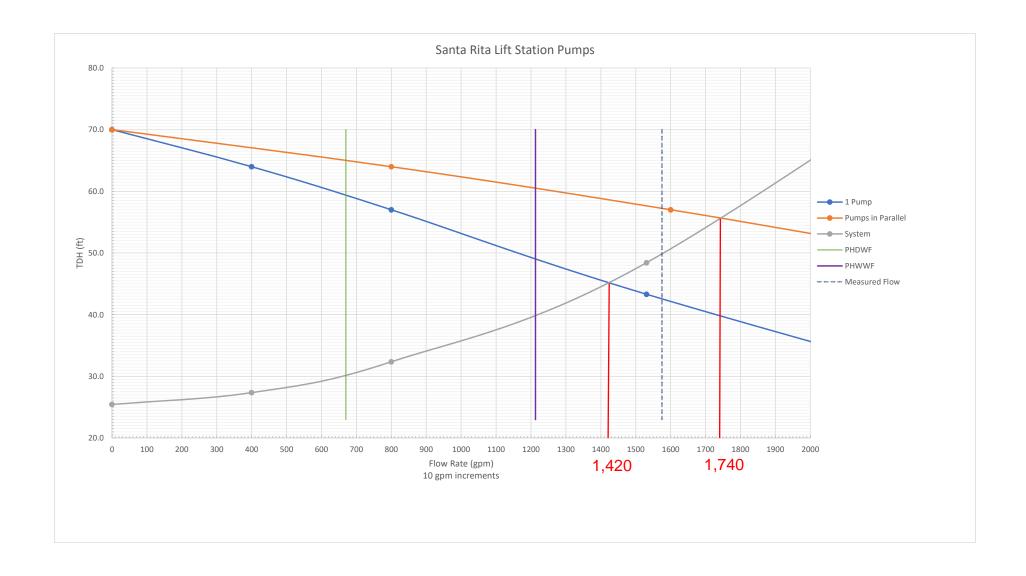
Mill Lake LS Salinas Sewer Master Plan



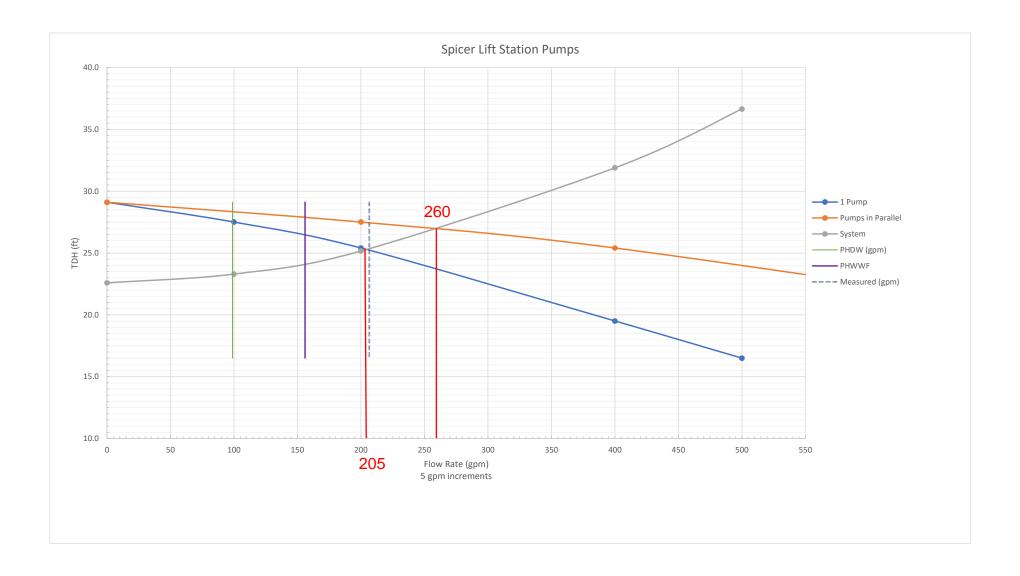
Santa Rita LS - Future Condition Salinas Sewer Master Plan



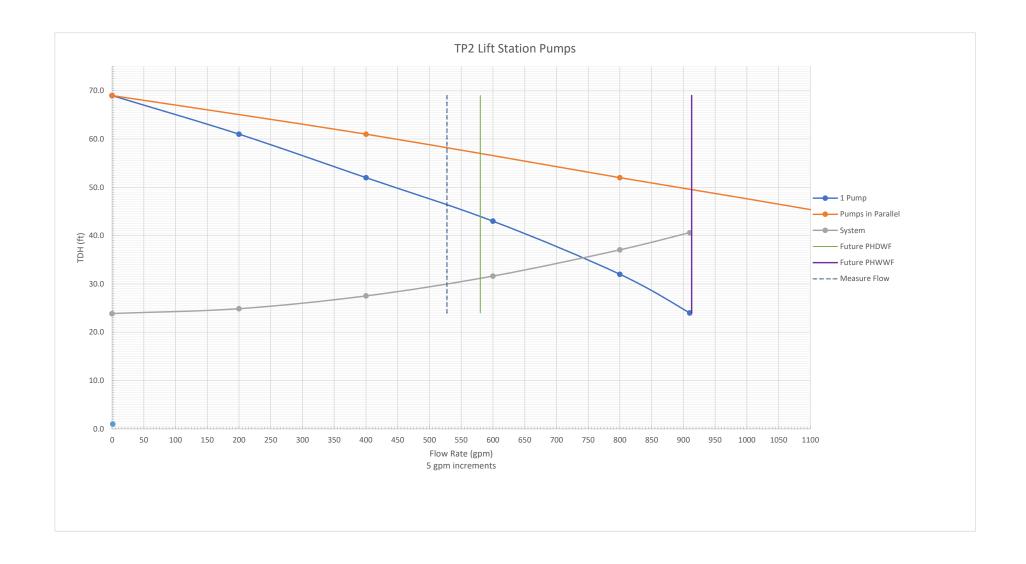
Santa Rita LS Salinas Sewer Master Plan



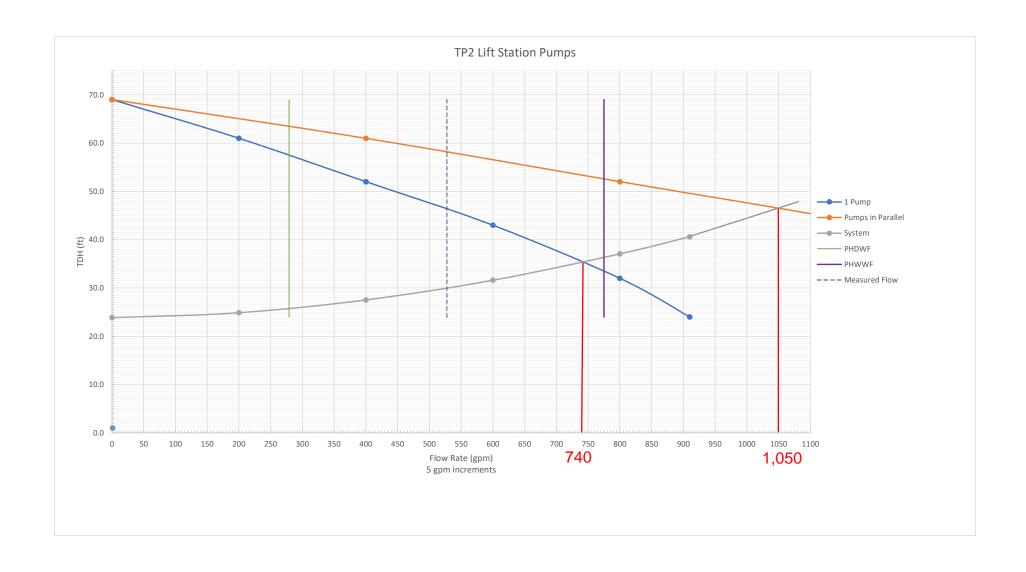
Spicer LS Salinas Sewer Master Plan

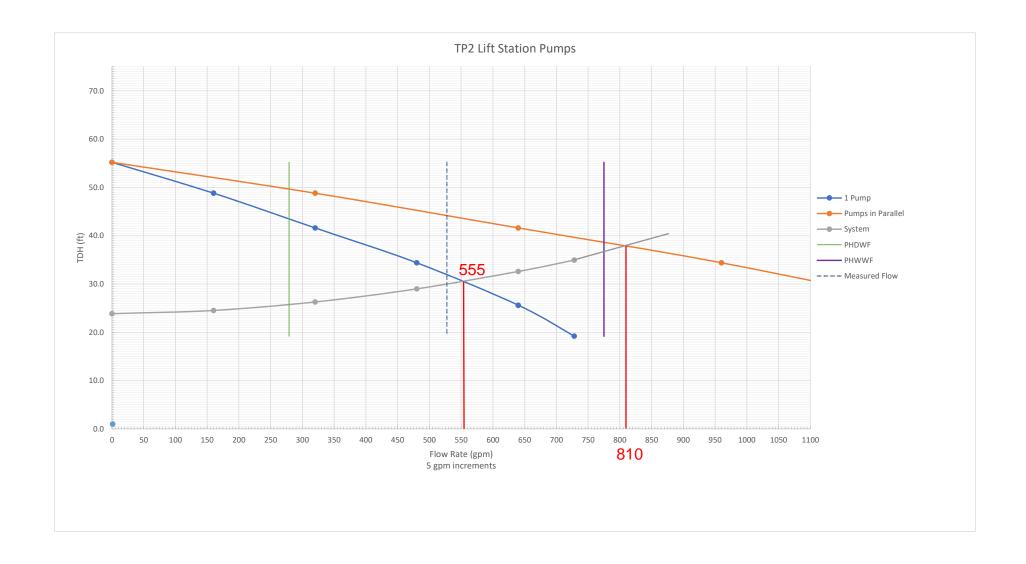


TP2 LS - Future Condition (VFD at 60 Hz max) Salinas Sewer Master Plan

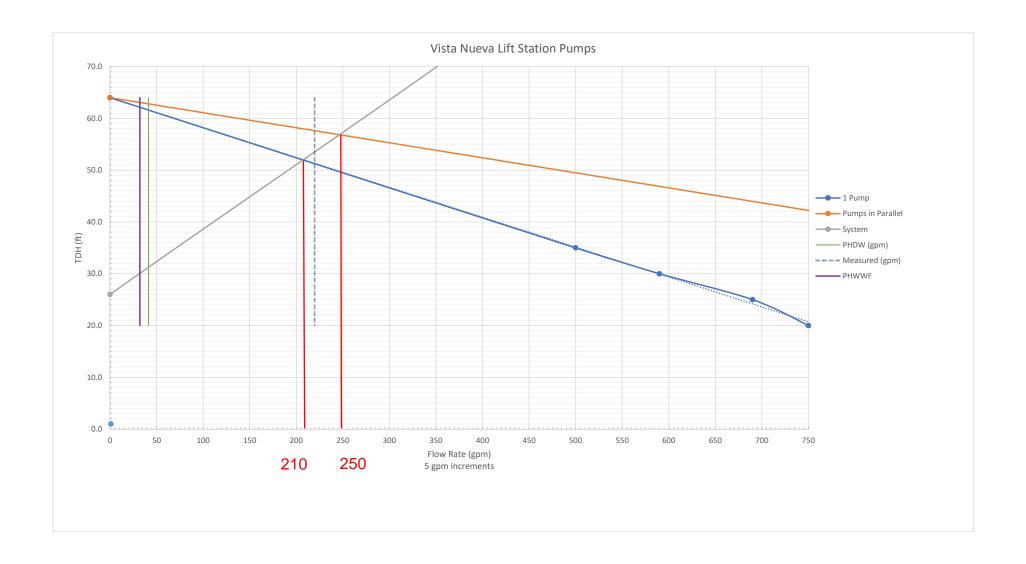


TP2 LS - Existing Conditions (VFD at 60 Hz max) Salinas Sewer Master Plan





Vista Nueva LS Salinas Sewer Master Plan



APPENDIX E: FRM Lift Station Condition Assessment



Lift Station:	Airport (Mof	fett) Facility ID:
Lift Station Type		Submersible
Number of Pumps		2
		Pump 1 Information
Manufacturer	Flygt	
Serial/Model #	3127.090-181044	
Motor Controller/VFD	Across the line contactor	
Horse Power	10	
Phase/Voltage	3 Phase/208V	
Megohm	1.28 / 1.16 / 1.57 @1133 Volts	
Amperage (Per Leg)	35.6 / 36.1 / 35.4	Megohm readings are very low indicating motor needs to be rebuilt, flow is comparable to pump 2 indicating impeller and volute are in operational condition. Pump 1 was replaced on 3-23-18. Pump
Speed	1740 RPM	Settings: Lead on @ 60%, Lead off @ 20% Lag on @ 70% Lag off @ 20% High level
Pump Level Settings		Alam: 90% Low Level Alarm: Not listed
Impeller/Bowl		
Flow (GPM)	Rated: 550 Measured: 467	
	Good Describe	
Pump 1 Condition		
	☐ Operational ☐ Poor	
	<u> </u>	Pump 2 Information
Manufacturar	Floret	Pump 2 information
Manufacturer	Flygt	
Serial/Model # Motor Controller/VFD	3127.090-5766 Across the line contactor	
Horse Power	10	
Phase/Voltage	Unknown/208V	
Megohm	706 / 930 / 895 @1132 Volts	
Amperage	24.6 / 25.0 / 24.4	Flow for both pumps is lower than the rated 550 GPM, motor was rebuilt on 3-22-18. Pump GPM
Speed	1740 RPM	seems excessive compared to current influent flow, planned future development will provide
Pump Level Settings		increased influent flow.
Impeller/Bowl	481	
Flow (GPM)	Rated: 550 Measured: 448	
	☑ Good Describe	
Pump 2 Condition	Caticfactory	
, ap = co	Operational	
	Poor	
	Wet We	Il Information/Recommendations
Wet Well Diameter (ft)	6'	Influent flow was estimated at 17.5 GPM. 1) Motor protection (Overload) is handled by the Multi
Wet Well Depth (ft)	15'	Smart controller, recommend installing overloads on load side of contactors for additional
Wet Well Coating	No	protection. 2) There are numerous schedule 40 water fittings used on conduit going to panel,
Discharge Pipe Size (in)	6"	recommend replacing with proper electrical conduit and using electrical sweeps to make pulling wire easier. Also, install EYS fittings on conduits. 3) The guide rail system is missing several rubber
Discharge Pipe Material		grommets and there are several carbon bolts installed. Recommend replacing rubber grommets on
EYS Seal-offs Installed? Check Valve?	No In wet well	lifting rails and installing stainless bolts.4) Wet well looks to have some type of light coating which
Guide Rail System	Yes, needs repair	is peeling off, recommend coating well. 5) Discharge piping is showing corrosion, recommend
·	Multi Trode Liquid Level Control	coating. 6) The handle for the wet well access is broken and has been replaced with a piece of wire,
Level Controls	System (Probe)	recommend replacing handle. 7) The check valves are located inside the wet well and are difficult to access, recommend moving check valves into a vault located outside of the well. 8) The rebar
Emergency	Yes, tested OK, also has manual	lifting hooks and wet well vent are trip hazards, recommend cutting rebar hooks to grade and
Back Up Generator?	transfer switch with ability to	relocating wet well vent. Wet well vent (4") is also in a horizontal position and open to the
	connect a portable generator.	elements. 9) The enclosure for the generator has heavy rust damage and there is a small oil leak
Bypass	Yes	from the filter. Recommend repairing oil leak and repairing/coating rusted areas. 10) The LCD screen for the automatic transfer switch is sun damaged and illegible, recommend replacing
Controller/SCADA	Multi Smart/Mission Ctrl/Sensaphone	screen 11) The line voltage is not listed on the cabinet and the back-up manual transfer switch
		lever positions are not labeled, recommend proper labeling. 12) The controls cabinet can be
	☐ Good Describe	opened without turning off the main breaker and the breaker disconnect handles for pump 1 and 2
Overall Station Condition	Satisfactory in notes	have been removed, recommend replacing installing proper disconnect hardware 13) Recommend
Overall Station Condition	✓ Operational	on-site water for wash down 14) Spare parts consist of extra contactors, recommend a spare complete pump/motor/volute. 15) Recommend having wiring diagram at station. Lift station is in
	Poor	operational condition.
		,
1 1	alled and working correctly and	
does not exhibit a need f	•	Operational: Equipment is working, but unable to determine if it is working as engineered
<u>Satisfactory:</u> Equipment correctly but is slightly w	_	Poor: Equipment appears to be failing and/or near failure
Donicolly Dut is slightly W	o, no repairs necutu	

Lift Station:	Carpenter H	Iall Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	MU237600-03/10-02	
Motor Controller/VFD	VFD Altivar 660	
Horse Power	30	
Phase/Voltage	3 Phase / 230 Volt	
Megohm	292 / 299 / 286 @ 1131 Volts	The flow meter for pump 1 is not reading correctly and needs to be calibrated. Ops stated that
Amperage	64.9 / 67.2 / 64.2	pump 1 sometimes has higher hours on it when compared to pump 2, pump and piping/check valve has been inspected with no obvious conclusion. Grease is coming out of the seal on the
Speed	1175 RPM	bottom of the motor. Amp readings are substantially lower when compared to Pump 2 and the
Pump Level Settings		motor plate rating. Hour Meter: 25,894.2 Lead on @ 5.6' Off @ 2.0' Lag on @ 6.0' Off @
Impeller/Bowl		High Level Alarm: 8.0' Low Level Alarm: 1.0'
Flow	1600 GPM est.	
	Good Describe	
Pump 1 Condition		
	✓ Operational Poor	
	1 00i	Druma 2 Information
Man of - 4	Constitute II accord	Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model # Motor Controller/VFD	MU237600-03/10-01 VFD Altivar 660	
Horse Power	30	
Phase/Voltage		
Megohm	188 / 164 / 160 @ 1134 Volts	
Amperage	75.6 / 71.3 / 72.1	
Speed	1175	Pump has leak at mechanical seal. Suction side piping/penetration from wet well into dry well is
Pump Level Settings		in poor condition and needs to be evaluated for repairs.
Impeller/Bowl		
Flow	1600 GPM	
	Good Describe	
Pump 2 Condition	Satisfactory :	
rump z condition	✓ Operational	
	Poor	
	Wet We	Il Information/Recommendations
Wet Well Diameter (ft)	7'	
Wet Well Depth (ft)	30'	
Wet Well Coating	Peeling	
Discharge Pipe Size (in)	10"	
Discharge Pipe Material	Ductile Iron	
EYS Seal-offs Installed?	Yes	1) Wet well access lid is bent, recommend repair/replacement 2) Electrical cabinets are not
Check Valve?	Satisfactory	labeled with line voltage, recommend labeling 3) Wet well coating is peeling at grout lines,
Guide Rail System Level Controls	N/A Hoist on-site for pumps	recommend re-coating 4) The Endress & Hauser flow meter for pump 1 is not reading
Level Controls	Digi Gage Plus w/transducer	accurately, recommend calibration 5) The suction side piping/penetration into the wet well for Pump 2 needs to be evaluated and repaired. 6) The grease seal for Pump 1 is damaged and the
Emergency	Yes, generator and transfer	mechanincal seal for Pump 2 is leaking, recommend repairing both. 7) Recommend installing
Back Up Generator?	switch tested OK.	disconnect switches for each pump at the bottom of the dry pit. 8) Recommend water
Bypass	NO	connection for wash down. 9) Generator has recently required extensive repairs, recommend
,,	Digi Gage Plus/Mission	further evaluation to determine overall condition of the generator.
Controller/SCADA	Ctrl/Sensaphone	
	Good Describe	
Overall Station Condition	☐ Satisfactory in notes	
	✓ Operational	
	Poor	
Good: Equipment is insta	alled and working correctly and	Operational: Equipment is working, but unable to determine if it is working as
does not exhibit a need f		engineered
Satisfactory: Equipment	-	Poor: Equipment appears to be failing and/or near failure
correctly but is slightly w	vorn; no repairs needed	

Lift Station:	De La Torr	e Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	6412746	
Motor Controller/VFD	Across the line contactor	
Horse Power	5	
Phase/Voltage	, , , , , , , , , , , , , , , , , , ,	
Megohm	3.41 / 3.76 / 3.81 @ 1128 Volts	
Amperage Speed	14.5 / 14.6 / 13.7 1165 RPM	Megohms on pump are low but amp readings are acceptable based on motor plate data. Measured flow was 342 GPM Lead on @ 3.5' Lead off @ 1.7' Lag on @ 3.8' Lag off @ 1.7' High
Pump Level Settings	1103 1(11)	level alarm: 5.5' Low level alarm: 0.8'
Impeller/Bowl		
Flow	Rated 200 GPM @ 37' Head	
Pump 1 Condition	Good Describe Satisfactory in notes Operational Poor	
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model #	6412763	
Motor Controller/VFD	Across the line contactor	
Horse Power	5 2 Phase / 240V	
Phase/Voltage Megohm	3 Phase / 240V 24.03/23.78/24.05 @ 1130 Volts	
Amperage	13.4 / 13.0 / 13.3	
Speed	13.4 / 13.0 / 13.3 1165 RPM	Mechanical seal needs to be replaced, megohms are slightly higher than Pump 1. Measured flow
Pump Level Settings	1103 1(11)	was 354 GPM.
Impeller/Bowl		
Flow	Rated 200 GPM @ 37' Head	
Pump 2 Condition	☐ Operational ☐ Poor	
		Il Information/Recommendations
Wet Well Diameter (ft)	4'	
Wet Well Depth (ft)	14.5'	1) Recommend replacing inlet and discharge isolation valves. 2) Check valve arms are not
Wet Well Coating Discharge Pipe Size (in)	No 4" into 6" F.M.	functioning, recommend repair or replacement. 3) Recommend either moving the main
Discharge Pipe Material	Ductile Iron	panel/meter closer to the station or installing fencing at the current location to protect against
EYS Seal-offs Installed?	N/A	vandalism. Also, recommend installing fencing to protect the dry well. 4) Motor contactors look to be original, there are open knockouts on the control panel, breaker disconnects are broken and
Check Valve?	Need Repair/Replace	overload reset push buttons are missing, control panel cover can be removed while controls are
Guide Rail System	N/A	still energized. Recommend new control panel mounted above ground. 5) Pump motors are
Level Controls	Micro-Mac 2300 #Mo28814 (Bubbler)	showing low megohms, recommend replacing complete pump and motor with more efficient model and having a complete motor/pump as a back up. 6) Station is set up for portable
Emergency Back Up Generator?	No, manual transfer switch and connector installed for portable generator	generator, recommend installing a permananent back-up generator and automatic transfer switch 7) Recommend on-site water for wash down 8) Coating on the dry pit floor is peeling, recommend re-coating 9) Influent flow was calculated at 15 GPM, pumps only run for 1 minute each cycle. Recommend evaluating current inflow and sourcing pumps that are more representative of actual
Bypass	No	flows. 10) Wet well is not coated and showing exposed aggregate, recommend coating wet well.
Controller/SCADA	Mission Ctrl/Sensaphone	11) Recommend installing a system to bypass wet well. 12) Debris is stuck in the wye located on
Overall Station Condition	☐ Good Describe ☐ Satisfactory in notes ☐ Operational ☑ Poor	the discharge side of the check valves, recommend removing wye and cleaning out debris. 13) Recommend upgrading Micro-Mac control system. 14) Recommend investigating rated flow compared to actual flow.
Good: Equipment is instated does not exhibit a need for Satisfactory: Equipment correctly but is slightly w	is installed and working	<u>Operational:</u> Equipment is working, but unable to determine if it is working as engineered <u>Poor:</u> Equipment appears to be failing and/or near failure

Lift Station:	Harkins Ro	ad Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	66N40657	
Motor Controller/VFD	Across the line contactor	
Horse Power	5	
Phase/Voltage	3 Phase / 240	
Megohm	567 / 590 / 560 @ 1133 Volts	Amps are lower when compared to Pump 2 and the motor plate data. The check valve makes a
Amperage	13.7 / 13.8 / 13.3	loud noise when the pump turns off. The city has new isolation valves/check valves and will
Speed	870 RPM	install as time permits. Hours: 14741.5 Lead on
Pump Level Settings		@ 4.0' Lead off @ 2.0' Lag on @ 4.3' Lag off @ 2.0' High alarm: 5.0'
Impeller/Bowl		Low Level Alarm: 1.0' Measured flow: 228 GPM
Flow	Rated 350 GPM @ 18' Head	
	Good Describe	
Pump 1 Condition	Satisfactory in notes	
	Operational	
	Poor	
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model #	66N40658	
Motor Controller/VFD	Across the line contactor	
Horse Power	5	
Phase/Voltage	Unknown/240	
Megohm	421 / 442 / 427 @ 1133 Volts 15.5 / 16.2 / 15.5	
Amperage Speed	15.5 / 16.2 / 15.5 870 RPM	Check valve arm does not move when running or shutting down. Hours: 14506.6 Measured
Pump Level Settings	670 KFIVI	flow: 281 GPM
Impeller/Bowl		
Flow	Rated 350 GPM @ 18' Head	
	Satisfactory Describe	
Pump 2 Condition	Satisfactory in notes Operational	
	Poor	
	Wet We	Il Information/Recommendations
Wet Well Diameter (ft)	4'	•
Wet Well Depth (ft)	18'	
Wet Well Coating	NO	1) High inflow and infiltration into station, recommend finding the source. 2) Recommend
Discharge Pipe Size (in)	6"	evaluating pump and motor efficiency, if replacing pumps/motors order three complete pumps
Discharge Pipe Material	Ductile Iron	and motors, this will allow for a complete spare. 3) There is a connection to hook up a portable
EYS Seal-offs Installed?	N/A	generator but there is no transfer switch, the generator is tied into the load side of the main
Check Valve?	Arms not lifting	breaker in the dry well, the danger of backfeeding generator power to the utility side is possible
Guide Rail System	N/A	and a safety issue. Highly recommend installing a transfer switch ASAP. Recommend a permanent back up generator. 4) Recommend replacing isolation and check valves 5) There is a
Level Controls	Micro-Mac 2300 #M9501002 (Bubbler)	leak in the 6" force main downstream of the wye, recommend repairing. 6) Recommend labeling
	No, unsafe connection, highly	control panel with line voltage 7) Recommend installing fencing around lift station 8) The control
Emergency	recommend installing transfer	panel breaker disconnects are broken and the panel cover can be removed while it is still
Back Up Generator?	switch	energized. The overload reset buttons for the contactors do not work with the new contactors.
Bypass	No	Recommend installing new control panel above ground. 9) Recommend finding a source of water for wash down purposes. 10) Bypass is accomplished using manholes, recommend
Controller/SCADA	Mission Ctrl/Sensaphone	installing bypass system. 11) Recommend upgrading Micro-Mac system. 12) Spare parts consist
	Good	of a motor and a contactor, recommend having one complete pump/motor assembly on hand.
Overall Charles Constitutes	Satisfactory	Influent flow was calculated at 38 GPM.
Overall Station Condition	✓ Operational in notes	
	Poor	
Good: Equipment is insta	alled and working correctly and	
does not exhibit a need		Operational: Equipment is working, but unable to determine if it is working as
Satisfactory: Equipment		engineered Poor: Equipment appears to be failing and/or near failure
correctly but is slightly w	orn; no repairs needed	roor. Equipment appears to be failing and/or near failure
L-		

Lift Station:	Lake Stre	· -
Lift Station Type		Dry Pit
Number of Pumps		3
		Pump 1 Information
Manufacturer	ITT Flygt	Amps are comparable to what is listed on motor data plate. GPM is lower compared to Pumps 2 & 3. Pump 1 rags up more compared to
Serial/Model #	9080091	Pumps 2 & 3 possibly due to the wet well design. Lead on @ 2.5' Lead off @ 1.8' Lag on @ 3.2' Lag off @ 2.55' Standby on @ 4.2' Standby off @ 3.5' High Alarm: 6.0' Low Alarm:
Motor Controller/VFD	VFD 1Y1261	1.1' Hours: 12847.6
Horse Power Phase/Voltage	30 3 Phase / 240 Volt	Spare parts consist of a complete back up pump. Gate valves and check valves for all three pumps were replaced approximately three
Megohm	234 / 249 / 279 @ 1134 Volts	years ago.
Amperage	79.1 / 78.7 / 78.7	
Speed	860 RPM	1
Pump Level Settings	555 111 111	1
Impeller/Bowl		
Flow	2300-2400 GPM	
	☐ Good Describe	
	Satisfactory in notes	
Pump 1 Condition	✓ Operational	
	Poor	
		Pump 2 Information
Manufacturer	ITT Flygt	Megohms are OK, amp readings are correct. Flow is higher than Pump 1 but lower than Pump 3. Hours: 65735.4
Serial/Model #	980150	megoning are on, ampreciangs are correct flow is nighter than 1 amp 1 but lower than 1 amp 5. Hours, 65755.4
Motor Controller/VFD	VFD 1Y1267	
Horse Power	30	1
Phase/Voltage	3 Phase / 240 Volt	
Megohm	675 / 636 / 737 @ 1134 Volts	
Amperage	76.8 / 77.4 / 81.8	
Speed	860 RPM	
Pump Level Settings		
Impeller/Bowl		1
Flow	2500-2600 GPM	4
	Good Describe	
Pump 2 Condition	Satisfactory in notes	
	Operational	
	Poor	
		Pump 3 Information
Manufacturer	ITT Flygt	Pump 3 is the newest pump. No amp meter on MCC panel like Pumps 1 & 2. Hours: 13629.0
Serial/Model #	3201.091-5645	
Motor Controller/VFD	VFD 1Y1263	
Horse Power	30	
Phase/Voltage	3 Phase / 240 Volt	
Megohm Amperage	325 / 276 / 312 @ 1134 Volts 76.5 / 76.9 / 79.1	4
Speed	860 RPM	1
Pump Level Settings	555 11 11	
Impeller/Bowl		
Flow	2700-2800 GPM	
	✓ Good	1
Duran 2 Candition	Describe Satisfactory in notes	
Pump 3 Condition	Operational	
	Poor	
		Wet Well Information/Recommendations
Wet Well Size (ft)	5.25' X 25'	
Wet Well Depth (ft)	40'	
Wet Well Coating	Yes	1) VFD settings and low max speed (860 RPM) of motors leads to frequent clogging of pumps with rags. Recommend changing minimum
Discharge Pipe Size (in)	12" & 14"	speed in VFD to help with ragging. Changing impellers on current pumps or switching to a higher RPM lower GPM pump may help. Lift
Discharge Pipe Material	Ductile Iron	station would benefit from some form of screening or head works prior to pumping. 2) Recommend alarm system and video surveillance
EYS Seal-offs Installed?	N/A	for security purposes. 3) Lift station has inflow and infiltration issues, recommend determining source and correcting. 4) MCC cabinet is not labeled with line voltage, breaker disconnects and cabinet locks are broken. Pump contactors have expanded metal covers and offer no
Check Valve?	Yes	protection against arc flash, also no disconnect at contactor panels. Recommend complete MCC cabinet replacement. 5) Conduit which
Guide Rail System	N/A Micro-Mac 2300 #M9111079	feeds the three VFD's is not supported, recommend using uni-strut and pipe clamps to support conduit. 6) Ventilation system intake is on
Level Controls	(Bubbler)	generator side of building and pulls in fumes from generator. Drive belt assembly for the ventilation system is open, recommend moving
F		ventilation intake and installing a guard for the drive belt. 7) Generator is operational but has recently required extensive repairs,
Emergency Back Up Generator?	Yes, Tested OK, additional plug for portable generator	recommend an evaluation of the generators overall condition. 8) Conduit from wet well into building is galvanized and failing, recommend replacing galvanized conduit with PVC conduit. 9) The 4" drain pipe for the floor drains and the sink is failing. A portion of the drain pipe
back op denerator:	portable generator	has been replaced, recommend completing replacement of old pipe. 10) The 1.25" sump pump is unable to keep up with the flow when
Bypass	No	bleeding the pumps to remove rags, recommend installing a higher GPM sump pump. 11) Unknown how emergency shut off works or if it
Controller/SCADA	Mission Ctrl/Sensaphone	functions, recommend researching operation before testing. 12) Recommend installing transducer to provide level control and removing
	☐ Good Describe	bubbler system/upgrading Mico-mac controller. 13) Recommend removing cat walk and ladder from wet well. Staff would like to have hot
Overall Station Condition	I —	water and a bathroom on-site.
	✓ Operational	
Coods Fauir amount in transfer i	Poor	<u> </u>
<u>Good:</u> Equipement is installed an exhibit a need for replacement	u working correctly and does not	Operational: Equipment is working, but unable to determine if it is working as engineered
Satisfactory: Equipement is instal	lled and working correctly but is	Poor: Equipment appears to be failing and/or near failure
slightly worn; no repairs needed		

Lift Station:	Las Casita	s Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	122190009	
Motor Controller/VFD	Soft Start	
Horse Power	10	
Phase/Voltage	3 Phase / 240V	
Megohm	536 / 586 / 571 @1113 Volts	
Amperage	20.0 / 21.8 / 20.6	Spare parts: motor Hours: 20000.0 Lead on
Speed	1200 RPM	@ 60% Lead off @ 20% Lag on @ 70% Lag off @ 20% Measured flow:
Pump Level Settings		357 GPM
Impeller/Bowl		
Flow	Rated: 150 GPM @ 50' TDH	
	☑ Good Describe	
Pump 1 Condition	Catisfactors in notes	
rump i condition	☐ Operational	
	Poor	
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model #	122190011	
Motor Controller/VFD	Soft Start	
Horse Power	10	
Phase/Voltage	3 Phase / 240V	
Megohm	416 / 408 / 390 @ 1131 Volts	
Amperage	23.4 / 24.2 / 23.7	
Speed	1200 RPM	High pitched noise while running. Measured flow: 345 GPM
Pump Level Settings		
Impeller/Bowl		
Flow	Rated: 150 GPM @ 50' TDH	
	☐ Good Describe	
Pump 2 Condition	Catisfactors	
Tump 2 condition	✓ Operational	
	Poor	
	Wet We	ell Information/Recommendations
Wet Well Diameter (ft)	4'	
Wet Well Depth (ft)	21'	
Wet Well Coating	No	
Discharge Pipe Size (in)	10"	
Discharge Pipe Material	Ductile Iron	1) Automatic transfer switch LCD screen is illegible, recommend replacing. 2) Corrosion on
EYS Seal-offs Installed?	N/A	generator enclosure, recommend spot repairs 3) Recommend pulling Pump 2 and installing spare pump to try and determine cause of high pitch noise. 4) Debris stuck in wye downstream of check
Check Valve?	Operational	valves, recommend pulling wye and cleaning out, install a blind flange at bottom of wye to make
Guide Rail System	N/A	cleaning easier. 5) Bottom of dry well showing rust, recommend spot coating. 6) Volutes have
Level Controls	Multi Smart w/probe	heli-coils installed, recommend reviewing the efficiency of the current pumps/motors.
Emergency		Recommend having one complete spare motor/pump on hand. 7) The control cabinet is showing
Back Up Generator?	Yes tested ()K	corrosion on connections due to moisture, dry pit has been flooded before. The breaker
'		disconnects no longer work. Recommend a new control panel with proper disconnects installed above ground. 8) Minimal corrosion to wet well, recommend coating. 9) On-site water is needed to
Bypass		wash down well. 10) Heavy grease build-up, recommend quarterly cleaning of all lift stations. 11)
Controller/SCADA	Mission Ctrl	Recommend investigating GPM discrepancy between rated GPM and actual GPM.
	Good Describe	
Overall Station Condition	☐ Satisfactory in notes	
	✓ Operational	
	Poor	
Good: Equipment is insta	alled and working correctly and	
does not exhibit a need for replacement Operational: Equipment is working, but unable to determine if it is working as engineered		
Satisfactory: Equipment	is installed and working	Poor: Equipment appears to be failing and/or near failure
correctly but is slightly w	orn; no repairs needed	
correctly but is slightly w	orn; no repairs needed	

Lift Station:	Mill Lake	Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	3Y6579005A13DQ	
Motor Controller/VFD	Soft Start	
Horse Power	15	
Phase/Voltage	3 Phase/240V	
Megohm	503 / 434 / 416 @ 1134 Volts	
Amperage	32.5 / 32.1 / 33.1	Lead on @ 60% Lead off @ 20% Lag on @ 70% Lag off @ 20% High Level Alarm: 80% Low Level Alarm: 8% Vibration when
Speed	1760 RPM	pump is running Hours: 36782.8 Measured:
Pump Level Settings		47 GPM
Impeller/Bowl		
Flow	Rated: 500 GPM @ 58'	
	Good Describe	
Pump 1 Condition	Satisfactory in notes	
	✓ Operational Poor	
	☐ P001	Parama 2 to fear and the
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model # Motor Controller/VFD	3YG570005A5DQ	
Horse Power	Soft Start 15	
Phase/Voltage	3 Phase/240V	
Megohm	412 / 421 / 420 @ 1128 Volts	
Amperage	32.7 / 33.6 / 33.4	
Speed	1760 RPM	Vibration when pump is running Hours:
Pump Level Settings		38678.5 Measured: 63 GPM
Impeller/Bowl		
Flow	Rated: 500 GPM @ 58'	
	Good Describe	
Pump 2 Condition	Catisfactory	
Tump 2 comunican	✓ Operational	
	Poor	
	Wet We	ell Information/Recommendations
Wet Well Diameter (ft)	4'	
Wet Well Depth (ft)	22'	
Wet Well Coating	No	
Discharge Pipe Size (in)	6"	
Discharge Pipe Material	Ductile Iron	1) Broken conduit leading into dry well, recommend moving conduit underground like Las Casitas.
EYS Seal-offs Installed?	No	2) Rust on generator enclosure, recommend spot repairs 3) Vibration in pumps started when
Check Valve? Guide Rail System	Operational N/A	impellers were changed to the "X" style. If pumps are not being replaced, recommend removing
Level Controls	Multi Smart w/probe	impellers and having them balanced to potentially solve vibration. 4) Recommend reasearching
Level Controls	Multi Smart W/probe	efficiency of current pumps and replacing if necessary 5) Control panel breaker disconnnects are broken, voltage is not labeled on the cabinet, removal of control panel cover is required to access
Emergency	Yes tested ()K	soft starts, no electrical drawings on-site. Recommend replacing control cabinet and placing it
Back Up Generator?	1.03, 103104 011	above ground. 6) Recommend installation of fencing around dry well 7) Recommend coating the
Bypass	No	wet well 8) Heavy grease deposits in well, recommend completing quarterly cleaning of the well 9)
Controller/SCADA	Mission Ctrl w/Sensaphone	Recommend water on-site for wash down purposes. 10) Recommend installing bypass structure
	Good	
Overall Station Condition	Satisfactory	
Overall Station Condition	✓ Operational	
	Poor	
Good: Equipment is insta	alled and working correctly and	
does not exhibit a need f	_	Operational: Equipment is working, but unable to determine if it is working as engineered
Satisfactory: Equipment	is installed and working	Poor: Equipment appears to be failing and/or near failure
correctly but is slightly worn; no repairs needed		

Lift Station:	Santa Rita	Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	790770L-1	
Motor Controller/VFD	Across the line contactor	
Horse Power	30	
Phase/Voltage	· · · · · · · · · · · · · · · · · · ·	
Megohm	332 / 362 / 371 @ 1128 Volts	Lead on @ 6.5' Lead off @ 3.5' Lag on @ 7.0' Lag off @ 3.5' High alarm: 8.5' Low alarm: 1.5'
Amperage Speed	61.8 / 63.4 / 63.9 1200 RPM	Hours: 52033.0 Calculated flow: 1489 GPM There is
Pump Level Settings	1200 RPIVI	an oil leak at the base of the motor. Megohms, flow and amps are substantially lower than pump
Impeller/Bowl		2.
Flow	1531 GPM @ 433 TDH	
Pump 1 Condition	☐ Good Describe ☐ Satisfactory in notes ☑ Operational ☐ Poor	
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model #	791170C-1	
Motor Controller/VFD	Across the line contactor	
Horse Power	30	
Phase/Voltage		
Megohm Amperage	1040 / 1077 / 1071 @ 1115 Volts 67.8 / 67.0 / 69.1	
Speed	1200 RPM	Small oil leak on motor, pump is making a grinding noise. Hours: 60126.0
Pump Level Settings	1200 111 111	
Impeller/Bowl		
Flow	Calculated 1,661 GPM	
Pump 2 Condition	Operational Poor	
	Wet We	ell Information/Recommendations
Wet Well Diameter (ft)	8"	
Wet Well Depth (ft)	19' 6"	
Wet Well Coating Discharge Pipe Size (in)	Yes	
Discharge Pipe Size (III)	10" into 12" Ductile Iron	1) Wet well coating is showing possible pooling on grout lines, recommend coating rapping 1) The
EYS Seal-offs Installed?	N/A	1) Wet well coating is showing possible peeling on grout lines, recommend coating repair. 2) The pump cycles are very short but frequent due to high flow pumps and a small wet well.
Check Valve?	Opertional	Recommend replacing contactors with VFD's to minimize the pump cycles and provide ramping
Guide Rail System	N/A	ability.3) The breaker disconnects and overload reset buttons do not work on the control cabinet.
Level Controls	Micro-Mac 2300 #M9501007 (Bubbler)	Also the voltage is not labeled, recommend installing a new control cabinet at surface level. 4) Broken conduit between dry and wet well, also it appears the holes from the conduit have been
Emergency Back Up Generator?	Yes tested ()K	torch cut into the dry well, recommend moving the conduit underground and coating the penetrations into the dry well. 5) Based on the current condition of Pump 1 and 2, recommend reviewing pumping (GPM) needs and possibly replacing current pumps with lower GPM pumps. 6) Generator enclosure has significant corrosion, recommend spot coating/repair. Influent was 7)
Bypass	No	Recommend upgrading Mico-Mac control system. 8) Recommend installing a bypass system.
Controller/SCADA	Mission Ctrl	Influent calculated at 440 GPM.
Overall Station Condition	Good Satisfactory Operational Poor Describe in notes	
Good: Equipment is instated does not exhibit a need for Satisfactory: Equipment correctly but is slightly w	is installed and working	Operational: Equipment is working, but unable to determine if it is working as engineered Poor: Equipment appears to be failing and/or near failure

Lift Station:	Spicer	Facility ID:
Lift Station Type	·	Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	67541123	
Motor Controller/VFD	Across the line contactor	
Horse Power	7.5	
Phase/Voltage	3 Phase/240V	
Megohm	897 / 855 / 874 @ 1134 volts	
Amperage	14.9 / 12.1 / 14.2	Impeller is worn, measured flow is 195 GPM. Hours: 19167.5 New slide valve on suction side of
Speed	1155 RPM	pump. Lead
Pump Level Settings		on @ 4.5' Lead off @ 1.8' Lag on @ 5.0' Lag off @ 1.8' High alarm: 6.0' Low alarm: 0.
Impeller/Bowl		
Flow	Rated: 400 GPM @ 32' TDH	
	☐ Good Describe	
Pump 1 Condition	Satisfactory in notes	
·	Operational	
	✓ Poor	
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model #	67541125	
Motor Controller/VFD	Across the line contactor	
Horse Power	7.5	
Phase/Voltage	3 Phase/240V	
Megohm	818 / 740 / 725 @ 1135 Volts	
Amperage Speed	15.1 / 13.4 / 14.6	Impeller is worn, measured flow is 218 GPM. Hours: 19826.2 New slide valve on suction side of
Pump Level Settings	1155 RPM	pump.
Impeller/Bowl		
Flow	Rated: 400 GPM @ 32' TDH	
	Good Describe Satisfactory in notes	
Pump 2 Condition	Satisfactory in notes Operational	
	✓ Poor	
		Wet Well Information
Wet Well Diameter (ft)	4'	
Wet Well Depth (ft)		
Wet Well Coating	No	1) The wiring for the generator is hooked into the load side of the main breaker located inside
Discharge Pipe Size (in)	6"	the dry well, there is no transfer switch. The current connection has the possibility of back
Discharge Pipe Material	Ductile Iron	feeding utility power when a generator is connected. Recommend installing a transfer switch
EYS Seal-offs Installed?	N/A	and dedicated back-up generator. 2) The 6" force main in the dry well has a leak where the ductile iron meets the flange, recommend repairing 3) Corrosion is present on the floor of the
Check Valve?	Operational	dry well, recommend spot repairs to coating. 4) The existing control cabinet has broken breaker
Guide Rail System	N/A	disconnects, the overload reset buttons do not work, there is no wiring diagram and the voltage
Level Controls	Micro-Mac 2300 #M0189002	is not labeled on the cabinet. Recommend installing a new controls cabinet at surface level. 5)
	(Bubbler)	Recommend finding a source of on-site water for wash down. 6) Recommend upgrading the
Emergency	No unanfo composition	Micro-Mac control system. 7) The barrier around the dry well is insufficient, bent and poorly
Back Up Generator?	No, unsafe connection	welded. Recommend installing removeable bollards for protection and easier access to the dry well. 8) The wet well is located in the middle of the street, recommend relocating the wet well if
Bypass	No	possible. 9) The wet well is not coated and has signs of exposed aggregate and concrete chipping
Controller/SCADA	Mission Ctrl	away, recommend coating. 10) The impellers on the pumps are worn and GPM is drastically
CONTROLLEYSCADA	i	lower than listed, recommend reviewing pumping needs and purchasing new pumps which are
	Good Describe	suited to actual conditions and having one complete pump/motor. 11) Recommend replacing
Overall Station Condition	☐ Satisfactory in notes ☐ Operational	corroded conduit in wet well. Influent flow measured 16 GPM.
	✓ Poor	
Coods Facility or such to to 1		
	alled and working correctly and	Operational: Equipment is working, but unable to determine if it is working as
does not exhibit a need t <u>Satisfactory:</u> Equipment		engineered
correctly but is slightly w		<u>Poor:</u> Equipment appears to be failing and/or near failure
correctly but is slightly W	ioni, no repairs needed	

Lift Station:	TP2	Facility ID:
Lift Station Type		Smith/Loveless Dry Pit
Number of Pumps		2
		Pump 1 Information
Manufacturer	Smith/Loveless	
Serial/Model #	99-1024B-2	
Motor Controller/VFD	VFD, hand mode uses contactor	
Horse Power	10	
Phase/Voltage	3 Phase/240 Volt	
Megohm	490 / 498 / 486 Volts	Pump shakes due to no clog impeller. Hours: 20985.8 Slight
Amperage	20.6 / 21.3 / 21.6	chipping of coating on suction side pipe work.
Speed	1300 RPM	3.3' Lead off @ 1.3' Lag on @ 3.5' Lag off @ 1.3' High alarm: 4.5' Low alarm: 0.2' Infli
Pump Level Settings Impeller/Bowl		88 GPM Measured flow: 564 GPM
Flow	Rated: 400 GPM @ 50' TDH	
Pump 1 Condition	Good Describe	
		Pump 2 Information
Manufacturer	Smith/Loveless	
Serial/Model #	99-1024B-1	
Motor Controller/VFD	VFD, hand mode uses contactor	
Horse Power	10	
Phase/Voltage	·	
Megohm	510 / 539 / 536 @ 1131 Volts	Pump shakes due to no clog impeller. Hours: 22182.1 Slight
Amperage	22.1 / 20.7 / 20.6	chipping of coating on suction side pipe work. Measured flow is 491 GPM, which is lower than
Speed Pump Level Settings	1300 RPM	Pump 1.
Impeller/Bowl		
Flow	400 GPM @ 50' TDH	
Pump 2 Condition	Good Describe	
		Wet Well Information
Wet Well Diameter (ft)	6'	
Wet Well Depth (ft)	34.5'	
Wet Well Coating	Yes, satisfactory	4) Useb sefferment sefferment services and finding services are serviced as the services and finding services are serviced as the serviced are serviced as the servi
Discharge Pipe Size (in)	6"	1) High inflow and infiltration into station, recommend finding source. 2) Generator has required extensive repairs, recommend evaluating overall condition 3) Recommend replacing
Discharge Pipe Material EYS Seal-offs Installed?	Ductile Iron N/A	corroded/damaged splice box in wet well 4) Recommend bypass structure 5) Recommend finding
Check Valve?	Operational	an on-site water source for wash down purposes 6) No GFI protection on air compressor outlet,
Guide Rail System	· · · · · · · · · · · · · · · · · · ·	recommend installing GFI protected plug 7) Both pumps vibrate after changing to non clog impellers, recommend having the impellers balanced to potentially solve vibration issue. 8) VFD
Level Controls	Varimac 3300 w/bubbler	max speed is set to 48 Hz to minimize vibration, recommend chaning this to 60 Hz once vibration
Emergency Back Up Generator?	Yes	issue is solved. 9) Control cabinet does not have a main breaker in the dry well, also the pump breakers are inside the cabinet. Operator has to open an energized cabinet to turn pump power off. Recommend installing a main breaker with disconnect and disconnects for both pumps on the outside of the cabinet, also the cabinet needs to be labeled with the voltage. 10) Pump 2 is running
Bypass	No	lower GPM compared to Pump 1, recommend pulling pump and checking for obstruction. 11)
Controller/SCADA Overall Station Condition	Good Describe	Spare parts consist of a motor and volute, recommend having one complete spare pump/motor assembly. 12) If flow monitoring is needed, recommend wiring/repairing on-site flow meter
Good: Equipment is insta does not exhibit a need f Satisfactory: Equipment correctly but is slightly w	is installed and working	<u>Operational:</u> Equipment is working, but unable to determine if it is working as engineered <u>Poor:</u> Equipment appears to be failing and/or near failure

Lift Station:	Vista Nuev	/a Facility ID:
Lift Station Type		Submersible
Number of Pumps		2
		Pump 1 Information
Manufacturer	ITT Flygt	
Serial/Model #	9640005	
Motor Controller/VFD	Across the line contactor	
Horse Power	3	
Phase/Voltage	3 Phase/240V	
Megohm	265 / 254 / 252 @ 1130 Volts	
Amperage	15.4 / 15.9 / 14.4	
Speed	1740 RPM	Hours: 4617.7 Influent flow: 17.5 GPM Measured flow: 219.7 GPM
Pump Level Settings		
Impeller/Bowl		
Flow	Rated: 175 GPM @ 54' TDH	
	Good Describe	
Pump 1 Condition	Satisfactory in notes Operational	
	Poor	
	_	Pump 2 Information
Manufacturer	ITT Flygt	rump 2 mormation
Serial/Model #	9640095	
Motor Controller/VFD	Across the line contactor	
Horse Power	3	
Phase/Voltage		
Megohm	246 / 245/ 244 @ 1129 Volts	
Amperage	11.5 / 12.4 / 11.2	
Speed	1740 RPM	Hours: 6384.7 Influent flow: 17.5 GPM Measured flow: 79 GPM Volute is worn out causing low
Pump Level Settings		flow and lower amps when compared to Pump 1.
Impeller/Bowl		
Flow	Rated: 175 GPM @ 54' TDH	
	☐ Good Describe	
Pump 2 Condition	Caticfactory	
Fullip 2 Collultion	Operational	
	Poor	
		Wet Well Information
Wet Well Diameter (ft)	6'	
Wet Well Depth (ft)	16'	
Wet Well Coating	No, signs of corrosion	
Discharge Pipe Size (in)	6"	
Discharge Pipe Material	Ductile Iron	1) Signs of corrosion and exposed aggregate in well, recommend coating. 2) Recommend installing
EYS Seal-offs Installed?	No	a back-up generator and auto transfer switch. 3) There is water in the conduit inside the electrical
Check Valve?	Operational	cabinet, recommend investigating how water is getting into conduit and sealing off/repairing. 4)
Guide Rail System	Yes, Good Condition	The volute on Pump 2 is damaged and discharge flow is drastically reduced, recommend setting
Level Controls	Multitrode MT2PC w/probe	Pump 1 as the permanent lead until replacement pump arrives. The controller lights for the 10, 20 and 30% well level indicators are not working, recommend upgrading controller. 5) The check
Emergency	·	valve vault lid is very difficult to remove, recommend changing to a hinged lid. 6) City staff has
Back Up Generator?	connection for portable generator	concerns regarding the bends in the discharge pipe work downstream of the check valve, recommend evaluating the current pipe layout to see if this caused the failure of Pump 2. 7)
Bypass	Yes, 4"	Recommend finding a source of water for wash down purposes. 8) Recommend having one
Controller/SCADA		complete pump/motor on hand.
,	Good	
	Describe	
Overall Station Condition	Operational in notes	
	✓ Poor	
Good: Equipment is insta	alled and working correctly and	
does not exhibit a need f		Operational: Equipment is working, but unable to determine if it is working as engineered
Satisfactory: Equipment		Poor: Equipment appears to be failing and/or near failure
correctly but is slightly w		-

Lift Station:	Harris Rd.	Facility ID:
Lift Station Type		Submersible, Meyers Control Panel
Number of Pumps		2
		Pump 1 Information
Manufacturer	Unknown	
Serial/Model #	Unknown	
Motor Controller/VFD	Across the line contactor	
Horse Power	Unknown	
Phase/Voltage	Single Phase/230V	
Megohm	City declined testing	
Amperage	17.4 / 17.1	Evidence of welling at the base of the pump, start/run capacitor unhooked indicating pump has
Speed	Unknown	been replaced at some point.
Pump Level Settings	Float Controlled	
Impeller/Bowl Flow	Unknown	
Flow	Unknown, Measured 101 GPM	
	☐ Good Describe	
Pump 1 Condition	Satisfactory in notes Operational	
	✓ Poor	
	<u> </u>	Pump 2 Information
Manufacturer	Under access	Pullip 2 illiornation
Serial/Model #	Unknown Unknown	
Motor Controller/VFD	Across the line contactor	
Horse Power	Unknown	
Phase/Voltage		
Megohm	City declined testing	
Amperage	15 / 14.7	
Speed	Unknown	Start/run capacitor unhooked indicating pump was replaced at some point.
Pump Level Settings	Float Controlled	
Impeller/Bowl	Unknown	
Flow	Unknown, Measured 136 GPM	
	Good Describe	
Pump 2 Condition	Caticfactory	
	<u>✓</u> Operational	
	Poor	
		Wet Well Information
Wet Well Diameter (ft)	6'	
Wet Well Depth (ft)		
Wet Well Coating	No, signs of corrosion	
Discharge Pipe Size (in)	4"	
Discharge Pipe Material	Ductile Iron/PVC No	1) Panel lists pumps as 2 horsepower, unknown if this is accurate. 2) Control panel backboard is
EYS Seal-offs Installed? Check Valve?	Back flowing after shut down	made of wood and rotting, recommend replacing with uni strut. 3) Heavy corrosion on guide rails/lifting chains, recommend replacing. 4) Recommend pulling both pumps for repair and
Guide Rail System	Yes	inspection, Pump 1 is showing evidence of welling 5) No EYS connectors on conduit, recommend
Level Controls	Float Controlled	installing 6) The discharge pipe work is corroded, the check valves are leaking by and the gate
		valves are corroded, recommend replacing all discharge piping/valves up to the PVC force main
Emergency	No	and providing proper supports 7) The wet well hatch is damaged and the check valve lid is not
Back Up Generator?		hinged, recommend replacing both lids. 8) Recommend removing all electrical splices in the wet well and replacing all four floats 9) Recommend cutting off rebar lifting eyes around wet well, trip
Bypass	No	hazard 10) Recommend coating the wet well. 11) Recommend having one complete motor/pump
Controller/SCADA	Altronix	assembly on hand.
	Good	
Overall Station Condition	Describe	
Overall Station Condition	Operational	
	Poor	
Good: Equipment is insta	alled and working correctly and	
does not exhibit a need f	or replacement	Operational: Equipment is working, but unable to determine if it is working as engineered
Satisfactory: Equipment	-	<u>Poor:</u> Equipment appears to be failing and/or near failure
correctly but is slightly w	orn; no repairs needed	

APPENDIX F: EXHIBIT 1 Existing and Future CIPs











APPENDIX G: Sewer Model Results



0 1 2 6 7 10 12 13 14 15 16 17 18 19 20 21 22 22	30 30 30 24 24 54 42 42 42 42 42 42 42 42 42 4	30 30 30 24 24 54 42 42 42 42 42	0.59 0.66 0.74 0.54 0.58 0.56 0.43 0.31	0.57 0.64 0.73 0.56 0.61	0.81 0.67 0.76 0.56	0.61 0.63 0.67 0.59	
2 6 7 7 10 12 13 14 15 16 17 18 19 20 21 22	30 24 24 54 42 42 42 42 42 42 42 42 42 42	30 24 24 54 42 42 42	0.74 0.54 0.58 0.56 0.43	0.73 0.56 0.61	0.76 0.56	0.67	
6 7 10 12 13 14 15 16 17 18 19 20 21 22	24 24 54 42 42 42 42 42 42 42 42 42 42	24 24 54 42 42 42	0.54 0.58 0.56 0.43	0.56 0.61	0.56		
7 10 12 13 14 15 16 17 18 19 20 21 21	24 54 42 42 42 42 42 42 42 42 42 42	24 54 42 42 42 42	0.58 0.56 0.43	0.61			
12 13 14 15 16 17 18 19 20 21 22	42 42 42 42 42 42 42 42 42	42 42 42	0.43	0.61	0.61	0.64	
13 14 15 16 17 18 19 20 21 22	42 42 42 42 42 42 42 42	42 42			0.59	0.62	
14 15 16 17 18 19 20 21 22	42 42 42 42 42 42	42	0.31	0.44	0.45	0.46	
15 16 17 18 19 20 21 22	42 42 42 42 42 42			0.31	0.31	0.32	
16 17 18 19 20 21 22	42 42 42 42	42	0.29	0.29	0.29	0.30	
17 18 19 20 21 22	42 42 42	42	0.40 0.38	0.40 0.37	0.41 0.38	0.41 0.39	
18 19 20 21 22	42 42	42	0.36	0.35	0.36	0.37	
19 20 21 22	42	42	0.36	0.35	0.36	0.37	
21 22	40	42	0.35	0.35	0.36	0.37	
22	42	42	0.35	0.35	0.36	0.37	
	42	42	0.35	0.35	0.36	0.37	
	42	42	0.35	0.35	0.36	0.36	
23	42	42	0.35	0.34	0.36	0.36	
24 25	42	42 42	0.35	0.34	0.36	0.36	
26	42 42	42	0.35 0.28	0.34 0.28	0.35 0.29	0.36 0.29	
27	42	42	0.21	0.21	0.29	0.29	
28	42	42	0.29	0.29	0.30	0.22	
29	42	42	0.30	0.29	0.31	0.31	
30	42	42	0.54	0.59	0.59	0.61	
31	42	42	0.38	0.41	0.41	0.43	
33	18	18	0.78	0.50	0.86	0.69	
34	18	18	0.17	0.17	0.19	0.19	
35	18	18	0.21	0.21	0.25	0.25	
36 37	18	18	0.19	0.19	0.22	0.22	
38	18 18	18 18	0.18 0.16	0.18 0.16	0.21 0.19	0.21 0.19	
41	10	10	0.63	0.63	0.67	0.67	
42	10	10	0.21	0.21	0.29	0.29	
43	18	18	0.86	0.55	0.97	0.76	
46	18	18	0.77	0.49	0.84	0.68	
47	10	10	0.19	0.19	0.23	0.23	
48	18	18	0.74	0.48	0.81	0.66	
49	18	18	0.66	0.43	0.71	0.59	
50 51	18 18	18 18	0.70 0.72	0.46 0.47	0.76 0.78	0.62 0.64	
53	10	10	0.72	0.28	0.78	0.34	
54	10	10	0.30	0.30	0.36	0.36	
55	18	18	0.65	0.42	0.69	0.57	
56	18	18	0.64	0.41	0.69	0.56	
59	21	21	0.15	0.15	0.18	0.18	
62	21	21	0.15	0.15	0.19	0.19	
63	21	21	0.12	0.12	0.14	0.14	
66 70	21	21 21	0.11	0.11	0.13	0.13	
71	21 21	21	0.10 0.12	0.10 0.12	0.12 0.13	0.12 0.13	
73	21	21	0.12	0.12	0.13	0.13	
74	21	21	0.14	0.14	0.15	0.15	
77	21	21	0.08	0.08	0.08	0.08	
78	21	21	0.09	0.09	0.09	0.09	
80	18	18	0.13	0.13	0.14	0.14	
81	18	18	0.12	0.12	0.14	0.14	
82 83	18 18	18 18	0.79	0.50	0.88	0.69 0.70	
84	21	21	0.80 0.15	0.50 0.15	0.90 0.16	0.70	
87	21	21	0.15	0.09	0.10	0.10	
90	21	21	0.07	0.03	0.06	0.06	
91	21	21	0.06	0.06	0.05	0.05	
92	18	18	0.66	0.43	0.70	0.58	
93	18	18	0.53	0.36	0.56	0.47	
94	18	18	0.68	0.45	0.72	0.60	
95 96	24	24	0.41	0.48	0.52	0.51	
98	12 21	12 21	0.11 0.27	0.14 0.32	0.23 0.36	0.21 0.36	
99	24	24	0.41	0.48	0.52	0.52	
100	21	21	0.44	0.51	0.55	0.55	
101	10	10	0.28	0.40	0.48	0.46	
102	10	10	0.02	0.04	0.06	0.06	
103	21	21	0.34	0.40	0.43	0.42	
105	18	18	0.34	0.39	0.39	0.39	
106	33	33	0.31	0.33	0.31	0.34	
107 108	33	33	0.41	0.44	0.42	0.46	
108	33 33	33 33	0.38 0.38	0.41 0.41	0.38 0.38	0.42 0.43	
110	33	33	0.43	0.46	0.38	0.43	
111	33	33	0.38	0.42	0.39	0.43	
113	27	27	0.51	0.56	0.52	0.58	
114	27	27	0.48	0.53	0.49	0.55	
115	18	18	0.44	0.51	0.49	0.59	
116	18	18	0.36	0.43	0.41	0.48	
118	18	18	0.38	0.38	0.31	0.31	
119 123	18	18	0.39	0.39	0.32	0.32	
123	21 21	21 21	0.44 0.39	0.51 0.40	0.46 0.38	0.54 0.42	
124	21 21	21 21	0.39	0.40	0.38	0.42	
127	12	12	0.27	0.38	0.23	0.31	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
130	10	10	0.40	0.40	0.32	0.32	
131 134	10 15	10 15	0.39 0.34	0.39 0.34	0.31 0.30	0.31 0.30	
135	18	18	0.34	0.34	0.30	0.30	
136	18	18	0.33	0.33	0.29	0.29	
138	18	18	0.34	0.34	0.29	0.29	
139	15	15	0.38	0.38	0.35	0.35	
146	10	10	0.24	0.24	0.19	0.19	
147	10	10	0.09	0.09	0.07	0.07	
148 149	12 10	12 10	0.27 0.35	0.27 0.35	0.32 0.29	0.32 0.29	
150	10	10	0.33	0.43	0.29	0.37	
154	10	10	0.27	0.27	0.22	0.22	
156	12	12	0.33	0.33	0.27	0.27	
157	12	12	0.33	0.33	0.27	0.27	
158	12	12	0.27	0.27	0.29	0.29	
159	12	12	0.32	0.32	0.30	0.30	
162 164	12 24	12 24	0.47 0.48	0.47 0.53	0.42 0.49	0.42 0.55	
165	24	24	0.48	0.60	0.54	0.60	
166	24	24	0.58	0.66	0.59	0.67	
167	21	21	0.42	0.50	0.43	0.52	
168	21	21	0.66	0.74	0.66	0.75	
170	12	12	0.04	0.09	0.03	0.09	
172	21	21	0.51	0.60	0.56	0.66	
175	21	21	0.46	0.54	0.50	0.60	
176 177	18 21	18 21	0.59 0.37	0.67 0.42	0.64 0.40	0.71 0.50	
178	18	18	0.61	0.42	0.40	0.50	
179	15	15	0.31	0.38	0.36	0.44	
180	18	18	0.61	0.67	0.66	0.73	
181	18	18	0.59	0.65	0.64	0.71	
183	18	18	0.66	0.75	0.73	0.81	
185	18	18	0.57	0.72	0.63	0.77	
186 190	18	18	0.48	0.53	0.52	0.56 0.14	
190	15 15	15 15	0.11 0.16	0.11 0.16	0.14 0.21	0.14	
192	15	15	0.10	0.32	0.33	0.36	
194	18	18	0.42	0.47	0.45	0.49	
195	18	18	0.37	0.41	0.38	0.42	
196	18	18	0.46	0.52	0.46	0.53	
198	18	18	0.53	0.60	0.54	0.61	
199	18	18	0.73	0.75	0.73	0.76	
201 205	18 18	18 18	0.84	0.83	0.85	0.83	
206	18	18	0.63 0.43	0.62 0.43	0.63 0.42	0.61 0.42	
210	15	15	0.43	0.21	0.19	0.19	
211	15	15	0.27	0.30	0.29	0.37	
215	15	15	0.16	0.15	0.16	0.15	
218	15	15	0.17	0.17	0.17	0.17	
221	12	12	0.21	0.20	0.19	0.18	
223	12	12	0.19	0.18	0.16	0.16	
227 230	12 15	12 15	0.08 0.64	0.08 0.64	0.10 0.60	0.10 0.60	
233	15	15	0.62	0.62	0.60	0.60	
234	15	15	0.60	0.60	0.58	0.58	
235	15	15	0.52	0.52	0.49	0.49	
236	15	15	0.59	0.59	0.55	0.55	
237	15	15	0.66	0.66	0.63	0.63	
241 521	6	6	0.00	0.00	0.00	0.00	
0.1.1	8	8	0.00	0.00	0.00	0.00	
932	6	6 6	0.00	0.00	0.00	0.00	
244	15	15	0.58	0.58	0.55	0.55	
245	15	15	0.63	0.63	0.59	0.59	
1364	6	6	0.00	0.00	0.00	0.00	
247	15	15	0.66	0.66	0.62	0.62	
1367	8	8	0.00	0.00	0.00	0.00	
249 1288	15	15	0.63	0.63	0.58 0.05	0.58	
254	8 15	8 15	0.05 0.65	0.05 0.65	0.60	0.05 0.60	
255	15	15	0.60	0.60	0.56	0.56	
257	15	15	0.61	0.61	0.56	0.56	
258	15	15	0.64	0.64	0.60	0.60	
262	15	15	0.52	0.52	0.48	0.48	
263	12	12	0.19	0.19	0.17	0.16	
264	12	12	0.00	0.00	0.00	0.00	
265 266	21 21	21 21	0.46 0.46	0.51 0.50	0.57 0.56	0.57 0.56	
267	18	18	0.46	0.53	0.62	0.62	
269	18	18	0.49	0.49	0.57	0.57	
270	18	18	0.42	0.49	0.47	0.47	
271	18	18	0.41	0.50	0.46	0.46	
272	18	18	0.30	0.38	0.33	0.33	
273	15	15	0.34	0.34	0.29	0.29	
274	15	15	0.31	0.31	0.27	0.26	
477 276	8	8 15	0.06	0.06 0.43	0.05 0.36	0.05	
277	15 12	15 12	0.42 0.33	0.43	0.36	0.36 0.38	
278	12	12	0.35	0.35	0.42	0.42	

281 282 284 285 286 287 288 289	10 10 15	10			(exist pipe dia)	(proposed pipe dia)	
284 285 286 287 288			0.17	0.17	0.27	0.27	
285 286 287 288	10	10 15	0.16 0.27	0.16 0.26	0.24 0.39	0.24 0.36	
286 287 288	15	15	0.27	0.20	0.33	0.30	
288	30	30	0.32	0.55	0.39	0.52	
	30	30	0.34	0.34	0.41	0.38	
289	30	30	0.32	0.47	0.38	0.46	
	30	30	0.34	0.40	0.41	0.42	
290	30	30	0.34	0.34	0.42	0.39	
291 292	30 30	30 30	0.34 0.34	0.34 0.34	0.42 0.41	0.39 0.39	
293	30	30	0.36	0.36	0.41	0.39	
294	30	30	0.36	0.36	0.44	0.41	
295	30	30	0.35	0.35	0.43	0.40	
296	30	30	0.32	0.32	0.40	0.37	
301	24	24	0.28	0.28	0.33	0.33	
302	24	24	0.33	0.33	0.38	0.38	
303	24	24	0.31	0.31	0.37	0.37	
305 308	10 24	10 24	0.20 0.61	0.20	0.16 0.64	0.16 0.67	
309	18	18	0.64	0.63 0.67	0.68	0.67	
311	10	10	0.16	0.15	0.00	0.18	
312	10	10	0.01	0.01	0.01	0.01	
502	8	8	0.08	0.07	1.00	0.09	
315	10	10	0.00	0.00	0.00	0.00	
925	6	6	0.07	0.07	0.06	0.06	
653	15	18	0.69	0.46	0.57	0.39	CESAR CHAVEZ PARK
645	15	18	0.68	0.58	0.56	0.52	CESAR CHAVEZ PARK
652	15	18	0.71	0.47	0.59	0.40	CESAR CHAVEZ PARK
651 656	15	18	0.74	0.48	0.61	0.41	CESAR CHAVEZ PARK
656 649	15 15	18 18	0.83 0.80	0.52 0.51	0.65 0.64	0.44 0.43	CESAR CHAVEZ PARK CESAR CHAVEZ PARK
650	15	18	0.80	0.52	0.65	0.43	CESAR CHAVEZ PARK CESAR CHAVEZ PARK
890	15	18	1.00	0.56	0.70	0.47	CESAR CHAVEZ PARK
319	21	24	0.39	0.29	0.34	0.25	CESAR CHAVEZ PARK
320	21	24	0.68	0.43	0.50	0.37	CESAR CHAVEZ PARK
317	21	24	1.00	0.59	0.70	0.50	CESAR CHAVEZ PARK
318	21	24	1.00	0.59	0.70	0.50	CESAR CHAVEZ PARK
321	21	24	1.00	0.59	0.71	0.50	CESAR CHAVEZ PARK
322	21	24	1.00	0.60	0.72	0.51	CESAR CHAVEZ PARK
323 332	21 30	24 30	1.00	0.61	0.73 0.43	0.51	CESAR CHAVEZ PARK
333	30	30	0.36 0.35	0.61 0.59	0.43	0.58 0.56	
334	30	30	0.32	0.54	0.43	0.50	
335	30	30	0.40	0.67	0.48	0.64	
324	21	24	1.00	0.61	0.74	0.51	CESAR CHAVEZ PARK
340	21	21	0.33	0.31	0.41	0.36	
341	21	21	0.42	0.38	0.56	0.49	
342	15	18	0.84	0.54	0.99	0.73	NATIVIDAD RD OR ALTERNATIVE
343 344	15	18	0.79	0.46 0.39	1.00	0.63	NATIVIDAD RD OR ALTERNATIVE
345	15 15	18 18	0.65 0.65	0.38	1.00 1.00	0.52 0.52	NATIVIDAD RD OR ALTERNATIVE NATIVIDAD RD OR ALTERNATIVE
346	15	18	0.65	0.38	1.00	0.52	NATIVIDAD RD OR ALTERNATIVE
673	8	8	0.08	0.08	0.07	0.07	TWITTE TO STORE STATE ST
349	15	15	0.17	0.16	0.22	0.20	
350	10	10	0.24	0.22	0.32	0.27	
351	15	15	0.19	0.17	0.24	0.21	
352	15	15	0.00	0.00	0.00	0.00	
353 354	15 36	15 36	0.00 0.42	0.00 0.41	0.00 0.51	0.00 0.51	
355	36 21	36 21	0.42	0.41	0.51	0.51	
356	24	24	0.81	0.76	0.81	0.81	
357	12	12	1.00	1.00	1.00	1.00	
758	8	8	0.10	0.10	0.16	0.16	
360	48	48	0.44	0.46	0.48	0.52	
361	54	54	0.59	0.61	0.63	0.66	
362	54	54	0.51	0.57	0.56	0.60	
363	24	24	1.00	1.00	1.00	1.00	
364 365	27 36	27 36	0.96 0.78	1.00 0.89	1.00 0.85	1.00 0.92	
366	54	54	0.65	0.72	0.70	0.92	
367	54	54	0.61	0.69	0.66	0.70	
368	54	54	0.64	0.71	0.69	0.72	
369	54	54	0.61	0.68	0.66	0.70	
370	54	54	0.60	0.66	0.64	0.68	
371	54	54	0.60	0.66	0.64	0.68	
372	54	54	0.60	0.66	0.64	0.68	
373 374	54	54	0.60	0.66	0.64	0.68	
374	54 54	54 54	0.59 0.59	0.66 0.66	0.64 0.64	0.67 0.67	
376	54 54	54 54	0.59	0.65	0.63	0.67	
377	54 54	54 54	0.58	0.64	0.62	0.66	
378	54	54	0.57	0.63	0.62	0.64	
379	54	54	0.56	0.62	0.60	0.63	
380	54	54	0.56	0.61	0.60	0.63	
381	54	54	0.58	0.63	0.62	0.65	
382	54	54	0.56	0.62	0.60	0.63	
250	6	6	0.11	0.11	0.12	0.12	
384	30	30	0.39	0.40	0.41	0.45	
385 559	30 8	30 8	0.52 0.12	0.54 0.12	0.53 0.09	0.56 0.09	

309	Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
GOD	392	12	12	0.15	0.15	0.18	0.18	
Color								
1.00								
ADD 28								
1.55								
460				0.31		0.37	0.37	
100								
100								
## ## ## ## ## ## ## ## ## ## ## ## ##								
326								
328 21								CESAR CHAVEZ PARK
1412								CESAR CHAVEZ PARK
419								CESAR CHAVEZ PARK
423	419		10		0.23			
426								
426								
468								
430								
1932 12								
438								
435								
442	435		12	0.29	0.29	0.40	0.40	
447								
448								
449								
453								
456								
469								
461	459							
466	461	12	12	0.19	0.19	0.21	0.21	
467								
469								
471								
471 30 30 0.16 0.26 0.20 0.25								
990 8 8 8 0.23 0.13 0.30 0.19 1285 8 8 0.12 0.12 0.16 0.16 0.16 478 10 10 10 0.10 0.10 0.10 0.12 0.12 480 18 18 0.28 0.25 0.44 0.45 482 48 48 48 0.61 0.60 0.67 0.68 485 48 12 12 12 0.48 0.62 0.73 0.78 486 12 12 12 0.39 0.43 0.60 0.64 487 18 18 0.87 0.39 0.43 0.60 0.64 487 18 18 0.87 0.39 0.43 0.60 0.64 487 18 18 0.8 0.27 0.29 0.38 0.40 487 18 18 0.8 0.27 0.29 0.38 0.40 487 18 18 0.27 0.29 0.38 0.40 489 18 18 0.40 0.40 0.46 0.55 0.61 491 18 18 0.40 0.40 0.46 0.55 0.62 492 18 18 18 0.41 0.46 0.55 0.62 492 18 18 18 0.41 0.46 0.55 0.62 493 18 18 0.41 0.46 0.55 0.62 494 12 12 12 0.63 0.52 1.00 0.75 495 18 18 0.41 0.46 0.55 0.62 497 12 12 12 0.63 0.62 0.77 498 12 12 12 0.63 0.62 0.77 498 12 12 12 0.57 0.44 1.00 0.68 18 18 18 0.41 0.46 0.55 0.62 497 12 12 12 0.57 0.48 1.00 0.68 18 18 18 0.41 0.47 0.55 0.62 498 12 12 12 0.57 0.48 1.00 0.68 18 18 18 0.41 0.46 0.55 0.62 498 12 12 12 0.57 0.48 1.00 0.68 198 198 199 0.41 0.40 0.66 0.55 0.62 498 12 12 12 0.57 0.48 1.00 0.68 198 198 199 0.41 0.40 0.66 0.55 0.62 498 12 12 12 0.57 0.48 1.00 0.68 199 0.48 1.00 0.68 0.41 0.00 0.68 199 0.48 1.00 0.68 0.41 0.00 0.68 199 0.48 1.00 0.68 0.41 0.00 0.68 199 0.49 0.40 0.40 0.60 0.60 0.60 0.60 0.60 0.60								
1285 8								
478								
482 48 48 0.61 0.60 0.67 0.68 483 48 0.69 0.68 0.77 0.78 485 12 12 0.48 0.52 0.73 0.78 486 12 12 0.29 0.38 0.40 0.64 487 18 18 0.27 0.29 0.38 0.40 487 18 18 0.40 0.40 0.00 0.64 489 18 18 0.40 0.46 0.54 0.61 490 12 12 12 0.62 0.51 1.00 0.74 491 18 18 0.40 0.46 0.55 0.62 491 18 18 0.41 0.46 0.55 0.62 484 12 12 12 0.63 0.52 1.00 0.75 495 18 18 18 0.41 0.47 0.55 0.62 <td>478</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	478							
483 48 48 0.69 0.88 0.77 0.78 485 12 12 0.48 0.52 0.73 0.78 486 12 12 0.39 0.43 0.60 0.64 487 18 18 0.27 0.29 0.38 0.40 977 12 115 0.37 0.23 1.00 0.31 NATIVIDAD RD OR ALT 489 18 18 0.40 0.46 0.54 0.61 490 12 12 0.62 0.51 1.00 0.74 491 18 18 0.42 0.47 0.57 0.64 492 18 18 0.41 0.46 0.55 0.62 484 12 12 12 0.63 0.52 1.00 0.75 485 18 18 0.41 0.47 0.55 0.62 0.62 486 12 12 0.2 0.51		18	18	0.28	0.25	0.44		
488 12 12 0.48 0.52 0.73 0.78 487 18 18 18 0.27 0.29 0.38 0.40 977 12 15 0.37 0.23 1.00 0.31 NATIVIDAD RD OR ALT 489 18 18 18 0.40 0.46 0.54 0.61 NATIVIDAD RD OR ALT 490 12 12 0.62 0.51 1.00 0.74 491 18 18 18 0.42 0.47 0.57 0.64 492 18 18 18 0.41 0.46 0.555 0.62 494 12 12 0.63 0.52 1.00 0.75 495 18 18 18 0.41 0.47 0.55 0.62 497 12 12 0.51 0.44 1.00 0.61 497 12 12 0.5 0.62 0.62 497 12								
488 12 12 0.39 0.43 0.60 0.64 487 18 18 0.27 0.29 0.38 0.40 977 12 15 0.37 0.23 1.00 0.31 NATIVIDAD RD OR ALT 489 18 18 0.40 0.46 0.54 0.61 490 12 12 0.62 0.51 1.00 0.74 491 18 18 0.42 0.47 0.57 0.64 492 18 18 0.41 0.46 0.55 0.62 494 12 12 0.63 0.52 1.00 0.75 495 18 18 18 0.41 0.47 0.55 0.62 497 12 12 0.51 0.44 1.00 0.61 498 12 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD R ALT 500 12 15 0								
487 18 18 0.27 0.29 0.38 0.40 PATIVIDAD R ALT 977 12 15 0.37 0.23 1.00 0.31 NATIVIDAD RD OR ALT 489 18 18 0.40 0.46 0.54 0.61 491 18 18 0.42 0.47 0.57 0.64 491 18 18 0.42 0.47 0.57 0.64 492 18 18 0.41 0.46 0.55 0.62 494 12 12 0.63 0.52 1.00 0.75 495 18 18 0.41 0.46 0.55 0.62 496 18 18 0.41 0.46 0.55 0.62 497 12 12 0.51 0.44 1.00 0.68 497 12 12 0.57 0.48 1.00 0.68 498 12 12 0.57 0.48								
977 12 15 0.37 0.23 1.00 0.31 NATIVIDAD RD OR ALT 489 18 18 0.40 0.46 0.54 0.61 1.00 1.74 181 18 0.42 0.62 0.51 1.00 0.74 181 18 18 0.42 0.47 0.57 0.64 181 18 18 0.41 0.46 0.55 0.62 1.00 0.75 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0								
489 18 18 0.40 0.46 0.54 0.61 490 12 12 0.62 0.51 1.00 0.74 491 18 18 0.42 0.47 0.57 0.64 491 18 18 0.41 0.46 0.55 0.62 494 12 12 16.3 0.52 1.00 0.75 496 18 18 0.41 0.46 0.55 0.62 496 18 18 0.41 0.46 0.55 0.62 497 12 12 0.51 0.44 1.00 0.61 498 12 12 0.57 0.48 1.00 0.68 500 12 15 0.90 0.48 1.00 0.68 NATIVIDAD RD OR ALT 501 12 15 0.90 0.48 1.00 0.68 NATIVIDAD RD OR ALT 501 12 15 0.93 0.44								NATIVIDAD RD OR ALTERNATIVE
491								
492 18 18 18 0.41 0.46 0.55 0.62 494 12 12 0.63 0.52 1.00 0.75 495 18 18 18 0.41 0.47 0.55 0.62 497 12 12 12 0.51 0.44 1.00 0.61 497 12 12 12 0.57 0.48 1.00 0.68 497 12 12 12 0.57 0.48 1.00 0.68 497 12 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 500 12 15 0.72 0.52 1.00 0.47 NATIVIDAD RD OR ALT 12 12 15 0.72 0.52 1.00 0.47 NATIVIDAD RD OR ALT 12 12 12 12 12 12 12 13 0.13 13 13 13 13 13 13 13 13 14 14 14 14 14 14								
494 12 12 0.63 0.52 1.00 0.75 496 18 18 0.41 0.47 0.55 0.62 497 12 12 0.51 0.44 1.00 0.61 497 12 12 0.51 0.44 1.00 0.68 500 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 501 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 501 12 15 0.90 0.48 1.00 0.47 NATIVIDAD RD OR ALT 501 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 242 8 8 0.12 0.12 0.13 0.13 505 18 18 0.42 0.48 0.57 0.63 506 18 18 0.48 0.54 0.65 0.74 474 8								
495 18 18 0.41 0.47 0.55 0.62 496 18 18 0.41 0.46 0.55 0.62 497 12 12 12 0.51 0.44 1.00 0.61 498 12 12 0.57 0.48 1.00 0.68 500 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 501 12 15 0.90 0.48 1.00 0.47 NATIVIDAD RD OR ALT 501 12 15 0.72 0.32 1.00 0.47 NATIVIDAD RD OR ALT 504 12 12 0.53 0.46 1.00 0.63 0.63 505 18 18 18 0.42 0.48 0.57 0.63 506 18 18 18 0.48 0.54 0.65 0.74 474 8 8 0.12 0.12 0.12 0.16 <								
496 18 18 0.41 0.46 0.55 0.62 497 12 12 0.51 0.44 1.00 0.61 498 12 12 0.57 0.48 1.00 0.68 500 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 501 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 242 8 8 0.12 0.12 0.13 0.13 504 12 12 0.53 0.46 1.00 0.63 505 18 18 0.42 0.48 0.57 0.63 506 18 18 0.42 0.48 0.57 0.63 506 18 18 18 0.48 0.54 0.65 474 8 8 0.12 0.12 0.12 0.16 510 21 21 21 0.44 0.50								
497 12 12 0.51 0.44 1.00 0.61 498 12 12 0.57 0.48 1.00 0.68 500 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 501 12 15 0.72 0.32 1.00 0.47 NATIVIDAD RD OR ALT 501 12 15 0.72 0.32 1.00 0.47 NATIVIDAD RD OR ALT 504 12 12 0.53 0.46 1.00 0.63 505 18 18 0.42 0.48 0.57 0.63 506 18 18 0.42 0.48 0.57 0.63 506 18 18 0.42 0.48 0.57 0.63 506 18 18 0.48 0.54 0.65 0.74 474 8 8 0.12 0.12 0.12 0.16 0.16 510 21 21<								
498 12 12 0.57 0.48 1.00 0.68 NATIVIDAD RD OR ALT 500 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RD OR ALT 501 12 15 0.72 0.32 1.00 0.47 NATIVIDAD RD OR ALT 242 8 8 0.12 0.12 0.13 0.13 0.13 504 12 12 0.53 0.46 1.00 0.63 505 18 18 0.42 0.48 0.57 0.63 506 18 18 0.42 0.48 0.57 0.65 506 18 18 0.42 0.48 0.57 0.65 506 18 18 0.42 0.48 0.57 0.65 510 21 21 0.16 0.16 0.16 510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.44<								
500 12 15 0.90 0.48 1.00 0.66 NATIVIDAD RO OR ALT 501 112 15 0.72 0.32 1.00 0.47 NATIVIDAD RO OR ALT 242 8 8 0.12 0.12 0.13 0.13 504 12 12 0.53 0.46 1.00 0.63 505 18 18 18 0.42 0.48 0.57 0.63 506 18 18 18 0.42 0.48 0.57 0.63 506 18 18 0.48 0.54 0.65 0.74 474 8 8 0.12 0.12 0.16 0.16 510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.44 0.50 0.60 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.4								
501 12 15 0.72 0.32 1.00 0.47 NATIVIDAD RD OR ALT 242 8 8 0.12 0.12 0.13 0.13 504 12 12 0.53 0.46 1.00 0.63 505 18 18 0.42 0.48 0.57 0.63 506 18 18 0.48 0.57 0.63 506 18 18 0.48 0.57 0.63 507 0.63 0.66 0.74 0.66 0.74 474 8 8 0.12 0.12 0.16 0.16 510 21 21 0.44 0.50 0.68 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.47 0.53 0.66 0.74 514 10			15	0.90				NATIVIDAD RD OR ALTERNATIVE
504 12 12 0.53 0.46 1.00 0.63 505 18 18 18 0.42 0.48 0.57 0.63 506 18 18 18 0.48 0.54 0.65 0.74 474 8 8 8 0.12 0.12 0.16 0.16 510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74	501	12	15	0.72	0.32	1.00	0.47	NATIVIDAD RD OR ALTERNATIVE
505 18 18 0.42 0.48 0.57 0.63 506 18 18 0.48 0.54 0.65 0.74 474 8 8 8 0.12 0.12 0.16 0.16 510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 8 0.13 0.13 0.20								
506 18 18 0.48 0.54 0.65 0.74 474 8 8 0.12 0.12 0.16 0.16 510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 8 0.13 0.13 0.20 0.20								
474 8 8 0.12 0.12 0.16 0.16 510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56								
510 21 21 0.44 0.50 0.60 0.68 511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.34 0.60 0.42 0.57 531								
511 21 21 0.46 0.52 0.63 0.71 512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 518 10 10 0.00 0.50 0.07 0.50 518 10 10 0.00 0.50 0.07 0.50 759 8 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.34 0.60 0.42 0.57								
512 21 21 0.47 0.53 0.66 0.74 513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 523 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.29 0.37 0.32 0.32 535								
513 21 21 0.48 0.54 0.70 0.80 514 10 10 0.03 0.03 0.03 0.03 516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 523 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17	512		21	0.47	0.53	0.66	0.74	
516 21 21 0.60 0.64 0.83 0.89 517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.29 0.37 0.32 0.32 532 18 18 0.29 0.24 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538		21	21		0.54	0.70	0.80	
517 21 21 0.54 0.55 0.74 0.78 518 10 10 0.00 0.50 0.07 0.50 759 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 244								
518 10 10 0.00 0.50 0.07 0.50 759 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 544 10 10 0.42 0.15 0.44 0.22 544								
759 8 8 0.13 0.13 0.20 0.20 522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547								
522 30 30 0.35 0.58 0.42 0.56 523 30 30 0.35 0.59 0.43 0.56 525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15								
523 30 30 0.35 0.59 0.43 0.56 525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51								
525 30 30 0.34 0.60 0.42 0.57 531 18 18 0.29 0.37 0.32 0.32 532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
532 18 18 0.22 0.28 0.24 0.24 535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22	525	30	30	0.34	0.60	0.42	0.57	
535 10 10 0.36 0.13 0.38 0.17 536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
536 10 10 0.44 0.16 0.46 0.21 538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
538 10 10 0.47 0.17 0.50 0.22 544 10 10 0.42 0.15 0.44 0.20 248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
544 10 10 0.42 0.15 0.44 0.20 248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
248 6 6 0.14 0.14 0.15 0.15 546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.50 549 24 24 0.17 0.18 0.22 0.22								
546 54 54 0.52 0.57 0.56 0.59 547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
547 24 24 0.14 0.14 0.15 0.15 548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22								
548 48 48 0.46 0.50 0.50 0.51 549 24 24 0.17 0.18 0.22 0.22	547	24	24	0.14	0.14	0.15	0.15	
		48	48		0.50	0.50	0.51	
552 48 48 0.40 0.44 0.44 0.45 553 54 54 0.50 0.54 0.53 0.56								

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
554	48	48	0.49	0.54	0.53	0.55	
555	18	18	0.26	0.18	0.27	0.23	
556 557	18 27	18 27	0.38 0.07	0.35 0.07	0.39 0.08	0.39 0.08	
1338	8	8	0.07	0.14	0.08	0.08	
560	21	21	0.36	0.36	0.41	0.41	
561	21	21	0.29	0.29	0.34	0.34	
563	21	21	0.26	0.26	0.29	0.29	
564	21	21	0.30	0.30	0.34	0.34	
565	21	21	0.30	0.30	0.35	0.35	
566	21	21	0.30	0.30	0.34	0.34	
567	21	21	0.34	0.34	0.39	0.39	
569	21	21	0.32	0.32	0.37	0.37	
570	21	21	0.27	0.27	0.31	0.31	
571	21	21	0.30	0.30	0.35	0.35	
572	21	21	0.30	0.30	0.34	0.34	05045 0141/57 5451/
411 575	24	27	0.74	0.57	0.64	0.48	CESAR CHAVEZ PARK
577	30	30	0.35 0.29	0.59	0.43	0.57	
578	30 30	30 30	0.29	0.29 0.26	0.34 0.31	0.32 0.29	
579	30	30	0.20	0.20	0.38	0.29	
580	30	30	0.34	0.34	0.41	0.38	
581	27	27	0.34	0.34	0.42	0.39	
582	21	21	0.35	0.35	0.42	0.39	
583	27	27	0.31	0.31	0.38	0.35	
584	27	27	0.24	0.24	0.30	0.27	
586	27	27	0.22	0.22	0.27	0.25	
587	27	27	0.29	0.29	0.35	0.32	
588	24	24	0.31	0.31	0.38	0.35	
589	24	24	0.33	0.33	0.41	0.37	
591	24	24	0.31	0.31	0.39	0.35	
592	24	24	0.32	0.32	0.39	0.36	
594	10	10	0.66	0.68	0.73	0.82	
595	10	10	0.14	0.14	0.22	0.22	
596 601	30	30	0.61	0.63	0.62	0.66	
606	30	30	0.63	0.65	0.65	0.69	
607	30 30	30 30	0.62 0.67	0.64 0.69	0.64 0.69	0.68 0.73	
609	30	30	0.67	0.73	0.73	0.73	
612	30	30	0.68	0.73	0.70	0.74	
615	30	30	0.70	0.72	0.72	0.77	
619	24	24	0.57	0.59	0.60	0.63	
623	27	27	0.12	0.12	0.15	0.15	
626	27	27	0.12	0.12	0.15	0.15	
627	27	27	0.11	0.11	0.15	0.15	
629	27	27	0.13	0.13	0.17	0.17	
631	27	27	0.15	0.15	0.19	0.19	
633	27	27	0.14	0.14	0.18	0.18	
636	27	27	0.14	0.14	0.17	0.17	
639	15	15	0.40	0.40	0.50	0.50	
923	6	6	0.14	0.14	0.13	0.13	
331	24	27	0.78	0.59	0.67	0.50	CESAR CHAVEZ PARK
330	24	27	0.80	0.59	0.68	0.50	CESAR CHAVEZ PARK
329 410	24	27	0.81	0.59	0.68	0.50	CESAR CHAVEZ PARK
	24	27	0.84	0.60	0.69	0.51	CESAR CHAVEZ PARK
338 328	24 24	27 27	0.83 0.83	0.48 0.60	0.69 0.69	0.41 0.51	CESAR CHAVEZ PARK
658	24	24	0.83	0.60	0.69	0.38	CESAR CHAVEZ PARK
659	24	24	0.30	0.30	0.42	0.36	
660	24	24	0.36	0.26	0.33	0.33	
662	24	24	0.26	0.26	0.33	0.33	
665	18	18	0.36	0.36	0.45	0.45	
666	48	48	0.56	0.55	0.62	0.62	
667	48	48	0.55	0.54	0.58	0.57	
669	15	15	0.21	0.20	0.29	0.27	
671	15	15	0.26	0.25	0.37	0.35	
246	6	6	0.15	0.15	0.16	0.16	
675	48	48	0.66	0.65	0.70	0.70	
677	48	48	0.59	0.58	0.64	0.63	
682	15	15	0.27	0.26	0.38	0.36	
686	12	12	0.34	0.39	0.43	0.49	
687	15	15	0.31	0.41	0.51	0.68	
688	15	15	0.24	0.32	0.39	0.52	
240 1186	<u>8</u> 8	<u>8</u> 8	0.18 0.20	0.18 0.20	0.19 0.16	0.19 0.16	
723	8	8	0.20	0.20	0.16 0.24	0.16 0.24	
864	8	8	0.21	0.21	0.24	0.24	
726	8	8	0.23	0.23	0.20	0.20	
917	8	8	0.23	0.23	0.28	0.20	
760	8	8	0.24	0.24	0.33	0.20	
705	12	12	0.24	0.39	0.17	0.55	
707	12	12	0.11	0.45	0.17	0.64	
709	12	12	0.12	0.44	0.15	0.63	
711	12	12	0.14	0.52	0.18	0.71	
712	12	12	0.03	0.41	0.04	0.58	
713	12	12	0.08	0.47	0.12	0.66	
	8	8	0.01	0.01	0.01	0.01	
1456					0.67	0.30	
1456 545	8	8	0.63	0.24	0.07	0.30	
	8 8	8 8	0.63	0.24	0.07	0.30	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
729	12	12	0.15	0.15	0.12	0.12	
732 734	12 14	12 14	0.29 0.21	0.29 0.21	0.25 0.17	0.25 0.17	
735	12	12	0.35	0.35	0.17	0.17	
738	12	12	0.37	0.37	0.30	0.30	
743	12	12	0.32	0.32	0.26	0.26	
744	15	15	0.29	0.29	0.24	0.24	
749	15	15	0.33	0.33	0.29	0.29	
751	15	15	0.35	0.35	0.32	0.32	
753	18	18	0.21	0.21	0.22	0.22	
756	18	18	0.38	0.38	0.42	0.42	
757 387	15 8	15 8	0.26 0.07	0.25 0.07	0.37 0.08	0.35 0.08	
1363	8	8	0.33	0.32	0.29	0.00	
778	6	6	0.28	0.28	0.34	0.34	
761	15	15	0.25	0.24	0.37	0.34	
762	48	48	0.59	0.58	0.64	0.63	
763	24	24	0.17	0.15	0.27	0.25	
764	48	48	0.60	0.59	0.65	0.64	
766	48	48	0.50	0.49	0.55	0.54	
855	8	8	0.28	0.28	0.24	0.24	
1358 769	8	8	1.00	0.29	1.00	0.38	
770	24 12	24 12	0.15 0.09	0.14 0.09	0.21 0.16	0.20	
771	24	24	0.09	0.09	0.16	0.15 0.27	
772	15	15	0.00	0.00	0.00	0.00	
1354	8	8	0.86	0.29	0.88	0.38	
1453	8	8	0.18	0.18	0.23	0.23	
CDT_33	8	8	0.24	0.30	0.20	0.24	
239	8	8	0.30	0.30	0.28	0.28	
CDT_19	8	8	0.30	0.30	0.49	0.49	
1428 779	8 12	8 12	0.41 0.28	0.41 0.28	0.52 0.40	0.52 0.40	
783	12	12	0.28	0.28	0.40	0.40	
785	14	14	0.23	0.23	0.28	0.28	
787	12	12	0.25	0.25	0.30	0.30	
788	12	12	0.26	0.26	0.31	0.31	
789	18	18	0.43	0.43	0.47	0.47	
792	14	14	0.13	0.13	0.16	0.16	
795	18	18	0.38	0.38	0.43	0.43	
796	18	18	0.37	0.37	0.42	0.42	
800 801	18	18	0.40	0.40	0.46	0.46	
802	18 18	18 18	0.48 0.44	0.48 0.44	0.54 0.49	0.54 0.49	
804	18	18	0.40	0.40	0.45	0.45	
805	18	18	0.39	0.39	0.44	0.44	
807	18	18	0.27	0.27	0.31	0.31	
808	18	18	0.34	0.34	0.40	0.40	
809	12	12	0.70	0.70	0.84	0.84	
810	18	18	0.53	0.53	0.61	0.61	
811 814	15 18	15 18	0.30 0.44	0.30	0.37 0.51	0.37 0.51	
815	21	21	0.38	0.44 0.38	0.51	0.44	
818	18	18	0.49	0.49	0.58	0.58	
819	18	18	0.45	0.45	0.53	0.53	
821	15	15	0.38	0.38	0.61	0.61	
824	15	15	0.73	0.73	0.87	0.87	
825	15	15	0.56	0.56	0.66	0.66	
828	21	21	0.34	0.34	0.39	0.39	
831 834	21 21	21 21	0.42 0.54	0.42 0.54	0.49 0.62	0.49 0.62	
835	24	24	0.34	0.34	0.82	0.39	
838	24	24	0.34	0.34	0.39	0.39	
843	21	21	0.52	0.57	0.64	0.64	
846	21	21	0.46	0.53	0.56	0.56	
847	12	12	0.17	0.17	0.21	0.21	
848	21	21	0.40	0.45	0.48	0.48	
850	21	21	0.45	0.50	0.55	0.55	
851 852	21 15	21 15	0.36 0.44	0.40 0.44	0.44 0.38	0.44 0.37	
853	15	15	0.32	0.32	0.38	0.37	
1402	8	8	0.38	0.38	0.49	0.49	
1454	8	8	0.14	0.14	0.18	0.18	
1369	8	12	0.86	0.32	1.00	0.43	LAUREL DR/N MAIN ST
863	15	15	0.32	0.32	0.28	0.28	
1327	8	12	1.00	0.32	1.00	0.44	LAUREL DR/N MAIN ST
867	10	10	0.11	0.11	0.10	0.10	
869 872	10 12	10 12	0.17	0.17	0.15 0.41	0.15 0.41	
874	12	12	0.33 0.32	0.33 0.32	0.41	0.41	
875	12	12	0.32	0.32	0.41	0.40	
878	12	12	0.20	0.20	0.40	0.40	
880	18	18	0.15	0.15	0.19	0.19	
881	18	18	0.21	0.21	0.26	0.26	
882	15	15	0.35	0.35	0.30	0.30	
886	15	15	0.24	0.24	0.21	0.20	
888	12	12	0.40	0.40	0.34	0.34	
889	15	15	0.17	0.17	0.15	0.15	CESAR CHAVEZ DARK
327 891	24 14	27 15	0.85 0.67	0.62 0.47	0.71 0.55	0.52 0.40	CESAR CHAVEZ PARK
	14	ເບ	0.07	0.47	0.55	0.40	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
893	10	10	0.50	0.50	0.43	0.43	
894	10	10	0.17	0.17	0.14	0.14	
896	12	12	0.05	0.05	0.05	0.05	
897	15	15	0.75	0.49	0.51	0.42	
899	12	12	0.15	0.15	0.14	0.14	
903	15	15	0.49	0.49	0.42	0.42	
316	8	8	0.36	0.34	0.82	0.42	
1401	8	8	0.42	0.42	0.54	0.54	
908	15	15	0.38	0.38	0.33	0.33	
911	15	15	0.52	0.52	0.46	0.46	
912	15	15	0.50	0.50	0.44	0.44	
777	8	8	0.38	0.34	1.00	0.44	
1356	8	8	0.36	0.34	1.00	0.48	
920	12	12	0.04	0.04	0.03	0.03	
921	15	15	0.45	0.45	0.38	0.38	
922	15	15	0.36	0.36	0.31	0.31	
1372	8	12	0.69	0.34	1.00	0.46	LAUREL DR/N MAIN ST
924	15	15	0.30	0.30	0.26	0.26	
776	8	8	0.37	0.34	1.00	0.44	
928	15	15	0.21	0.21	0.18	0.18	
929	15	15	0.25	0.25	0.22	0.22	
931	15	15	0.34	0.34	0.30	0.30	
1452							
933	8	8	0.26	0.26	0.32	0.32	
935	15 18	15	0.15	0.15	0.13	0.13	
		18	0.45	0.30	0.45	0.30	
936	18	18	0.44	0.33	0.45	0.34	
940	18	18	0.52	0.41	0.55	0.44	
945	18	18	0.48	0.37	0.52	0.41	
946	18	18	0.58	0.46	0.62	0.51	
948	18	18	0.57	0.45	0.62	0.50	
949	10	12	0.46	0.31	0.51	0.36	0.00
950	18	12	0.14	0.14	0.16	0.18	
951	18	18	0.15	0.09	0.17	0.12	
953	18	18	0.46	0.37	0.50	0.41	
955	18	18	0.61	0.49	0.67	0.55	
956	18	18	0.42	0.33	0.46	0.37	
957	18	18	0.54	0.43	0.60	0.49	
1403	8	8	0.44	0.44	0.56	0.56	
963	10	12	0.35	0.28	0.46	0.37	0.00
1425	8	8	0.45	0.45	0.58	0.58	
967	10	10	0.73	0.61	0.81	0.70	
968	10	10	0.43	0.37	0.47	0.42	
969	18	18	0.89	0.56	1.00	0.78	
970	18	18	0.90	0.56	1.00	0.79	
971	18	18	0.87	0.51	1.00	0.75	
973	18	18	0.79	0.44	1.00	0.67	
974	18	18		0.48		0.70	
978			0.81		1.00		NATIVIDAD DD OD ALTEDNATIVE
	12	15	0.49	0.33	1.00	0.42	NATIVIDAD RD OR ALTERNATIVE
979	12	15	0.42	0.28	1.00	0.36	NATIVIDAD RD OR ALTERNATIVE
984	12	15	0.43	0.29	1.00	0.37	NATIVIDAD RD OR ALTERNATIVE
1012	12	15	0.58	0.37	1.00	0.49	NATIVIDAD RD OR ALTERNATIVE
1013	12	15	0.67	0.42	1.00	0.57	NATIVIDAD RD OR ALTERNATIVE
1386	12	15	0.81	0.46	1.00	0.63	NATIVIDAD RD OR ALTERNATIVE
1389	12	15	0.82	0.49	1.00	0.68	NATIVIDAD RD OR ALTERNATIVE
488	15	18	0.78	0.44	0.85	0.59	NATIVIDAD RD OR ALTERNATIVE
985	15	18	0.65	0.49	1.00	0.64	NATIVIDAD RD OR ALTERNATIVE
986	15	18	0.66	0.48	1.00	0.66	NATIVIDAD RD OR ALTERNATIVE
988	15	18	0.73	0.53	1.00	0.72	NATIVIDAD RD OR ALTERNATIVE
989	15	18	0.72	0.52	1.00	0.71	NATIVIDAD RD OR ALTERNATIVE
995	18	18	0.28	0.28	0.35	0.35	
996	18	18	0.38	0.38	0.48	0.48	
998	18	18	0.22	0.22	0.29	0.29	
1000	18	18	0.13	0.13	0.18	0.18	
990	15	18	0.69	0.52	1.00	0.70	NATIVIDAD RD OR ALTERNATIVE
1003	12	12	0.58	0.41	1.00	0.57	
1004	12	12	0.64	0.47	1.00	0.67	
992	15	18	0.04	0.56	1.00	0.75	NATIVIDAD RD OR ALTERNATIVE
993	15	18	0.74	0.53	1.00	0.73	NATIVIDAD RD OR ALTERNATIVE
1009	12	12	0.42	0.55	1.00	0.73	TO CHIVIDAD IND OIL ALTERNATIVE
994	15	18	0.42	0.19	1.00	0.68	NATIVIDAD RD OR ALTERNATIVE
1002	15	18	0.69	0.50	1.00	0.63	NATIVIDAD RD OR ALTERNATIVE
1005	15	18	0.48	0.36	1.00	0.48	NATIVIDAD RD OR ALTERNATIVE
1014	15	15	0.57	0.57	0.49	0.49	
1017	12	12	0.27	0.27	0.22	0.22	
1021	18	18	0.29	0.29	0.34	0.34	
1023	18	18	0.25	0.25	0.29	0.29	
1024	12	12	0.29	0.29	0.33	0.33	
1025	12	12	0.29	0.29	0.33	0.33	
1027	12	12	0.30	0.30	0.35	0.35	
1029	12	12	0.29	0.29	0.33	0.33	
1031	12	12	0.29	0.29	0.33	0.33	
1033	12	12	0.29	0.29	0.33	0.33	
1035	12	12	0.27	0.27	0.31	0.31	
1037	12	12	0.27	0.27	0.30	0.30	
1040	12	12	0.26	0.26	0.30	0.30	
1040	12	12	0.26	0.26	0.30	0.30	
1042	12	12	0.16	0.16	0.17	0.17	
1044							
	12	12 12	0.11 0.11	0.11 0.11	0.09 0.09	0.09 0.09	
1049	12						
	12 12 12	12 12 12	0.24 0.31	0.11 0.26 0.34	0.36 0.46	0.40 0.49	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1055	12	12	0.38	0.41	0.57	0.61	
1056	12	12	0.36	0.39	0.53	0.57	
1060	12	12	0.29	0.32	0.40	0.44	
1061	12	12	0.35	0.39	0.48	0.53	
1063	12	12	0.40	0.45	0.55	0.61	
1065	12	12	0.41	0.46	0.56	0.63	
1068	12	12	0.31	0.36	0.43	0.50	
1071	14	14	0.86	0.97	1.00	1.00	
1078	15	15	0.29	0.39	0.48	0.62	
1079	15	15	0.26	0.34	0.43	0.55	
1081	15	15	0.23	0.30	0.38	0.48	
1093	48	48	0.59	0.60	0.67	0.70	
1096	10	10	0.54	0.54	0.56	0.56	
1097	10	10	0.29	0.29	0.41	0.41	
1101	15	15	0.31	0.40	0.52	0.67	
1108	27	27	0.24	0.33	0.26	0.35	
1109	12	12	0.23	0.23	0.30	0.30	
1110	27	27	0.11	0.11	0.14	0.14	
1114	24	24	0.58	0.60	0.60	0.63	
1115	24	24	0.63	0.65	0.66	0.69	
1116	24	24	0.51	0.53	0.53	0.56	
1131	12	12	0.38	0.38	0.48	0.48	
1132	12	12	0.43	0.41	0.55	0.52	
1134	12	12	0.37	0.34	0.47	0.43	
1139	27	27	0.24	0.36	0.26	0.38	
1140 1141	27	27	0.20	0.35	0.23	0.39	
1141 1146	27	27	0.23	0.37	0.26	0.40	NORTHBIDGE MALL
1146	15	18 18	0.64	0.43	0.70 0.70	0.47 0.46	NORTHRIDGE MALL
1152	15	18 18	0.64	0.43 0.46		0.46	NORTHRIDGE MALL
	15		0.67		0.73		NORTHRIDGE MALL
1155 1159	15	18	0.65	0.44	0.71	0.47	NORTHRIDGE MALL NORTHRIDGE MALL
1162	15 15	18	0.68	0.44 0.49	0.73 0.90	0.47 0.52	NORTHRIDGE MALL NORTHRIDGE MALL
1164	18	18 18	0.68 0.61	0.49	0.90	0.52	NOR I DRIDGE MALL
1167		18	0.61		1.00		
1167	18 27	18 27	0.72	0.63 0.25	1.00 0.21	0.66 0.29	
1175	15	18	0.63	0.25		0.46	NORTHRIDGE MALL
1177	15	15	0.54	0.55	0.68 0.57	0.46	NORTHRIDGE WALL
1182	27	27	0.25		0.26	0.35	
1183	27	27	0.25	0.32 0.33	0.26	0.35	
CDT 47	8	8	0.24	0.33	0.26	0.35	
1206	15	15	0.17	0.36	0.45	0.58	
1207	15	15	0.21	0.41	0.52	0.68	
1208	15	15	0.34	0.45	0.57	0.74	
1209	15	15	0.33	0.44	0.56	0.74	
1210	15	15	0.33	0.43	0.56	0.73	
1211	15	15	0.32	0.42	0.55	0.76	
1212	15	15	0.33	0.44	0.58	0.83	
1213	15	15	0.36	0.47	0.62	0.83	
1214	48	48	0.70	0.72	0.76	0.79	
1215	48	48	0.71	0.73	0.79	0.80	
1216	48	48	0.71	0.73	0.80	0.81	
1217	48	48	0.73	0.75	0.82	0.84	
1218	48	48	0.74	0.76	0.83	0.86	
1219	48	48	0.69	0.70	0.78	0.81	
1220	48	48	0.63	0.64	0.71	0.75	
1221	10	10	0.61	0.61	0.58	0.58	
1222	10	10	0.23	0.23	0.19	0.19	
1223	10	10	0.27	0.27	0.22	0.22	
1224	10	10	0.27	0.27	0.22	0.22	
1225	10	10	0.28	0.28	0.23	0.23	
1226	10	10	0.28	0.28	0.22	0.22	
1227	10	10	0.26	0.26	0.21	0.21	
1228	12	12	0.22	0.22	0.18	0.18	
1229	10	10	0.27	0.27	0.22	0.22	
1230	24	24	0.10	0.10	0.13	0.13	
1231	24	24	0.07	0.07	0.08	0.08	
1232	24	24	0.05	0.05	0.06	0.06	
1233	24	24	0.03	0.03	0.03	0.03	
1234	24	24	0.02	0.02	0.02	0.02	CHEDOVEE DE
1235	18	24	0.79	0.50	0.86	0.53	CHEROKEE DR
1236	18	24	0.87	0.46	1.00	0.50	CHEROKEE DR
1237	18	24	0.77	0.43	1.00	0.46	CHEROKEE DR
1238 1239	18 18	24 24	0.67	0.40 0.46	0.85	0.42 0.49	CHEROKEE DR
1239			0.82	0.48	0.85	0.49	CHEROKEE DR CHEROKEE DR
1240	18	24	1.00		1.00		CHEROKEE DK
1241	12	12	0.77	0.23	0.81	0.24	
1242	12	12	0.71 0.70	0.22	0.74	0.23	
1243	12	12		0.25 0.49	0.72	0.26	CHEDOVEE DB
	18	24	1.00		1.00	0.52	CHEROKEE DR
1245 1248	18	24	1.00	0.50	1.00	0.53	CHEROKEE DR
	18	24	0.80	0.41	1.00	0.44	CHEROKEE DR
1252 1253	12	12 24	0.53	0.21	0.54 0.82	0.24	CHEROKEE DR
1253	18		0.60	0.36		0.39	
1254	18	24	0.59	0.36	0.64	0.38	CHEROKEE DR
	15	15	0.57	0.57	0.61	0.61	
1257 1259	27 27	27 27	0.28 0.27	0.36 0.34	0.30 0.29	0.38 0.36	
1426	8	8	0.27	0.34	0.29	0.36	
1267	12	12	0.48	0.48	0.62	0.62	
1267	12	12	0.38	0.38	0.39	0.39	
1200	14	14	0.00	0.30	0.40	∪.+∪	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1272	15	15	0.39	0.39	0.49	0.49	
1273 1275	12 10	12 10	0.32 0.29	0.32 0.29	0.40 0.37	0.40 0.37	
1279	10	10	0.27	0.27	0.34	0.34	
1280	10	10	0.40	0.40	0.51	0.51	
1281	10	10	0.37	0.37	0.47	0.47	
1283 775	36	36	0.59	0.57	0.67	0.66	
1286	8 36	<u>8</u> 36	0.39 0.78	0.36 0.76	1.00 0.84	0.45 0.82	
1287	14	14	0.02	0.02	0.01	0.01	
774	8	8	0.39	0.36	1.00	0.45	
1289	30	30	0.66	0.64	0.67	0.62	
1427	8	8	0.48	0.48	0.62	0.62	
1431	8	8	0.33	0.33	0.43	0.42	
1292 1293	30 48	30 48	0.73 0.68	0.73 0.67	0.76 0.72	0.68 0.71	
1294	48	48	0.59	0.58	0.63	0.62	
1305	24	24	0.12	0.12	0.16	0.17	
1306	48	48	0.66	0.66	0.74	0.75	
1307	48	48	0.67	0.67	0.75	0.77	
1308	48	48	0.56	0.56	0.63	0.66	
1309	48	48	0.56	0.56	0.62	0.65	
1313 1320	12 12	12 12	1.00 0.26	1.00 0.26	1.00 0.31	1.00 0.31	
1321	12	12	0.24	0.24	0.31	0.28	
1324	12	12	0.19	0.19	0.23	0.23	
1325	12	12	0.25	0.25	0.30	0.30	
CDT_11	10	10	0.73	0.58	0.74	0.61	
1329	18	18	0.11	0.11	0.13	0.13	
1332	12	12	0.06	0.06	0.06	0.06	
1333 1335	12 18	12 18	0.30 0.23	0.30 0.23	0.35 0.27	0.35 0.27	
1432	8	8	0.23	0.23	0.56	0.56	
1341	18	18	0.22	0.24	0.25	0.25	
1342	10	10	0.10	0.10	0.08	0.08	
1344	12	12	0.27	0.38	0.25	0.25	
1349	10	10	0.34	0.49	0.32	0.32	
1350	10	10	0.34	0.51	0.28	0.28	
1351 1352	10 10	10 10	0.33 0.29	0.52 0.45	0.27 0.24	0.27 0.24	
773	8	8	0.29	0.38	1.00	0.24	
1362	8	12	1.00	0.38	1.00	0.51	LAUREL DR/N MAIN ST
914	8	8	0.39	0.39	0.34	0.34	
1361	8	12	1.00	0.39	1.00	0.53	LAUREL DR/N MAIN ST
904	8	8	0.40	0.40	0.34	0.34	
1359	12	12	0.53	0.25	0.77	0.34	LAUDEL DOWNALLOT
358 1404	12 8	15 8	0.41 0.53	0.40 0.53	0.85 0.69	0.60 0.69	LAUREL DR/N MAIN ST
1405	8	8	0.53	0.53	0.69	0.69	
860	8	8	0.43	0.43	0.39	0.39	
1368	12	12	0.00	0.00	0.00	0.00	
690	12	15	0.46	0.42	1.00	0.65	LAUREL DR/N MAIN ST
692 693	12	15	0.48	0.46	1.00	0.70	LAUREL DR/N MAIN ST
694	12 12	15 15	0.42 0.39	0.42 0.40	1.00 1.00	0.64 0.61	LAUREL DR/N MAIN ST LAUREL DR/N MAIN ST
696	12	15	0.38	0.40	1.00	0.62	LAUREL DR/N MAIN ST
702	12	15	0.29	0.34	1.00	0.51	LAUREL DR/N MAIN ST
703	10	15	0.24	0.31	1.00	0.43	LAUREL DR/N MAIN ST
717	12	15	0.37	0.39	1.00	0.57	LAUREL DR/N MAIN ST
767	12	15	0.40	0.42	1.00	0.63	LAUREL DR/N MAIN ST
1006 1010	15 15	18 18	0.90 1.00	0.52	1.00 1.00	0.72	NATIVIDAD RD OR ALTERNATIVE
1390	15	18 18	0.48	0.58 0.36	1.00	0.80 0.49	NATIVIDAD RD OR ALTERNATIVE NATIVIDAD RD OR ALTERNATIVE
1380	8	8	0.44	0.44	1.00	0.59	
965	10	10	0.53	0.42	0.62	0.50	
1450	8	8	0.32	0.32	0.39	0.39	
507	8	8	0.52	0.45	0.61	0.52	
1375	8	8	0.45	0.45	1.00	0.62	
1406 1408	10 10	10 10	0.54 0.04	0.54 0.04	0.53 0.03	0.53 0.03	
1413	27	27	0.04	0.33	0.03	0.36	
1416	12	12	0.93	0.25	0.94	0.26	
1417	12	12	1.00	0.23	1.00	0.24	
1418	12	12	1.00	0.12	1.00	0.13	
1419	12	12	1.00	0.00	1.00	0.00	
1385 907	8	8	0.45	0.45	0.98	0.62	
1263	<u>8</u> 8	<u>8</u> 8	0.47 0.64	0.47 0.62	0.41 0.82	0.41 0.79	
1357	8	8	0.10	0.48	1.00	0.79	
1429	10	10	0.27	0.27	0.34	0.34	
1383	8	8	0.49	0.49	1.00	0.67	
716	8	8	0.36	0.50	0.53	0.70	
1433	10	10	0.23	0.23	0.29	0.29	
1437	10	10	0.28	0.28	0.35	0.35	
1438 1440	10 10	10 10	0.31	0.31 0.31	0.38	0.38	
1443	10	10	0.31 0.31	0.31	0.38 0.39	0.38 0.39	
1444	10	10	0.16	0.16	0.19	0.19	
1449	10	10	0.28	0.28	0.35	0.35	
1374	8	8	0.49	0.50	1.00	0.71	
CDT 39	6	6	0.50	0.50	0.50	0.50	İ

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1373	8	8	0.59	0.50	1.00	0.70	
383	8	8	0.28	0.48	0.48	0.51	
1384	8	8	0.53	0.53	1.00	0.72	
1457	24	24	0.34	0.34	0.42	0.38	
1458	27	27	0.31	0.31	0.39	0.35	
1459	27	27	0.31	0.31	0.39	0.35	
1460	27	27	0.31	0.31	0.39	0.35	
1461	27	27	0.31	0.31	0.39	0.35	
1462	27	27	0.29	0.29	0.36	0.33	
1463	27	27	0.32	0.32	0.40	0.37	
1464 1465	30	30	0.36	0.36	0.43	0.40	
1465	21	21	0.53	0.54	0.72	0.76	
1467	21 21	21	0.53	0.54	0.74	0.78	
1467		21	0.57	0.58	0.79	0.84	
	10	10	0.37	0.43	0.47	0.55	
1469 1470	18 18	18 18	0.83 0.77	0.56 0.53	1.00 1.00	0.72 0.66	
1470	18 27	18 27					
1471	27	27	0.49 0.52	0.55 0.59	0.50 0.53	0.57 0.61	
1472	27	27	0.52	0.59	0.53	0.58	
1474	12	12	0.35	0.28	0.40	0.32	
1474	10	10	0.90	0.90	0.40	0.92	
314	8	8	0.56	0.53	0.82	0.62	
347	8	8	0.61	0.58	0.76	0.68	
CDT 101	30	30	0.58	0.60	0.60	0.63	
768	12	15	0.32	0.36	1.00	0.54	LAUREL DR/N MAIN ST
CDT 111	18	18	0.44	0.30	0.58	0.37	ENOTICE BIVING IN CI
CDT 113	42	42	0.66	0.71	0.70	0.72	
CDT 117	36	36	0.78	0.89	0.85	0.92	
CDT 119	27	27	0.96	1.00	1.00	1.00	
CDT 123	14	14	1.00	1.00	1.00	1.00	
CDT 125	12	12	1.00	1.00	1.00	1.00	
CDT 131	15	18	0.47	0.37	0.65	0.47	
CDT_133	15	18	0.49	0.42	0.68	0.56	
CDT_153	12	15	0.48	0.36	1.00	0.44	
CDT_155	12	15	0.51	0.37	1.00	0.47	
CDT_157	18	18	0.07	0.07	0.09	0.09	
CDT_159	18	18	0.00	0.00	0.00	0.00	
CDT_161	18	18	0.00	0.00	0.00	0.00	
CDT_163	18	18	0.00	0.00	0.00	0.00	
CDT_165	18	18	0.00	0.00	0.00	0.00	
1291	8	8	0.55	0.57	0.60	0.46	
1290	8	8	0.59	0.59	0.63	0.62	
1482	8	8	0.67	0.66	0.65	0.64	
1483	8	8	0.67	0.67	0.67	0.67	
CDT_51	8	8	0.63	0.63	0.63	0.60	
CDT_45	4	4	0.79	0.79	0.81	0.78	
CDT_35 CDT_37	10	10	0.36	0.57	0.29	0.29	
CDT_37 CDT_21	6	6 6	0.90 0.86	0.90 0.91	0.85 0.94	0.85 1.00	
CDT_21	2	2	1.00	1.00	1.00	1.00	
CDT_23	6	6	1.00	1.00	1.00	1.00	
CDT_29	6	6	0.84	1.00	0.78	0.78	
CDT_53	12	12	1.00	1.00	1.00	1.00	
CDT_55	12	12	1.00	1.00	1.00	1.00	
CDT_57	12	12	0.05	0.05	0.04	0.04	
CDT 59	10	10	0.00	0.00	0.00	0.00	
CDT_63	12	12	0.30	0.35	0.39	0.45	
CDT 69	12	12	0.00	0.16	0.14	0.13	
CDT 71	12	12	0.00	0.12	0.11	0.10	
CDT 75	18	18	0.00	0.56	1.00	0.77	
CDT 83	54	54	0.00	0.63	0.61	0.64	
CDT 85	54	54	0.00	0.63	0.62	0.65	
CDT 87	12	12	0.00	0.30	0.24	0.24	
CDT 89	12	12	0.00	0.17	0.49	0.21	
CDT 93	18	18	0.00	0.51	0.60	0.60	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
0	30	30	0.81	0.81	0.77	0.84	
1	30	30	0.70	0.70	0.68	0.73	
2	30	30	0.83	0.83	0.74	0.74	110071101110000
6 7	24	30	0.92	0.92	1.00	0.51	NORTH DAVIS RD.
	24	30	0.90	0.90	1.00	0.53	NORTH DAVIS RD.
10 12	54 42	54 42	0.62 0.54	0.62	0.67 0.55	0.68	
13	42	42		0.54		0.57	
14	42	42	0.38 0.36	0.38	0.39	0.40 0.37	
				0.36	0.36		
15 16	42	42	0.51	0.51	0.50	0.52	
16 17	42	42	0.49	0.49	0.47	0.50	
18	42	42 42	0.47	0.47	0.46	0.48	
19	42 42	42	0.46	0.46	0.45	0.48	
20			0.46	0.46	0.45	0.48	
	42	42	0.46	0.46	0.45	0.48	
21 22	42	42	0.46	0.46	0.45	0.48	
23	42	42	0.46	0.46	0.45	0.47	
	42	42	0.46	0.46	0.45	0.47	
24 25	42	42	0.46	0.46	0.45	0.47	
	42	42	0.45	0.45	0.45	0.47	
26	42	42	0.36	0.36	0.36	0.38	
27	42	42	0.28	0.28	0.27	0.28	
28	42	42	0.37	0.37	0.37	0.38	
29	42	42	0.39	0.39	0.38	0.40	
30	42	42	0.63	0.63	0.68	0.69	
31	42	42	0.48	0.48	0.51	0.52	
33	18	18	0.94	0.94	0.94	0.63	
34 35	18	18	0.17	0.17	0.20	0.19	
	18	18	0.21	0.21	0.26	0.25	
36	18	18	0.19	0.19	0.23	0.22	
37	18	18	0.18	0.18	0.21	0.21	
38	18	18	0.16	0.16	0.20	0.19	
41 42	10 10	10 10	0.63 0.21	0.63 0.21	0.67 0.29	0.67 0.29	
43	18	18	1.00	1.00	1.00	0.69	
46 47	18	18	0.91	0.91	0.90	0.62	
	10	10	0.19	0.19	0.23	0.23	
48	18	18	0.87	0.87	0.86	0.60	
49	18	18	0.77	0.77	0.75	0.54	
50	18	18	0.81	0.81	0.80	0.57	
51	18	18	0.84	0.84	0.83	0.59	
53	10	10	0.28	0.28	0.34	0.34	
54	10	10	0.30	0.30	0.36	0.36	
55 56	18	18	0.75	0.75	0.73	0.52	
56	18	18	0.74	0.74	0.73	0.52	
59	21	21	0.15	0.15	0.19	0.18	
62	21	21	0.15	0.15	0.19	0.19	
63	21	21	0.12	0.12	0.14	0.14	
66	21	21	0.11	0.11	0.13	0.13	
70	21	21	0.10	0.10	0.12	0.12	
71	21	21	0.12	0.12	0.13	0.13	
73	21	21	0.12	0.12	0.12	0.12	
74	21	21	0.14	0.14	0.15	0.15	
77	21	21	0.08	0.08	0.08	0.08	
78	21	21	0.09	0.09	0.09	0.09	
80	18	18	0.13	0.13	0.14	0.14	
81	18	18	0.12	0.12	0.14	0.14	
82	18	18	0.98	0.98	0.97	0.63	
83	18	18	0.98	0.98	0.98	0.64	
84	21	21	0.15	0.15	0.16	0.16	
87	21	21	0.09	0.09	0.10	0.10	
90 91	21	21	0.07	0.07	0.06	0.06	
	21	21	0.06	0.06	0.05	0.05	
92	18	18	0.76	0.76	0.74	0.53	
93 94	18	18	0.59	0.59	0.58	0.44	
	18	18	0.78	0.78	0.76	0.55	
95 96	24	24	0.66	0.66	0.69	0.67	
	12	12	0.65	0.65	0.79	0.72	
98 99	21	21 24	0.42	0.42	0.50	0.47	
100	24		0.67	0.67	0.71	0.69	
	21	21	0.66	0.66	0.74	0.71	
101	10	10	0.62	0.62	0.71	0.69	
102	10	10	0.18	0.18	0.22	0.21	
103	21	21	0.46	0.46	0.52	0.51	
105	18	18	0.39	0.39	0.43	0.43	
106 107	33	33	0.42	0.42	0.42	0.51	
	33	33	0.57	0.57	0.56	0.62	
108	33	33	0.54	0.54	0.54	0.60	
109	33	33	0.54	0.54	0.54	0.60	
110	33	33	0.60	0.60	0.60	0.61	
111	33	33	0.55	0.55	0.54	0.61	
113	27	27	0.76	0.76	0.75	0.85	
114	27	27	0.70	0.70	0.69	0.78	
115	18	18	0.69	0.69	0.68	0.75	
116	18	18	0.56	0.56	0.56	0.61	
118	18	18	0.76	0.76	0.69	0.65	
119	18	18	0.79	0.79	0.68	0.68	
123	21	21	0.85	0.85	0.84	0.70	
124	21	21	0.78	0.78	0.76	0.65	
125	21	21	0.61	0.61 0.68	0.58 0.62	0.50 0.62	
127	12	12	0.68				

131 19	Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1982 1982	130	10	10	0.77	0.77	0.68	0.68	
195								
198								ABBOTT ST.
198								
139								
148								
147								ABBOTT ST.
148								
149								
150								ABBOTT ST.
158								
1988								
157 12 12 12 0.58 0.58 0.77 0.54 ASSOTT ST. 158 1.00 1.00 0.44 ASSOTT ST. 152 12 13 1.00 1.00 1.00 0.44 ASSOTT ST. 152 12 13 1.00 1.00 1.00 0.44 ASSOTT ST. 152 12 13 1.00 1.00 1.00 0.04 ASSOTT ST. 152 1.00 1.00 1.00 1.00 0.04 ASSOTT ST. 152 1.00 1.00 1.00 1.00 0.04 ASSOTT ST. 152 1.00 1.0								
1988 12								
199								100077.07
162								
164								
195								
168			27					
167								
168								SOUTH SANBORN RD.
1770								COLITH CANDODAL DD
172								SOUTH SANBURN RD.
175								
176								
177								SOLITH SANDODN DD
178								SOUTH SANBUKN KD.
179								SOLITH SANDODN DD
180								SOUTH SANDORN RD.
181								SOLITH SANDODN DD
183								
185								
188								
190								
191								SOUTH SANBORN RD.
192								
194								
195								SOLITH SAMBORN PD
198								
198								SOUTH SANBORN RD
199								
201								
205								
200								
210								
211								Ento i neione o i
215								
218								
221								
12								
227								
230	227	12				0.10		
233	230	15	18	1.00	1.00	1.00	0.58	EAST ALISAL ST.
235 15 18 1.00 1.00 0.80 0.51 EAST ALISAL ST. 236 15 18 1.00 1.00 0.99 0.56 EAST ALISAL ST. 237 15 18 1.00 1.00 1.00 0.56 EAST ALISAL ST. 239 8 8 1.00 1.00 1.00 0.40 240 8 8 1.00 1.00 1.00 0.19 241 6 6 6 1.00 1.00 0.73 0.00 242 8 8 8 1.00 1.00 0.73 0.00 244 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 245 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 6 1.00 1.00 1.00 0.59 EAST ALISAL ST. 247 15 18 1.00 1.00	233	15	18	0.86	0.86	0.83	0.63	EAST ALISAL ST.
236	234	15	18	1.00	1.00	0.84	0.60	EAST ALISAL ST.
237 15 18 1.00 1.00 1.00 0.56 EAST ALISAL ST. 239 8 8 1.00 1.00 1.00 0.40 240 8 8 1.00 1.00 0.09 241 6 6 1.00 1.00 0.73 0.00 242 8 8 1.00 1.00 0.76 0.13 244 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 6 6 1.00 1.00 0.09 EAST ALISAL ST. 246 6 6 6 1.00 1.00 0.43 0.16 EAST ALISAL ST. 247 15 18 1.00 1.00 1.00 0.15 EAST ALISAL ST. 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 6 0.11 0.11 0.12	235	15	18	1.00	1.00	0.80	0.51	EAST ALISAL ST.
239 8 8 1.00 1.00 1.00 0.40 240 8 8 1.00 1.00 1.00 0.19 241 6 6 6 1.00 1.00 0.73 0.00 242 8 8 1.00 1.00 0.76 0.13 244 15 18 1.00 1.00 0.059 EAST ALISAL ST. 245 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 1.00 1.00 0.43 0.16 0.16 247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 0.56 0.56 0.15 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.11 0.12 0.12								
240 8 8 1.00 1.00 1.00 0.19 241 6 6 1.00 1.00 0.73 0.00 242 8 8 1.00 1.00 0.76 0.13 244 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 1.00 1.00 0.43 0.16 247 15 18 1.00 1.00 1.00 0.61 248 6 6 6 0.56 0.56 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 6 0.11 0.11 0.12 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST.								EAST ALISAL ST.
241 6 6 1.00 1.00 0.73 0.00 242 8 8 1.00 1.00 0.76 0.13 244 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 245 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 6 6 1.00 1.00 0.43 0.16 247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 6 0.56 0.56 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.12 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 0.58								
242 8 8 1.00 1.00 0.76 0.13 2444 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 1.00 1.00 0.43 0.16 247 15 18 1.00 1.00 0.43 0.16 247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 0.56 0.56 0.15 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.11 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58		8						
244 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 245 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 6 1.00 1.00 0.43 0.16 247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 0.56 0.56 0.56 0.15 0.15 249 15 18 1.00 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.12		6						
245 15 18 1.00 1.00 1.00 0.59 EAST ALISAL ST. 246 6 6 1.00 1.00 0.43 0.16 EAST ALISAL ST. 247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 0.56 0.56 0.15 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.								
246 6 6 1.00 1.00 0.43 0.16 EAST ALISAL ST. 247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 0.56 0.56 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.12								
247 15 18 1.00 1.00 1.00 0.61 EAST ALISAL ST. 248 6 6 0.56 0.56 0.15 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 260 15 18								EAST ALISAL ST.
248 6 6 0.56 0.56 0.15 0.15 249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.111 0.11 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 0.58 EAST ALISAL ST. 262 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 262 15 18 1.00 1.00 1.00 0.50 EAST ALISAL ST. 264 12 12 0.19 0.19 0.16 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>FACT ALICAL OF</td></td<>								FACT ALICAL OF
249 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 250 6 6 0.11 0.11 0.12 0.12 254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 262 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 0.16 EAST ALISAL ST. 263 12 12 0.09 0.00 0.00 0.00 0.00 0.00 0.00 0.00								EAST ALISAL ST.
250 6 6 0.11 0.11 0.12 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>FACT ALICAL OF</td>								FACT ALICAL OF
254 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 262 15 18 1.00 1.00 1.00 0.50 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 0.16 264 12 12 0.00 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 0.67 266 21 21 0.60 0.60 0.68 0.67 0.62 0.62 267 18 18 0.53 0.53 0.62 0.62 0.62 269 18 18 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>EAST ALISAL ST.</td>								EAST ALISAL ST.
255 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 262 15 18 1.00 1.00 1.00 0.50 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 0.16 264 12 12 0.00 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 0.67 266 21 21 0.60 0.60 0.68 0.67 0.62 267 18 18 0.49 0.49 0.57 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 0.53 271 18 18 0.55								EAST ALICAL ST
257 15 18 1.00 1.00 1.00 0.58 EAST ALISAL ST. 258 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 262 15 18 1.00 1.00 0.00 0.50 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 0.16 264 12 12 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18								
258 15 18 1.00 1.00 1.00 0.62 EAST ALISAL ST. 262 15 18 1.00 1.00 1.00 0.50 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 0.16 264 12 12 0.00 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.50 0.50 0.53 0.53 271 18 18 0.50 0.50 0.53 0.53 271 18 18 0.50								
262 15 18 1.00 1.00 1.00 0.50 EAST ALISAL ST. 263 12 12 0.19 0.19 0.16 0.16 0.16 264 12 12 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.26 0.28								
263 12 12 0.19 0.19 0.16 0.16 0.16 264 12 12 0.00 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
264 12 12 0.00 0.00 0.00 0.00 265 21 21 0.60 0.60 0.68 0.67 266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.26 0.23 0.23								LAGI ALIGAL ST.
265 21 21 0.60 0.60 0.68 0.67 266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.26 0.23 0.23								
266 21 21 0.60 0.60 0.68 0.67 267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.95 0.55 0.54 0.54 272 18 18 0.42 0.41 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 0.23								
267 18 18 0.53 0.53 0.62 0.62 269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.26 0.23 0.23								
269 18 18 0.49 0.49 0.57 0.57 270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.26 0.23 0.23								
270 18 18 0.50 0.50 0.53 0.53 271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 0.23								
271 18 18 0.55 0.55 0.54 0.54 272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 0.23								
272 18 18 0.42 0.42 0.41 0.41 273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 0.23								
273 15 15 0.34 0.34 0.29 0.29 274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 0.23								
274 15 15 0.32 0.32 0.28 0.28 275 8 8 0.26 0.26 0.23 0.23								
275 8 8 0.26 0.26 0.23 0.23								
276 15 15 0.43 0.43 0.38 0.38								
270 15 15 0.45 0.45 0.36 0.36 277 12 12 0.33 0.33 0.38 0.38 0.38								
277 12 12 0.35 0.35 0.36 0.36 2.78 12 12 0.35 0.35 0.42 0.42								
270 12 12 0.35 0.35 0.42 0.42 280 12 12 0.36 0.36 0.42 0.42								

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
281	10	10	0.17	0.17	0.27	0.27	
282	10	10	0.16	0.16	0.24	0.24	
284 285	15	15	0.43	0.43	0.47	0.47 0.40	
286	15 30	15 30	0.37 0.69	0.37 0.69	0.40 0.66	0.69	
287	30	30	0.70	0.70	0.70	0.76	
288	30	30	0.63	0.63	0.70	0.76	
289	30	30	0.67	0.67	0.67	0.70	
290	30	30	0.70	0.70	0.70	0.75	
291	30	30	0.70	0.70	0.71	0.76	
292	30	30	0.71	0.71	0.72	0.78	
293	30	30	0.75	0.75	0.75	0.80	
294	30	30	0.75	0.75	0.75	0.81	
295	30	30	0.74	0.74	0.74	0.80	
296	30	30	0.69	0.69	0.69	0.75	
301	24	24	0.28	0.28	0.33	0.33	
302	24	24	0.33	0.33	0.38	0.38	
303	24	24	0.31	0.31	0.37	0.37	
305	10	10	0.20	0.20	0.16	0.16	
308	24	30	0.87	0.87	0.94	0.56	NORTH DAVIS RD.
309	18	24	0.90	0.90	0.94	0.54	NORTH DAVIS RD.
311	10	10	0.20	0.20	0.21	0.21	
312	10	10	0.01	0.01	0.01	0.01	
314	8	8	0.67	0.67	0.69	0.69	
315	10	10	0.00	0.00	0.00	0.00	
316	8	8	0.46	0.46	0.49	0.49	
317	21	24	0.58	0.58	0.50	0.50	
318	21	24	0.58	0.58	0.50	0.50	
319	21	24	0.29	0.29	0.25	0.25	
320	21	24	0.42	0.42	0.37	0.36	
321	21	24	0.59	0.59	0.50	0.50	
322	21	24	0.60	0.60	0.51	0.51	
323	21	24	0.60	0.60	0.52	0.51	
324	21	24	0.61	0.61	0.52	0.52	
325	21	24	0.61	0.61	0.52	0.51	
326	21	24	0.65	0.65	0.55	0.55	
327	24	27	0.61	0.61	0.52	0.52	
328	24	27	0.60	0.60	0.51	0.51	
329	24	27	0.59	0.59	0.50	0.50	
330	24	27	0.59	0.59	0.50	0.50	
331	24	27	0.59	0.59	0.50	0.50	
332	30	30	0.77	0.77	0.74	0.77	
333	30	30	0.73	0.73	0.71	0.74	
334	30	30	0.69	0.69	0.66	0.69	
335	30	30	0.84	0.84	0.81	0.84	
336	24	24	0.59	0.59	0.56	0.59	
337	24	24	0.57	0.57	0.54	0.57	
338	24	27	0.55	0.55	0.50	0.51	
339	24	24	0.57	0.57	0.54	0.57	
340	21	21	0.31	0.31	0.37	0.37	
341	21	21	0.38	0.38	0.49	0.49	
342	15	18	0.54	0.54	0.73	0.73	
343	15	18	0.46	0.46	0.63	0.63	
344	15	18	0.39	0.39	0.52	0.52	
345	15	18	0.38	0.38	0.52	0.52	
346	15	18	0.38	0.38	0.52	0.52	
347	8	8	0.73	0.73	0.75	0.75	
349	15	15	0.21	0.21	0.22	0.22	
350	10	10	0.30	0.30	0.31	0.31	
351	15	15	0.23	0.23	0.24	0.24	
352	15	15	0.00	0.00	0.00	0.00	
353	15	15	0.00	0.00	0.00	0.00	
354	36	36	0.42	0.42	0.52	0.53	
355	21	21	0.82	0.82	0.90	0.95	
356	24	24	0.78	0.78	0.85	0.89	
357	12	12	1.00	1.00	1.00	1.00	
358	12	15	0.49	0.49	0.66	0.66	
360	48	48	0.52	0.52	0.60	0.61	·
361	54	54	0.66	0.66	0.73	0.74	
362	54	54	0.60	0.60	0.67	0.69	
363	24	24	1.00	1.00	1.00	1.00	
364	27	27	1.00	1.00	1.00	1.00	
365	36	36	0.92	0.92	0.98	0.99	
366	54	54	0.74	0.74	0.81	0.83	
367	54	54	0.71	0.71	0.78	0.79	<u> </u>
368	54	54	0.72	0.72	0.80	0.81	
369	54	54	0.70	0.70	0.77	0.78	
370	54	54	0.68	0.68	0.75	0.76	
371	54	54	0.68	0.68	0.75	0.76	
372	54	54	0.68	0.68	0.75	0.76	
373	54	54	0.68	0.68	0.75	0.76	
374	54	54	0.68	0.68	0.74	0.75	
375	54	54	0.67	0.67	0.74	0.75	
376	54	54	0.67	0.67	0.73	0.74	
377	54	54	0.66	0.66	0.72	0.73	
378	54	54	0.65	0.65	0.71	0.71	
379	54	54	0.64	0.64	0.70	0.70	
380	54	54	0.63	0.63	0.68	0.69	
381	54	54	0.65	0.65	0.71	0.72	
		54	0.64	0.64	0.69	0.70	
382	54	J -1	0.04				

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
384	30	32	0.50	0.50	0.57	0.51	NORTH DAVIS RD.
385	30	32	0.68	0.68	0.68	0.59	NORTH DAVIS RD.
387	8	8	0.27	0.27	0.32	0.32	
392	12	12	0.15	0.15	0.18	0.18	
399	21	21	0.60	0.60	0.68	0.67	
400	21	21	0.64	0.64	0.73	0.71	
401	21	21	0.58	0.58	0.66	0.65	
402	21	21	0.57	0.57	0.66	0.65	
403	24	24	0.33			0.42	
				0.33	0.42		
404	24	24	0.31	0.31	0.36	0.36	
405	21	21	0.54	0.54	0.60	0.60	
406	21	21	0.52	0.52	0.54	0.54	
407	24	24	0.40	0.40	0.49	0.49	
408	24	24	0.36	0.36	0.48	0.48	
409	24	24	0.08	0.08	0.10	0.10	
410	24	27	0.60	0.60	0.51	0.51	
411	24						
		27	0.56	0.56	0.49	0.49	
412	24	27	0.49	0.49	0.43	0.43	
419	10	12	0.41	0.41	0.67	0.38	SAN JUAN GRADE
421	15	15	0.62	0.62	0.82	0.82	
423	21	21	0.53	0.53	0.72	0.72	
424	36	36	0.24	0.24	0.32	0.32	
425	36	36	0.38	0.38	0.49	0.49	
426	36		0.37	0.37	0.46	0.49	
		36					
430	12	12	0.33	0.33	0.35	0.35	
432	12	12	0.31	0.31	0.44	0.44	
434	12	12	0.32	0.32	0.45	0.45	
435	12	12	0.29	0.29	0.40	0.40	
437	12	12	0.29	0.29	0.40	0.40	
442	12	12	0.29	0.29	0.41	0.41	
447	14	14	0.41	0.41	0.58	0.60	
448	12						
		12	0.26	0.26	0.36	0.36	
449	12	12	0.21	0.21	0.17	0.17	
453	12	12	0.38	0.38	0.45	0.45	
456	12	12	0.37	0.37	0.40	0.40	
459	12	12	0.38	0.38	0.38	0.38	
461	12	12	0.19	0.19	0.21	0.21	
462	24	24	0.47	0.47	0.45	0.47	
463	30	30	0.74	0.74	0.71	0.74	
464							
	24	24	0.50	0.50	0.48	0.50	
465	24	24	0.32	0.32	0.31	0.33	
466	30	30	0.64	0.64	0.62	0.64	
467	30	30	0.66	0.66	0.65	0.66	
469	14	14	0.56	0.56	0.47	0.43	
470	24	24	0.16	0.16	0.16	0.16	
471	30	30	0.30	0.30	0.30	0.30	
474	8	8	0.12	0.12	0.16	0.16	
477							
	8	8	0.06	0.06	0.05	0.05	
478	10	10	0.10	0.10	0.12	0.12	
480	18	18	0.33	0.33	0.52	0.57	
482	48	48	0.63	0.63	0.70	0.73	
483	48	48	0.72	0.72	0.83	0.86	
485	12	12	0.56	0.56	0.81	0.81	
486	12	12	0.45	0.45	0.66	0.66	
487	18	18	0.31	0.31	0.41	0.41	
488	15	18	0.44	0.44	0.59	0.59	
489	18	18	0.46	0.46	0.61	0.61	
490	12	12	0.51	0.51	0.74	0.74	
491	18	18	0.47	0.47	0.64	0.64	
492	18	18	0.46	0.46	0.62	0.62	
494	12	12	0.52	0.52	0.75	0.75	
495	18	18	0.47	0.47	0.62	0.62	
496	18	18	0.46	0.46	0.62	0.62	
497	12	12	0.44	0.44	0.61	0.61	
498							
	12	12	0.48	0.48	0.68	0.68	
500	12	15	0.48	0.48	0.66	0.66	
501	12	15	0.32	0.32	0.47	0.47	
502	8	8	0.07	0.07	0.09	0.09	
504	12	12	0.46	0.46	0.63	0.63	
505	18	18	0.48	0.48	0.63	0.63	<u> </u>
506	18	18	0.54	0.54	0.74	0.74	
507	8	8	0.45	0.45	0.52	0.52	
510	21	21	0.50	0.50	0.68	0.68	
511	21	21	0.52	0.52	0.71	0.00	
512	21	21	0.53	0.53	0.74	0.74	
513	21	21	0.54	0.54	0.80	0.80	
514	10	10	0.03	0.03	0.03	0.03	
516	21	21	0.65	0.65	0.90	0.90	·
517	21	21	0.56	0.56	0.78	0.78	
518	10	10	0.50	0.50	0.50	0.50	
521							
	8	8	0.00	0.00	0.00	0.00	
522	30	30	0.73	0.73	0.70	0.73	
523	30	30	0.74	0.74	0.71	0.74	
524	24	24	0.52	0.52	0.50	0.52	
	30	30	0.77	0.77	0.74	0.77	
				0.57	0.54	0.57	
525		24					
525 526	24	24	0.57				
525 526 527	24 24	24	0.46	0.46	0.44	0.46	
525 526 527 531	24 24 18	24 18	0.46 0.42	0.46 0.42	0.44 0.39	0.46 0.39	
525 526 527 531 532	24 24 18 18	24 18 18	0.46 0.42 0.32	0.46 0.42 0.32	0.44 0.39 0.30	0.46 0.39 0.30	
525 526 527 531	24 24 18	24 18	0.46 0.42	0.46 0.42	0.44 0.39	0.46 0.39	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
538	10	10	0.21	0.21	0.24	0.24	
544	10	10	0.19	0.19	0.22	0.22	
545	8	8	0.29	0.29	0.33	0.33	
546	54	54	0.59	0.59	0.64	0.65	
547	24	24	0.15	0.15	0.15	0.15	
548	48	48	0.52	0.52	0.55	0.56	
549	24	24	0.20	0.20	0.24	0.24	
552	48	48	0.45	0.45	0.49	0.49	
553	54	54	0.56	0.56	0.60	0.60	
554	48	48	0.55	0.55	0.60	0.60	
555	18	18	0.29	0.29	0.28	0.22	
556	18	18	0.50	0.50	0.49	0.48	
557	27	27	0.11	0.11	0.11	0.12	
559	8	8	0.12	0.12	0.09	0.09	
560	21	21	0.59	0.59	0.59	0.63	
561	21	21	0.45	0.45	0.45	0.45	
563	21	21	0.40	0.40	0.40	0.40	
564	21	21	0.45	0.45	0.46	0.46	
565	21	21	0.47	0.47	0.47	0.47	
566	21	21	0.46	0.46	0.46	0.46	
567	21	21	0.51	0.51	0.52	0.52	
569	21	21	0.48	0.48	0.48	0.48	
570	21	21	0.41	0.41	0.41	0.41	
571	21	21	0.46	0.46	0.47	0.47	
572	21	21	0.45	0.45	0.46	0.46	
574	24	24	0.60	0.60	0.58	0.60	
575	30	30	0.76	0.76	0.73	0.76	
576	24	24	0.48	0.48	0.46	0.48	
577	30	30	0.62	0.62	0.62	0.69	
578	30	30	0.56	0.56	0.56	0.63	
579	30	30	0.60	0.60	0.60	0.64	
580	30	30				0.64	
			0.66	0.66	0.66		
581	27	27	0.74	0.74	0.74	0.81	
582	21	21	0.68	0.68	0.69	0.76	
583	27	27	0.66	0.66	0.66	0.71	
584	27	27	0.49	0.49	0.49	0.52	
586	27	27	0.46	0.46	0.46	0.50	
587	27	27	0.62	0.62	0.62	0.68	
588	24	27	0.68	0.68	0.74	0.57	NATIVIDAD CREEK PARK
589	24	27	0.74	0.74	0.82	0.57	NATIVIDAD CREEK PARK
591	24	27	0.70	0.70	0.76	0.54	NATIVIDAD CREEK PARK
592	24	27	0.70	0.70	0.76	0.55	NATIVIDAD CREEK PARK
594	10	10	0.81	0.81	1.00	1.00	
595	10	10	0.14	0.14	0.22	0.22	
596	30	32	0.80	0.80	0.81	0.70	NORTH DAVIS RD.
601	30	32	0.86	0.86	0.89	0.73	NORTH DAVIS RD.
606	30	32	0.87	0.87	0.91	0.72	NORTH DAVIS RD.
607	30	32	0.93	0.93	0.94		
						0.77	NORTH DAVIS RD.
609	30	32	1.00	1.00	1.00	0.81	NORTH DAVIS RD.
612	30	32	1.00	1.00	1.00	0.78	NORTH DAVIS RD.
615	30	32	1.00	1.00	1.00	0.80	NORTH DAVIS RD.
619	24	30	0.92	0.92	1.00	0.50	NORTH DAVIS RD.
623	27	27	0.36	0.36	0.34	0.34	
626	27	27	0.38	0.38	0.36	0.36	
627	27	27	0.39	0.39	0.36	0.36	
629	27	27	0.38	0.38	0.36	0.36	
631	27	27	0.40	0.40	0.39	0.39	
633	27	27	0.36	0.36	0.35	0.35	
636	27	27	0.35	0.35	0.34	0.34	
639	15	15	0.52	0.52	0.61	0.63	
644	6	6	0.00	0.00	0.00	0.00	
645	15	18	0.58	0.58	0.52	0.52	
649	15	18	0.50	0.50	0.43	0.43	
650	15	18	0.52	0.52	0.44	0.44	
651	15	18	0.52		0.44	0.41	
652				0.48			
	15	18	0.47	0.47	0.41	0.41	
653	15	18	0.46	0.46	0.39	0.39	
656	15	18	0.52	0.52	0.44	0.44	
658	24	27	0.79	0.79	0.89	0.60	NATIVIDAD CREEK PARK
659	24	27	0.79	0.79	0.89	0.59	NATIVIDAD CREEK PARK
660	24	27	0.72	0.72	0.80	0.55	NATIVIDAD CREEK PARK
662	24	27	0.72	0.72	0.77	0.56	NATIVIDAD CREEK PARK
665	18	21	0.98	0.98	1.00	0.75	NATIVIDAD CREEK PARK
666	48	48	0.58	0.58	0.64	0.66	
667	48	48	0.55	0.55	0.58	0.59	
669	15	15	0.24	0.24	0.29	0.29	
671	15	15	0.35	0.35	0.41	0.41	
673	8	8	0.08	0.08	0.07	0.07	
675	48	48	0.67	0.67	0.07	0.72	
677							
	48	48	0.60	0.60	0.64	0.66	
682	15	15	0.43	0.43	0.46	0.46	
686	12	12	0.43	0.43	0.51	0.51	
687	15	15	0.50	0.50	0.75	0.75	
688	15	15	0.39	0.39	0.58	0.58	
690	12	15	0.53	0.53	0.73	0.73	
692	12	15	0.57	0.57	0.79	0.79	
	12	15	0.53	0.53	0.73	0.73	
693						0.69	
693 694		15	(),51	0.51			
694	12	15 15	0.51 0.52	0.51 0.52	0.69 0.71		
		15 15 15	0.51 0.52 0.45	0.51 0.52 0.45	0.69 0.71 0.59	0.59 0.71 0.59	

177 12	Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
175 22	705			0.55	0.55	0.66	0.43	WEST LAUREL DR.
The color of the								
175								
The State								
177								WEST LAUREL DR.
Page								
172								
175								
172								
14								
19								
138								
143								
Total								
15								
15								
1758								
1769								
February								
Fig. 48								
PRS								
Feet								
F66								
Total 12								
T88								
Fig. 24								
771								
1772								
1773								
7774								
7775								
7776								
777 8 8 8 8 0.47 0.47 0.52 0.52 778 6 6 6 0.28 0.28 0.34 0.34 1.34 779 12 12 12 0.28 0.28 0.28 0.40 0.40 0.40 779 12 12 12 0.28 0.28 0.28 0.40 0.40 0.40 778 14 14 14 0.23 0.23 0.23 0.27 0.27 785 14 14 14 0.23 0.25 0.28 0.30 0.30 786 12 12 12 0.25 0.25 0.26 0.30 0.30 787 12 12 12 0.25 0.25 0.27 0.30 0.30 788 12 12 12 0.25 0.25 0.26 0.30 0.30 789 18 18 18 0.43 0.43 0.43 0.47 0.47 799 18 18 18 0.43 0.43 0.43 0.43 799 18 18 18 0.33 0.38 0.38 0.43 0.43 796 18 18 18 0.37 0.37 0.42 0.42 796 18 18 18 0.39 0.37 0.42 0.42 796 18 18 18 0.40 0.40 0.40 0.46 0.46 796 18 18 18 0.40 0.40 0.40 0.46 0.46 797 18 18 18 0.40 0.40 0.40 0.46 0.46 798 18 18 18 0.40 0.40 0.40 0.46 0.46 799 18 18 18 0.40 0.40 0.40 0.46 0.46 799 18 18 18 0.48 0.48 0.48 0.48 799 18 18 18 0.40 0.40 0.40 0.40 0.40 0.40 0.40 799 18 18 18 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.4								
778 6 6 6 0.28 0.28 0.34 0.34 0.34 779 12 12 12 0.28 0.28 0.34 0.34 0.34 783 14 14 14 0.23 0.23 0.23 0.27 0.27 0.27 785 14 14 14 0.23 0.23 0.23 0.28 0.28 0.28 787 12 12 0.26 0.26 0.26 0.30 0.30 0.30 788 12 12 12 0.26 0.26 0.31 0.31 0.31 0.31 0.31 0.31 0.31 0.31								
779								
783 14 14 14 0.23 0.23 0.23 0.27 0.27 785 14 14 14 0.23 0.23 0.23 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28								
785 14 14 14 0.23 0.23 0.28 0.28 0.28 787 787 12 12 0.25 0.25 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3								
787 12 12 12 0.25 0.25 0.30 0.30 0.30 788 19 12 12 0.26 0.26 0.31 0.31 0.31 0.31 0.31 0.38 18 18 0.43 0.43 0.43 0.47 0.47 0.47 0.47 0.47 0.47 0.47 0.47								
788 12 12 12 0.26 0.31 0.31 0.31 789 18 18 0.43 0.43 0.47 0.47 792 14 14 0.13 0.13 0.16 0.16 796 18 18 0.38 0.38 0.33 0.43 796 18 18 0.40 0.40 0.42 0.42 800 18 18 0.40 0.40 0.46 0.46 801 18 18 0.40 0.40 0.46 0.54 801 18 18 0.48 0.48 0.54 0.54 802 18 18 0.44 0.44 0.49 0.49 804 18 18 0.39 0.39 0.44 0.44 807 18 18 0.30 0.39 0.34 0.40 0.40 0.40 808 18 18 0.32 0.34 0.34 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
789 18 18 0.43 0.43 0.47 0.47 795 14 14 0.13 0.13 0.16 0.16 795 18 18 0.38 0.38 0.43 0.43 796 18 18 0.37 0.37 0.42 0.42 800 18 18 0.40 0.40 0.46 0.46 801 18 18 0.48 0.48 0.54 0.54 802 18 18 0.48 0.48 0.54 0.54 802 18 18 0.40 0.40 0.49 0.49 804 18 18 0.40 0.40 0.44 0.49 0.49 805 18 18 0.39 0.39 0.34 0.44 0.44 807 18 18 0.39 0.39 0.44 0.44 0.44 809 12 12 12 0.73 0.73 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
792 14 14 0.13 0.13 0.16 0.16 0.16 796 18 18 0.38 0.33 0.43 0.42 0.42 800 18 18 0.40 0.40 0.46 0.46 0.46 801 18 18 0.48 0.48 0.54 0.54 801 18 18 0.44 0.44 0.49 0.49 804 18 18 0.44 0.44 0.49 0.49 804 18 18 0.40 0.40 0.45 0.45 807 18 18 0.39 0.39 0.44 0.44 807 18 18 0.34 0.34 0.40 0.40 0.40 808 18 18 0.32 0.34 0.34 0.40 0.40 0.40 809 12 12 0.70 0.70 0.70 0.84 0.84 0.84 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
795								
Top								
800								
801								
802 18 18 0.44 0.44 0.49 0.49 804 18 18 0.40 0.40 0.45 0.45 805 18 18 0.39 0.39 0.31 0.31 807 18 18 18 0.27 0.27 0.31 0.31 808 18 18 0.34 0.34 0.40 0.40 809 12 12 0.70 0.70 0.64 0.64 810 18 18 0.53 0.53 0.61 0.61 811 15 15 0.30 0.30 0.37 0.37 814 18 18 0.44 0.44 0.44 0.51 0.51 815 21 21 0.38 0.38 0.38 0.44 0.44 818 18 18 0.49 0.49 0.59 0.56 819 18 18 0.49 0.49 0.59 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
804								
805 18 18 0.39 0.39 0.44 0.44 0.44 807 18 18 18 0.27 0.27 0.31 0.31 808 18 18 0.34 0.34 0.40 0.40 810 18 18 0.53 0.53 0.61 0.84 810 18 18 0.53 0.53 0.61 0.61 811 15 15 0.53 0.53 0.61 0.61 814 18 18 0.44 0.044 0.044 0.044 0.044 815 21 21 0.38 0.38 0.34 0.44 0.44 818 18 18 0.49 0.49 0.49 0.59 0.58 0.58 819 18 18 0.49 0.49 0.49 0.59 0.53 0.53 0.53 829 15 15 0.56 0.45 0.53 0.53								
807 18 18 18 0.27 0.27 0.31 0.31 0.31 808 18 18 18 0.34 0.34 0.40 0.40 0.40 809 12 12 0.70 0.70 0.70 0.84								
808 18 18 0.34 0.34 0.40 0.40 0.40 809 12 12 0.70 0.70 0.84 0.84 0.84 810 18 18 0.53 0.53 0.61 0.61 0.61 811 15 15 0.30 0.30 0.37 0.37 0.37 814 18 18 0.44 0.44 0.51 0.51 0.51 815 21 21 0.38 0.38 0.44 0.44 0.44 818 18 18 0.49 0.49 0.58 0.59 0.53 819 18 18 18 0.45 0.45 0.53 0.53 0.53 821 15 15 0.33 0.38 0.61 0.60 0.60 0.87 824 15 15 0.56 0.56 0.66 0.66 0.66 0.66 0.66 0.66 0.66 0.66								
809								
810 18 18 0.53 0.53 0.61 0.61 811 15 15 0.30 0.30 0.37 0.37 814 18 18 0.44 0.44 0.51 0.51 815 21 21 0.38 0.38 0.44 0.44 818 18 18 0.49 0.49 0.58 0.58 819 18 18 0.45 0.45 0.53 0.53 821 15 15 0.38 0.38 0.61 0.60 824 15 15 0.38 0.38 0.38 0.61 0.60 824 15 15 0.73 0.73 0.87 0.87 0.87 825 15 15 0.56 0.56 0.56 0.66 0.66 0.66 828 21 21 21 0.34 0.34 0.39 0.39 831 21 21 0.42 </td <td>809</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	809							
811 15 15 0.30 0.30 0.37 0.37 814 18 18 0.44 0.44 0.51 0.51 815 21 21 0.38 0.38 0.44 0.44 818 18 18 0.49 0.49 0.58 0.58 819 18 18 0.45 0.45 0.53 0.53 821 15 15 0.38 0.38 0.38 0.53 0.53 824 15 15 0.38 0.38 0.38 0.61 0.60 824 15 15 0.56 0.56 0.56 0.66 0.66 828 21 21 0.34 0.94 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39	810							
814 18 18 0.44 0.44 0.51 0.51 815 21 21 0.38 0.38 0.44 0.44 818 18 18 0.49 0.49 0.56 0.58 819 18 18 0.45 0.45 0.53 0.53 821 15 15 15 0.38 0.38 0.61 0.60 824 15 15 0.73 0.73 0.87 0.87 825 15 15 0.56 0.56 0.66 0.66 828 21 21 0.34 0.34 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39				0.30	0.30	0.37	0.37	
818 18 18 18 0.49 0.49 0.58 0.58 819 18 18 0.45 0.45 0.53 0.53 821 15 15 0.38 0.38 0.61 0.60 824 15 15 0.73 0.73 0.87 0.87 825 15 15 0.56 0.56 0.66 0.66 828 21 21 0.34 0.34 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.34 0.39 0.39 </td <td></td> <td></td> <td>18</td> <td>0.44</td> <td>0.44</td> <td>0.51</td> <td>0.51</td> <td></td>			18	0.44	0.44	0.51	0.51	
818 18 18 18 0.49 0.49 0.58 0.58 819 18 18 0.45 0.45 0.53 0.53 821 15 15 0.38 0.38 0.61 0.60 824 15 15 0.73 0.73 0.87 0.87 825 15 15 0.56 0.56 0.66 0.66 0.66 828 21 21 0.34 0.34 0.39 0.39 0.39 831 21 21 0.54 0.54 0.62 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 0.69 8								
821 15 15 0.38 0.38 0.61 0.60 824 15 15 0.73 0.73 0.87 0.87 825 15 15 0.56 0.56 0.66 0.66 828 21 21 0.34 0.34 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.66 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.66 0.66 0.67 0.66 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
824 15 15 0.73 0.73 0.87 0.87 825 15 15 0.56 0.56 0.66 0.66 828 21 21 0.34 0.39 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.69 0.69 0.78 0.77 847 12 12 0.17 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
825 15 15 0.56 0.56 0.66 0.66 828 21 21 0.34 0.34 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.69 0.69 0.78 0.77 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 0.39 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
828 21 21 0.34 0.34 0.39 0.39 831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 0.77 846 21 21 0.66 0.66 0.71 0.69 0.69 847 12 12 0.17 0.17 0.21 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 0.69 0.60 0.67 0.66 0.66 0.67 0.66 0.66 0.67 0.66 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.66 0.66 0.								
831 21 21 0.42 0.42 0.49 0.49 834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.66 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28								
834 21 21 0.54 0.54 0.62 0.62 835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.34 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.22 0.28 0.28 0.28 855 8 8 8 0.24 0.24 0.24 866								
835 24 24 0.34 0.34 0.39 0.39 838 24 24 0.34 0.39 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 855 8 8 0.28 0.28 0.24 0.24								
838 24 24 0.34 0.39 0.39 0.39 843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 856 8 8 0.28 0.28 0.24 0.21 860								
843 21 21 0.69 0.69 0.78 0.77 846 21 21 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.24 0.24 0.24 0.24 856 8 8 0.28 0.28 0.28 0.28 855 8 8 0.24 0.24 0.24 0.24 856 8 8 0.28 0.28 0.28 0.28 860								
846 21 21 0.66 0.66 0.71 0.69 847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 856 8 8 0.24 0.24 0.24 0.24 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.39 0.29 0.24 860 8 8 0.24 0.24 0.24 0.24 0.24 0.24								
847 12 12 0.17 0.17 0.21 0.21 848 21 21 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.32 0.28 0.24 0.24 860 8 8 0.28 0.28 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 0.39								
848 21 21 0.54 0.54 0.59 0.57 850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.28 0.28 856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.3 0.24 0.24 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.23 0.29 0.29 864 8 8 0.23 0.23 0.20 0.29 867 <								
850 21 21 0.60 0.60 0.67 0.66 851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.29 0.29 867 10 10 0.11 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63								
851 21 21 0.48 0.48 0.53 0.52 852 15 15 0.45 0.45 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.07 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY			21					
852 15 15 0.45 0.45 0.39 0.39 0.39 853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.28 0.24 0.24 856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
853 15 15 0.32 0.32 0.28 0.28 855 8 8 0.28 0.24 0.24 0.24 856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
855 8 8 0.28 0.24 0.24 0.24 856 8 8 0.24 0.21 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
856 8 8 0.24 0.24 0.21 0.21 860 8 8 0.43 0.43 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
880 8 8 0.43 0.43 0.39 0.39 0.39 863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
863 15 15 0.33 0.33 0.29 0.29 864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
864 8 8 0.23 0.23 0.20 0.20 867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
867 10 10 0.11 0.11 0.10 0.10 869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
869 10 10 0.17 0.17 0.15 0.15 872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
872 12 18 1.00 1.00 1.00 0.63 FREEDOM PKWY								
								EDEED ON Digital
X/4 1 40 1 400 1 400 1 000 1 FEEDOLOGO	872 874	12 12	18 18	1.00 1.00	1.00 1.00	1.00 1.00	0.63 0.60	FREEDOM PKWY FREEDOM PKWY

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
875	12	18	0.90	0.90	0.90	0.51	FREEDOM PKWY
878	12	18	0.51	0.51	0.52	0.31	FREEDOM PKWY
880	18	18	0.29	0.29	0.30	0.34	
881	18	18	0.41	0.41	0.43	0.49	
882	15	15	0.36	0.36	0.31	0.31	
886	15	15	0.25	0.25	0.22	0.22	
888	12	12			0.22		
			0.40	0.40		0.34	
889	15	15	0.18	0.18	0.16	0.16	
890	15	18	0.56	0.56	0.47	0.47	
891	14	15	0.47	0.47	0.41	0.41	
892	15	15	0.20	0.20	0.17	0.17	
893	10	10	0.50	0.50	0.43	0.43	
894	10	10	0.17	0.17	0.14	0.14	
896	12	12	0.05		0.05	0.05	
				0.05			
897	15	15	0.49	0.49	0.42	0.42	
899	12	12	0.15	0.15	0.14	0.14	
903	15	15	0.49	0.49	0.42	0.42	
904	8	8	0.40	0.40	0.34	0.34	
907	8	8	0.47	0.47	0.41	0.41	
908	15	15	0.38	0.38	0.33	0.33	
911	15	15	0.52	0.52	0.46	0.46	
912	15	15	0.50	0.50	0.44	0.44	
914	8	8	0.39	0.39	0.34	0.34	
917	8	8	0.23	0.23	0.20	0.20	
920	12	12	0.04	0.04	0.03	0.03	
921	15	15	0.45	0.45	0.38	0.38	
922							
	15	15	0.36	0.36	0.31	0.31	
923	6	6	0.14	0.14	0.13	0.13	
924	15	15	0.30	0.30	0.26	0.26	
925	6	6	0.07	0.07	0.06	0.06	
928	15	15	0.21	0.21	0.18	0.18	
929	15	15	0.25	0.25	0.10	0.10	
931	15	15	0.25	0.23	0.30	0.30	
932	6	6	0.00	0.00	0.00	0.00	
933	15	15	0.15	0.15	0.13	0.13	
935	18	18	0.43	0.43	0.38	0.02	
936	18	18	0.47	0.47	0.43	0.13	
940	18	18	0.56	0.56	0.54	0.31	
945	18	18	0.52	0.52	0.51	0.30	
946	18	18	0.62	0.62	0.62	0.38	
948	18	18	0.62	0.62	0.60	0.37	
949	10	12	0.40	0.40	0.41	0.32	
950	18	12	0.23	0.23	0.23	0.20	
951	18	18	0.15	0.15	0.15	0.06	
953	18	18	0.49	0.49	0.49	0.32	
955	18	18	0.66	0.66	0.66	0.42	
956	18	18	0.45	0.45	0.45	0.27	
957	18	18	0.59	0.59	0.59	0.37	
960	8	8	0.28	0.28	0.29	0.14	
963	10	15	1.00	1.00	1.00	0.68	FREEDOM PKWY
965	10	10	0.61	0.61	0.63	0.47	
967	10	10	0.82	0.82	0.84	0.56	
968	10	10	0.47	0.47	0.48	0.35	
969	18	18	1.00	1.00	1.00	0.72	
970	18	18	1.00	1.00	1.00	0.72	
971	18	18	1.00	1.00	1.00	0.65	
973	18	18	1.00	1.00	1.00	0.53	
974	18	18	1.00	1.00	1.00	0.54	
977	12	15	0.23	0.23	0.31	0.31	
978	12	15	0.33	0.33	0.42	0.42	
979	12	15	0.28	0.28	0.36	0.36	
984	12	15	0.29	0.29	0.37	0.37	
985	15	18	0.49	0.49	0.64	0.64	
986	15	18	0.48	0.48	0.66	0.66	
988	15	18	0.53	0.53	0.72	0.72	
989	15	18	0.52	0.52	0.71	0.72	
990							
	15	18	0.52	0.52	0.70	0.70	
992	15	18	0.56	0.56	0.75	0.75	
993	15	18	0.53	0.53	0.73	0.73	
994	15	18	0.50	0.50	0.68	0.68	
995	18	21	0.87	0.87	1.00	0.59	NATIVIDAD CREEK PARK
996	18	21	1.00	1.00	1.00	0.76	NATIVIDAD CREEK PARK
998	18	18	0.59	0.59	0.60	0.76	TWITTEND ONLEN FAIN
1000	18	18	0.70	0.70	0.64	0.59	
1002	15	18	0.47	0.47	0.63	0.63	
1003	12	12	0.41	0.41	0.57	0.57	
1004	12	12	0.47	0.47	0.67	0.67	
1005	15	18	0.36	0.36	0.48	0.48	
1005	15	18	0.52	0.52	0.40	0.40	
1009	12	12	0.19	0.19	0.31	0.31	
1010	15	18	0.58	0.58	0.80	0.80	
1012	12	15	0.37	0.37	0.49	0.49	
1013	12	15	0.42	0.42	0.57	0.57	
1014	15	15	0.57	0.57	0.49	0.49	
1017							
1017	12	12	0.27	0.27	0.22	0.22	
4001	18	18	0.49	0.49	0.48	0.48	
1021		18	0.42	0.42	0.42	0.42	
1023	18						
	18 12	12	0.62	0.62	0.58	0.58	
1023 1024	12	12	0.62				
1023				0.62 0.61 0.64	0.58 0.58 0.61	0.58 0.58 0.61	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1031	12	12	0.62	0.62	0.59	0.59	
1033 1035	12 12	12 12	0.63 0.64	0.63 0.64	0.60 0.59	0.60 0.59	
1033	12	12	0.63	0.63	0.59	0.59	
1040	12	12	0.63	0.63	0.58	0.58	
1042	12	12	0.58	0.58	0.52	0.52	
1044	12	12	0.55	0.55	0.47	0.47	
1046	12	12	0.55	0.55	0.47	0.47	
1049	12	12	0.55	0.55	0.48	0.48	
1052	12	12	0.27	0.27	0.42	0.42	
1053 1055	12 12	12 12	0.36 0.44	0.36 0.44	0.50 0.63	0.50 0.63	
1056	12	12	0.42	0.42	0.58	0.58	
1060	12	12	0.35	0.35	0.45	0.45	
1061	12	12	0.42	0.42	0.54	0.54	
1063	12	12	0.48	0.48	0.63	0.63	
1065	12	12	0.51	0.51	0.65	0.65	
1068	12	12	0.40	0.40	0.52	0.52	
1071	14	14	1.00	1.00	1.00	1.00	
1078 1079	15	15	0.47	0.47 0.42	0.68	0.68	
1079	15	15	0.42		0.60	0.60	
1093	15 48	15 48	0.36 0.65	0.36 0.65	0.52 0.73	0.52 0.76	
1096	10	10	0.58	0.58	0.58	0.78	
1097	10	10	0.59	0.59	0.61	0.61	
1101	15	18	0.48	0.48	0.73	0.49	VICTOR ST.
1108	27	27	0.46	0.46	0.47	0.47	
1109	12	12	0.23	0.23	0.30	0.30	
1110	27	27	0.38	0.38	0.36	0.36	NORTH DAVIE DD
1114 1115	24 24	30 30	0.79 0.97	0.79 0.97	0.86 1.00	0.55 0.56	NORTH DAVIS RD. NORTH DAVIS RD.
1116	24	30	0.97	0.97	1.00	0.56	NORTH DAVIS RD.
1131	12	12	0.50	0.50	0.62	0.65	
1132	12	12	0.54	0.54	0.68	0.71	
1134	12	12	0.45	0.45	0.55	0.58	
1139	27	27	0.52	0.52	0.54	0.54	
1140	27	27	0.55	0.55	0.57	0.58	
1141	27	27	0.56	0.56	0.58	0.59	
1146 1152	15 15	18 18	0.48 0.47	0.48 0.47	0.56 0.56	0.58 0.57	
1154	15	18	0.50	0.50	0.59	0.60	
1155	15	18	0.49	0.49	0.57	0.58	
1159	15	18	0.48	0.48	0.56	0.57	
1162	15	18	0.54	0.54	0.64	0.65	
1164	18	18	0.63	0.63	0.75	0.77	
1167	18	18	0.68	0.68	0.79	0.81	
1172 1175	27 15	27 18	0.47	0.47	0.47 0.55	0.47 0.56	
1177	15	15	0.47 0.59	0.47 0.59	0.55	0.73	
1182	27	27	0.44	0.44	0.45	0.46	
1183	27	27	0.46	0.46	0.47	0.48	
1186	8	8	0.20	0.20	0.16	0.16	
1206	15	15	0.43	0.43	0.64	0.65	
1207	15	15	0.49	0.49	0.75	0.68	140700.07
1208	15	18	0.54	0.54	0.84	0.53	VICTOR ST.
1209 1210	15 15	18 18	0.53 0.52	0.53 0.52	0.87 0.89	0.52 0.51	VICTOR ST. VICTOR ST.
1211	15	18	0.52	0.52	0.89	0.51	VICTOR ST.
1212	15	18	0.53	0.53	0.98	0.52	VICTOR ST.
1213	15	18	0.57	0.57	0.92	0.55	VICTOR ST.
1214	48	48	0.78	0.78	0.86	0.87	
1215	48	48	0.79	0.79	0.87	0.89	
1216	48	48	0.80	0.80	0.88	0.89	
1217 1218	48 48	48 48	0.81 0.82	0.81 0.82	0.90 0.92	0.92 0.94	
1218	48	48	0.82	0.82	0.92	0.89	
1220	48	48	0.70	0.70	0.80	0.82	
1221	10	10	0.65	0.65	0.62	0.61	
1222	10	10	0.30	0.30	0.24	0.24	
1223	10	10	0.35	0.35	0.28	0.28	
1224	10	10	0.35	0.35	0.29	0.29	
1225	10	10	0.36	0.36	0.29	0.29	
1226 1227	10 10	10 10	0.36 0.35	0.36 0.35	0.29 0.28	0.29 0.28	
1227	10	10	0.35	0.35	0.28	0.28	
1229	10	10	0.38	0.38	0.23	0.23	
1230	24	24	0.42	0.42	0.39	0.39	
1231	24	24	0.39	0.39	0.35	0.35	
1232	24	24	0.40	0.40	0.36	0.36	
1233	24	24	0.39	0.39	0.35	0.35	
1234	24	24	0.36	0.36	0.32	0.32	
1235 1236	18	24	0.66	0.66	0.70	0.62	
1236	18 18	24 24	0.62 0.57	0.62 0.57	0.64 0.59	0.66 0.59	
1238	18	24	0.52	0.52	0.53	0.59	
1239	18	24	0.61	0.61	0.63	0.64	
1240	18	24	0.64	0.64	0.67	0.67	
1241	12	12	0.23	0.23	0.24	0.24	
1242	12	12	0.22	0.22	0.23	0.23	
1243 1244	12	12	0.25	0.25	0.26	0.26	
4044	18	24	0.65	0.65	0.68	0.68	

Pipe I	[inches]	[inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1245		24	0.67	0.67	0.70	0.70	
1248		24	0.54	0.54	0.56	0.56	
1252	2 12	12	0.32	0.32	0.34	0.34	
1253		24	0.47	0.47	0.49	0.49	
1254		24	0.47	0.47	0.49	0.49	
1255		15	0.87	0.87	0.88	0.89	
1257		27	0.53	0.53	0.55	0.55	
1259		27	0.45	0.45	0.46	0.47	
1263		12	0.84	0.84	0.90	0.60	SAN JUAN GRADE
1267	7 12	12	0.40	0.40	0.52	0.54	
1269	9 12	12	0.50	0.50	0.61	0.64	
1272	2 15	15	0.53	0.53	0.63	0.64	
1273	3 12	12	0.41	0.41	0.50	0.52	
1275	5 10	10	0.45	0.45	0.48	0.48	
1279	9 10	10	0.42	0.42	0.44	0.44	
1280		10	0.64	0.64	0.70	0.70	
1281		10	0.60	0.60	0.65	0.65	
1283		36	0.59	0.59	0.67	0.68	
1285		8	0.12	0.12	0.16	0.16	
1286		36	0.78	0.78	0.83	0.85	
1287		14	0.02	0.02	0.01	0.01	
1288		8	0.05	0.05	0.05	0.05	
1289		30	0.03	0.03	0.68	0.68	
1208		8	0.71	0.71	0.63	0.63	
1290		8	0.59	0.59	0.62	0.62	
1292		30	0.59	0.59	0.62	0.62	
1292		48		0.68	0.78	0.76	
1293		48	0.68			0.73	
1305		24	0.59	0.59	0.63		
1306		48	0.13 0.70	0.13	0.17	0.17	
				0.70	0.80	0.83	
1307		48	0.71	0.71	0.82	0.84	
1308		48	0.60	0.60	0.68	0.71	
1309		48	0.61	0.61	0.67	0.70	
1313		12	1.00	1.00	1.00	1.00	
1320		12	0.26	0.26	0.31	0.31	
1321		12	0.24	0.24	0.28	0.28	
1324		12	0.19	0.19	0.23	0.23	
1325		12	0.25	0.25	0.30	0.30	
1327		12	0.32	0.32	0.44	0.44	
1329		18	0.11	0.11	0.13	0.13	
1332		12	0.06	0.06	0.06	0.06	
1333		12	0.30	0.30	0.35	0.35	
1335		18	0.23	0.23	0.27	0.27	
1338		8	0.14	0.14	0.12	0.12	
1341		18	0.25	0.25	0.27	0.27	
1342		10	0.10	0.10	0.08	0.08	
1344		12	0.45	0.45	0.38	0.38	
1349	9 10	10	0.60	0.60	0.49	0.49	
1350		10	0.64	0.64	0.50	0.50	
1351	1 10	10	0.65	0.65	0.51	0.51	
1352	2 10	10	0.56	0.56	0.44	0.44	
1354	4 8	8	0.36	0.36	0.42	0.42	
1356	8	8	0.41	0.41	0.52	0.52	
1357	7 8	8	0.62	0.62	0.80	0.80	
1358	3 8	8	0.35	0.35	0.42	0.42	
1359	12	12	0.32	0.32	0.40	0.40	
1361	1 8	12	0.44	0.44	0.57	0.57	
1362		12	0.48	0.48	0.58	0.58	
1363		8	0.31	0.31	0.27	0.27	
1364		6	0.00	0.00	0.00	0.00	
1367		8	0.00	0.00	0.00	0.00	
1368		12	0.00	0.00	0.00	0.00	
1369		12	0.32	0.32	0.43	0.43	
1372		12	0.34	0.34	0.46	0.46	
1373		8	0.50	0.50	0.70	0.70	
1374		8	0.50	0.50	0.71	0.71	
1375		8	0.45	0.45	0.62	0.62	
1380		8	0.44	0.44	0.59	0.59	
1383		8	0.49	0.49	0.67	0.67	
1384		8	0.53	0.53	0.72	0.72	
1385		8	0.45	0.45	0.62	0.62	
1386		15	0.46	0.46	0.63	0.63	
1389		15	0.49	0.49	0.68	0.68	
1390		18	0.36	0.36	0.49	0.49	
1401		12	0.77	0.77	1.00	0.42	SAN JUAN GRADE
1402		12	0.63	0.63	1.00	0.38	SAN JUAN GRADE
1402		12	0.03	0.65	1.00	0.36	SAN JUAN GRADE SAN JUAN GRADE
1403		12	0.75	0.89	1.00	0.44	SAN JUAN GRADE SAN JUAN GRADE
1405		12	0.89	0.89	1.00	0.51	SAN JUAN GRADE SAN JUAN GRADE
1406		10	0.54	0.54	0.53	0.52	UNIT JUNIN GIVADE
1408		10	0.04	0.04	0.03	0.03	
1413		27	0.47	0.47	0.49	0.49	
1416		12	0.25	0.25	0.26	0.26	
1417		12	0.23	0.23	0.24	0.24	
1418		12	0.12	0.12	0.13	0.13	
1419		12	0.00	0.00	0.00	0.00	
1425		12	0.74	0.74	1.00	0.43	SAN JUAN GRADE
1426		12	0.82	0.82	1.00	0.45	SAN JUAN GRADE
1427		12	0.77	0.77	0.89	0.46	SAN JUAN GRADE
1428	3 8	12	0.62 0.47	0.62 0.47	0.80 1.00	0.38 0.45	SAN JUAN GRADE SAN JUAN GRADE

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
1431	8	8	0.54	0.54	1.00	0.46	
1432	8	12	0.76	0.76	1.00	0.46	SAN JUAN GRADE
1433	10	12	0.39	0.39	1.00	0.38	SAN JUAN GRADE
1437	10	10	0.42	0.42	0.54	0.54	
1438	10	10	0.49	0.49	0.63	0.63	
1440	10	10	0.52	0.52	0.67	0.67	
1443	10	10	0.55	0.55	0.73	0.73	
1444	10	10	0.27	0.27	0.33	0.31	
1449	10	10	0.49	0.49	0.63	0.63	
1450	8	8	0.45	0.45	0.56	0.56	
1452	8	8	0.34	0.34	0.43	0.43	
1453	8	8	0.30	0.30	0.36	0.36	
1454	8	8	0.31	0.31	0.38	0.38	
1456	8	8	0.24	0.24	0.29	0.29	
1457	24	27	0.77	0.77	0.85	0.60	NATIVIDAD CREEK PARK
1458	27	27	0.70	0.70	0.70	0.77	
1459	27	27	0.70	0.70	0.70	0.76	
1460	27	27	0.70	0.70	0.70	0.76	
1461	27	27	0.70	0.70	0.70	0.76	
1462	27	27	0.64	0.64	0.64	0.70	
1463	27	27	0.72	0.72	0.72	0.79	
1464	30	30	0.71	0.71	0.72	0.76	
1465	21	21	0.55	0.55	0.72	0.77	
1466	21	21	0.55	0.55	0.79	0.79	
1467	21	21	0.59	0.59	0.79	0.79	
1468	10	10	0.59	0.59	0.58	0.58	
1469	18	18	1.00	1.00	1.00	0.58	
1470		18	1.00			0.54	
1470	18			1.00	1.00		
	27	27	0.81	0.81	0.79	0.86	
1472	27	27	0.84	0.84	0.83	0.89	
1473	27	27	0.77	0.77	0.76	0.88	
1474	12	12	0.31	0.31	0.39	0.40	
1478	10	10	0.94	0.94	1.00	1.00	
1482	8	8	0.66	0.66	0.64	0.64	
1483	8	8	0.68	0.68	0.69	0.69	
CDT_101	30	32	0.79	0.79	0.81	0.67	NORTH DAVIS RD.
CDT_11	10	10	0.60	0.60	0.62	0.62	
CDT_111	18	18	0.57	0.57	0.57	0.33	
CDT 113	42	42	0.75	0.75	0.79	0.80	
CDT 117	36	36	0.92	0.92	0.98	0.99	
CDT 119	27	27	1.00	1.00	1.00	1.00	
CDT 123	14	14	1.00	1.00	1.00	1.00	
CDT 125	12	12	1.00	1.00	1.00	1.00	
CDT 131	15	18	0.37	0.37	0.47	0.47	
CDT 133	15	18	0.42	0.42	0.56	0.56	
CDT 141	24	27	0.59	0.59	0.57	0.59	
CDT_153					0.44		
	12	15	0.36	0.36		0.44	
CDT_155	12	15	0.37	0.37	0.47	0.47	
CDT_157	18	18	0.72	0.72	0.61	0.61	
CDT_159	18	18	0.68	0.68	0.57	0.57	
CDT_161	18	18	0.60	0.60	0.51	0.51	
CDT_163	18	18	0.63	0.63	0.53	0.53	
CDT_165	18	18	0.62	0.62	0.53	0.53	
CDT_181	15	15	1.00	1.00	0.66	0.56	
CDT_183	15	15	1.00	1.00	0.56	0.56	
CDT_185	15	15	1.00	1.00	0.56	0.56	· · · · · · · · · · · · · · · · · · ·
CDT_187	15	15	1.00	1.00	0.56	0.56	
CDT_189	15	15	0.98	0.98	0.56	0.56	
CDT_19	8	8	0.30	0.30	0.49	0.49	<u> </u>
CDT_191	15	15	0.88	0.88	0.56	0.56	
CDT_193	15	15	0.73	0.73	0.52	0.56	
CDT_195	12	15	0.90	0.90	0.74	0.53	ABBOTT ST.
CDT 197	12	15	1.00	1.00	0.89	0.50	ABBOTT ST.
CDT 199	12	15	1.00	1.00	0.91	0.50	ABBOTT ST.
CDT 201	12	18	1.00	1.00	1.00	0.64	FREEDOM PKWY
CDT 203	10	15	1.00	1.00	1.00	0.51	FREEDOM PKWY
CDT 205	10	15	1.00	1.00	1.00	0.47	FREEDOM PKWY
CDT 207	10	15	1.00	1.00	1.00	0.50	FREEDOM PKWY
CDT 21	6	6	0.95	0.95	1.00	1.00	I ILLESOWI I KWI
CDT_21	2	2	1.00	1.00	1.00	1.00	
CDT_23	6	6	1.00	1.00	1.00	1.00	
CDT_31	6	6	1.00	1.00	1.00	1.00	
CDT_33	8	8	0.30	0.30	0.24	0.24	
CDT_35	10	10	0.76	0.76	0.58	0.58	
CDT_37	6	6	1.00	1.00	1.00	1.00	
CDT_39	6	6	0.50	0.50	0.50	0.50	
CDT_45	4	4	0.76	0.76	0.81	0.79	
CDT_47	8	8	0.17	0.17	0.15	0.15	
CDT_51	8	8	0.62	0.62	0.60	0.60	
CDT_53	12	12	1.00	1.00	1.00	1.00	<u> </u>
CDT 55	12	12	1.00	1.00	1.00	1.00	
CDT 57	12	12	0.37	0.37	0.30	0.30	
CDT_59	10	10	0.72	0.72	0.61	0.61	
CDT 63	12	12	0.39	0.39	0.47	0.47	
CDT 69	12	12	0.39	0.16	0.13	0.47	
CDT_69	12	12	0.16	0.10	0.13	0.13	
CDT_71							
	18	18	1.00	1.00	1.00	0.59	
CDT_83	54	54	0.65	0.65	0.70	0.71	
CDT_85	54	54	0.65	0.65	0.70	0.71	
	12	12	0.57	0.57	0.51	0.51	
CDT_87 CDT_89	12	12	0.20	0.20	0.23	0.23	

Pipe ID	Existing Diameter [inches]	Proposed Diameter [inches]	Existing MDF d/D (exist pipe dia)	Existing MDF d/D (proposed pipe dia)	Existing PHWWF d/D (exist pipe dia)	Existing PHWWF d/D (proposed pipe dia)	CIP Name
CDT 93	18	18	0.51	0.51	0.60	0.60	



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-298, Version: 1

American Rescue Plan Act of 2021 Update

No action required. This item provides an administrative update on the City's various Council-adopted projects included in the Salinas recovery under the American Rescue Plan Act (ARPA) of 2021.

DATE: May 2, 2023

DEPARTMENT: ADMINISTRATION

FROM: STEVEN S. CARRIGAN, CITY MANAGER

BY: DEPARTMENT DIRECTORS

JIM PIA, ASSISTANT CITY MANAGER

TITLE: SALINAS' AMERICAN RESCUE PLAN UPDATE

RECOMMENDED MOTION:

This item provides an administrative update on the City's various Council-adopted projects included in the Salinas recovery under the American Rescue Plan Act (ARPA) of 2021. No action is required.

DISCUSSION:

On March 11, 2021, President Biden signed the American Rescue Plan Act, which provided the City with \$51,567,313 in relief funds. The City has now received all of this funding. As a reminder, the project areas were adopted by the City Council in September of 2021. As of mid-April 2024, \$5,512,276 has been spent, with another \$8,920,217 encumbered on projects, for a total of approximately 28 percent.

BACKGROUND:

COUNCIL ADOPTED ARPA CATEGORY SPENDING

- 1. <u>Public Facilities</u>: (\$11.5 million) According to Treasury guidelines, Capital investments in public facilities to meet pandemic operational needs are eligible, including public building adaptations to implement COVID-19 mitigation. Staff has identified this expenditure area with \$11.5 million in spending, including:
 - a. Adaptations to Salinas City Hall, \$5,002,313
 - b. Hebbron Family Center, \$1.5 million (for contingencies, unexpected costs, furniture, and fixtures)

- c. Fire Stations, and other Recreational Facilities, \$3 million
- d. Playground Structures, Park Benches, Grills, \$2 million (Majority to be spent in 93905 & 93906 due to having the higher number of COVID-19 cases)
- 2. <u>Public Infrastructure</u>: (\$12 million) Staff wanted to identify all vital City expenditure areas, even those that may not technically be addressed through ARPA allowable expenses. The Treasury Department gives recipients broad latitude to use funds for the provision of government services to the extent of the reduction in revenue. As a result, staff has identified this expenditure area at \$12 million, as follows:

 (Finance Committee has been involved in reviewing these projects)
 - a. Sidewalk repairs, \$6 million (Majority to be spent in 93905 & 93906 due to having the higher number of COVID-19 cases)
 - b. Street repair / Traffic safety, \$6 million (\$3 million from City Hall improvements + \$1 million from other public facilities above) (majority to spent in 93905 & 93906 due to having the higher number of COVID-19 cases)
- 3. <u>Investments in Water and Sewer</u>: (\$15.465 million) ARPA fund recipients may use Coronavirus State and Local Fiscal Recovery Funds to make necessary investments in water and sewer. Staff has identified this expenditure area at \$15.465 million, as follows:

a. Sewer System Work, \$4,620,000
b. Gabilan Creek Silt removal, \$500,000
c. Natividad Creek Silt Removal, \$1,545,000
d. Storm Water Master Plan, \$800,000
e. Park Irrigation Upgrades \$5 million
f. Stormwater Green Infrastructure \$3 million

4. <u>Homelessness/Housing</u>: (\$12.6 million)

a. Chinatown Navigation Center Operations, \$1 million
b. SHARE Center Operations, \$1 million
c. Downtown Streets Team \$600,000

d. Salinas Homeless Motel Program \$3 million

e. Affordable Housing Production Fund, \$7 million (to facilitate affordable housing production, funds can be used for predevelopment, acquisition, construction, plans and studies)

ARPA SPECIFIC PROJECTS IDENTIFIED

Numbering	Project ID	Project Name	Budget	Obligations	Expenditures
1	3911.50.8170	Adaptations to City Hall	5,002,313.00	-	-
2	3911.30.9021	Affordable Housing Production	7,000,000.00	-	-
3	3911.30.8161	Chinatown Navigation Center Operations	1,000,000.00	-	-
4	3911.30.9181	Downtown Streets Team	600,000.00	-	-
5	3911.45.9235	Fire Station Renovations	1,500,000.00	-	-
6	3911.45.9541	Fire Station Repairs	1,400,000.00	-	-
7	3911.55.9311	Firehouse Rec Center	100,000.00	-	-
8	3911.50.9727	Gabilan Creek Silt Removal	500,000.00	-	-
9	3911.55.9165	Hebbron Family Center	1,500,000.00	-	-
10	3911.50.9086	Natividad Creek Silt Removal	1,545,000.00	-	-
11	3911.55.8191	Park Irrigation Upgrades	5,000,000.00	-	-
12	3911.55.8171	Playground Structures, Park Benches, Grills	2,000,000.00	-	-
13	3911.30.8162	Salinas Homeless Motel Program	3,000,000.00	-	-
14	3911.50.8190	Sewer System Work	4,620,000.00	-	-
15	3911.30.3220	SHARE Center Operations	1,000,000.00	-	-
16	3911.50.9720	Sidewalk Repairs	6,000,000.00	-	-
17	3911.50.9293	Storm Water Master Plan	800,000.00	-	-
18	3911.50.8192	Stormwater Green Infrastructure	3,000,000.00	-	-
19	3911.50.8180	Street Repair / Traffic Safety	6,000,000.00	-	-
			51,567,313.00	-	-

UPDATED HIGHLIGHTS by ADOPTED CATEGORY SPENDING

The highlights below capture some of the upcoming activity by category. The attached ARPA Project status list addresses the entirety of information on the projects noted above.

PUBLIC FACILITY CATEGORY:

On the Fire Station Renovations/Repairs, the Salinas Fire Department expects to award a contract in May/June 2023 that will identify a project renovation schedule for \$2.9 million that will span over 1.5 years, and all six fire stations.

On the Adaptations to City Hall project, staff remains focused on the new roof, (approved by Council on April 4), as well as abating environmental hazards and providing for modern HVAC (Heating, ventilating, and air-conditioning), and important building security enhancements. These projects will be worked on during the summer months with significant progress on expenditures (more than \$2 million) in the coming fiscal year.

In the expansion of the Firehouse Recreation Center, staff is exploring modular units that can serve to appropriately expand the site, as well as necessary restroom renovations, with proposals due in mid-May 2023.

A demolition contract for the Hebbron Family Center was awarded on April 4, 2023, with the anticipated completion in June on that important project.

PUBLIC INFRASTRUCTURE CATEGORY:

It is anticipated that sidewalk repairs totaling \$3.5 million will be completed by August 2023, with a second large sidewalk repair project going out for bid in the fall of 2023.

INVESTMENTS IN WATER AND SEWER CATEGORY:

Three million dollars was allocated to the Stormwater Green Infrastructure projects, including Green City Master Plan, Street sweeping community engagement and route reconfiguring, Cesar Chavez Park Basin engineering and drainage repair, all with work identified in the remainder of 2023 and throughout 2024.

The next steps on the Citywide Park Irrigation upgrades (\$5 million allocation) will come with staff recommendations in the upcoming summer months.

HOMELESSNESS/HOUSING CATEGORY:

ARPA funds for the Chinatown Navigation Center operation have been nearly half used with a new funding agreement to be executed in the new fiscal year. Funding continues to be used for the SHARE Center operations as well.

In terms of Affordable Housing production, the City has completed steps toward: 1) acquiring affordable housing at 403 E. Romie Lane; 2) support for Eden Housing at 855 E. Laurel Drive; 3) acquiring Soledad Street properties; 4) predevelopment efforts on Division Street parcel; 5) acquisition of parcel from St. George Church for CHISPA development of 31-unit Senior housing project. Additionally, funded work by the Downtown Streets Team continues and ongoing efforts also continue in the Salinas Homeless Motel Program.

It is anticipated that All ARPA money, as required by the legislation, will be encumbered by the end of 2024 and work completed by the end of 2026.

Attachments

ARPA Project Status List

Salinas Recovery Plan (ARPA) (Total Allocation: \$51,567,313)	Status	Schedule/Update/Date of Completion/Next Steps
Public Facilities (\$11,502,313 allocated)		
Adaptations to City Hall 3911.50.8170	\$5,002,313 allocated	Council approved a Roof repair on April 4, 2023, that is now being scheduled with the vendor through Public Works. Prior to the work, environmental abatement hazards need to be completed. As a result, the updated timeframe for this work is August-September 2023.
Fire Station Renovations/Repairs 3911.45.9235/3911.45.9541	\$2,900,000 allocated	In January 2023, SFD signed a Professional Services Agreement with CSG Consultants for the project/construction management for the renovations and repairs of FS 1-6. On March 27, 2023, SFD will release an RFP for architectural services and expects to award a contract by May 19, 2023. SFD expects to have a renovation/repair schedule by this summer with a project renovation schedule extending over 1.5 -2 years.
Firehouse Recreation Center 3911.55.9311	\$100,000 allocated	 Staff is exploring modular units to expand the facility. Staff is also working with facilities to identify structural issues needing to be addressed prior to expansion. Restroom renovation scope of work has been completed and released to

	_	-
		the Master Architect List. Following receipt of proposals and contract
		award, design of the new restroom
		would be developed.
		Proposals are due May 15, 2023.
Hebbron Family Center 3911.55.9165	\$1,500,000 allocated	A demolition contract for the HFC was
		awarded on April 4, 2023, to Randazzo, for
		\$316,016. Asbestos abatement is anticipated
		to last 10-15 days prior to demolition. Staff
		anticipates demolition work starting in
		early May 2023, with completion in June 2023
Playground Structures, Park Benches, Grills 3911	.55.8171 \$2,000,000 allocated	 Systemwide playground engineered wood fiber installation was completed in early March. Staff is working on securing a sand vendor and anticipates bringing a contract to council in May. Playground equipment has started to arrive, and repairs have started. As more equipment becomes available, more parks playgrounds will be repaired. Contracts for playground repairs with Miracle and Ross Recreation are valid
		through December 31, 2023. 3. An outreach plan is being developed for the new universal playgrounds being designed for Northgate and Williams Ranch Parks. Outreach is anticipated to start in early May.

			\$1,405,638 has been spoken for of \$2 Million.
Public Infrastructure (\$12,000,000 allocated)		
Sidewalk Repairs	3911.50.9720	\$6,000,000 allocated	Awarded contract to JJR Construction. Estimated ARPA funds \$3.5 million expended by August 2023. Working on a phase 2 sidewalk project to go out to bid in the fall of 2023.
Street Repair/Traffic Safety	3911.50.8180	\$6,000,000 allocated	Completed Plans and Specs for the Williams Rd crosswalk. Project was awarded grant funds for construction and the City is waiting on allocation of grant funds. The City should go out to bid Summer/Fall this year. Approved traffic calming plans for Acacia, Paseo Grande, Victor, and Iverson St. Material has been ordered and construction has started on Acacia St. Street repairs total \$762,000. Caoba Way and a portion of Dallas Avenue have been completed. Additional paving will start in April. Set aside \$1,000,000 per year for pavement work by city Crews. Purchased 2 motorcycles for traffic officers. Total cost \$99,161.06

		Discussion on paying for FUSUS (Camera Platform) in the amount of \$250,000 Pavement management program out to bid. We could use ARPA if the bids are higher than available funding.
Water and Sewer (\$15,465,000 allocated)		
Sewer system work 3911.50.8190	\$4,620,000 allocated	City staff has created a list of priority repair projects based on results of the draft Sanitary Sewer Master Plan. A consultant has been engaged and has begun design work on the repair areas. Surveying is expected to start April and design are expected to be ready for bids by the 3 rd quarter of 2023. CCTV work is scheduled to begin in 2 nd quarter of 2023.
Gabilan Creek Silt Removal 3911.50.9727	\$500,000 allocated	A consultant has been engaged to continue the permitting efforts which had begun prior to the ARPA funding. Completion of the permitting process is expected in the 3rd quarter of 2023. Implementation of required mitigation measures are also expected to begin at that time.
Natividad Creek Silt Removal 3911.50.9086	\$1,545,000 allocated	A consultant has been engaged to continue the permitting efforts which had begun prior to the ARPA funding. Completion of the permitting process is expected in the 3rd quarter of 2023. Implementation of required mitigation

		measures are also expected to begin at that time.
Storm Water Master Plan 3911.50.9293	\$800,000 allocated	Master Plan due May 1, 2023
	+	\$270k remaining (contract extn for 12/23)
Stormwater Green Infrastructure 3911.50.8192	\$3,000,000 allocated	 Green City Master Plan due Aug 2023 (extn being drafted for Feb 2024). \$600k allocated/\$590k remaining Closter Park PS&Es due Jan 2024 (extn being drafted for March 2024) \$508k allocated/\$491k remaining Street Sweeping Community Engagement due Jan 2024 \$100k allocated/\$95k remaining Sweeping route reconfigure due 12/23 (will be sooner) \$45k allocated/\$28.5k remaining Pesticide Reduction Plan – RFP to be released summer of 2023 for completion in early 2024 (\$100k reserved) Street Sweeping Pilot signage – RFP to be released Fall 2023 for implementation by 12/24. (\$500k reserved, depends on Andrew's sign plan for chosen pilot route) Cesar Chavez Park Basin System Engineering Assessment - \$147k reserved, RFP released with Cesar Chavez Master Plan.

		 Repair of Cesar Chavez Drainage basin system (\$1M reserved); RFP to be released once EA complete. Not sure if the cost to fix CC basin system will be \$1M. Whatever is remaining will be used for Closter Park Green Street grant match. •
Park Irrigation Upgrades 3911.55.8191	\$5,000,000 allocated	A systemwide irrigation assessment was completed at the end of May. The assessment identifies repair costs and prioritization for complete irrigation renovations. Staff is currently reviewing the report and will be developing a plan to implement assessment recommendations. Staff's recommendations and next steps to be identified by June 2023
Homelessness/Housing (\$12,600,00 allocated)		,
Chinatown Navigation Center Operations 3911.30.8161	\$1,000,000 allocated	Funding Agreement executed for FY 22-23 in the amount of \$500,000 for term of 7/1/22 – 6/30/23. Next Steps: Execute a Funding Agreement for FY 23-24 in the amount of \$500,000 for a term of 7/1/2023 thru 6/30/2024.

SHARE Center Operations 3911.30.3220	\$1,000,000 allocated	Executed Funding agreement for a term of 1/1/2023 thru 6/30/2023 in the amount of \$1,000,000. City fund expenditures to follow priority expenditure of County funds. Next steps: Extend agreement to support
		City's portion of shared operations funding for FY 23-24, if necessary.
Affordable Housing Production 3911.30.9021	\$7,000,000 allocated	Completed/In-progress: Acquired 403 E. Romie Lane - \$1,450,000 Acquired 34 Soledad - \$230,625 In Escrow 37 Soledad - \$200,000 – awaiting final court approval of Trustee sale, anticipated closing June 2023 Pre-development support to Eden Housing for 855 E. Laurel Drive - \$500,000 Potential/Next Steps: Acquisition of additional Soledad Street properties adjacent to other City-owned sites to create larger contiguous parcel amenable to mixed-use development/housing Acquisition of small 25-unit motel for rehabilitation to affordable housing Pre-development support to Envision II, LLC for potential 75- unit 100% affordable rental

		development at 467-479 Market St \$500,000+ - TCAC application anticipated in June in partnership with onboarding of additional affordable housing development partner • Division Street – potential \$500,000 for pre-development to HACM for city-owned parcels, potential for larger development including adjacent County-owned parcels contingent upon additional discussions with County and Teamsters • Acquisition of parcel from St. George Church to allow CHISPA development of 31-unit Senior Housing complex – pending subdivision of current parcel and reappraisal of new parcel - \$645,000 (original appraisal of non-divided building site) Initiating discussions with HACM for potential development of an undeveloped parcel on Casentini St
Downtown Streets Team 3911.30.9181	\$600,000 allocated	Executed Funding agreement for FY 22-23 - in the amount of \$223,100 for 7/1/22 - 6/30/23.

		Executed a Funding Agreement for FY 23-24 in the amount of \$376,900 for a term of 7/1/2023 - 6/30/2024.
Salinas Homeless Motel Program 3911.30.8162	\$3,000,000 allocated	Funding Agreement Executed with motel and services providers: • Central Coast Center for Independent Living for \$672,969 • CSUMB CHE for \$456,000 • Benitez Security for \$486,000 • Marina Hotels Ci, LLC for \$135,000 • JS Inc. for \$1,000,000 • Housing Staff Admin: \$153,000



200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-314, Version: 1

Minutes

Approve minutes of April 18, 2023.



200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-310, Version: 1

Financial Claims

Approve financial claims report.

Payment Register
From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count		
<u>Check</u>				
466007	04/13/2023	Open	Law Offices of Roy C Gunter III	\$570.50
466008	04/13/2023	Open	PNC Equipment Finance, LLC	\$58,774.99
466009	04/13/2023	Open	Walmart c/o Capitol One	\$1,405.37
466010	04/18/2023	Open	Evelia Marr	\$160.00
466011	04/18/2023	Open	Roberto Filice	\$217.00
466012	04/18/2023	Open	Steven Carrigan	\$328.35
466013	04/18/2023	Open	4 Imprint	\$924.28
466014	04/18/2023	Open	72 Hour LLC dba Chevrolet of Watsonville/National	\$245.19
466015	04/18/2023	Open	Ace Hardware	\$10.91
466016	04/18/2023	Open	Acme Car Wash (William Pierce Inc)	\$1,289.00
466017	04/18/2023	Open	AJ's Equipment Company	\$999.27
466018	04/18/2023	Open	Alameda Electrical Distributors	\$85.98
466019	04/18/2023	Open	Alhambra and Sierra Spring DS Waters of America LP	\$90.93
466020	04/18/2023	Open	All Safe Security Alarm	\$360.00
466021	04/18/2023	Open	Amazon.Com	\$230.99
466022	04/18/2023	Open	American Supply Company	\$3,743.33
466023	04/18/2023	Open	American Traffic Solutions Inc.	\$26,057.84
466024	04/18/2023	Open	Amerigas	\$1,960.26
466025	04/18/2023	Open	Ana Rueda De Vidales dba JAV Language Solutions	\$975.61
466026	04/18/2023	Open	Assured Aggregates Company Inc	\$4,329.95
466027	04/18/2023	Open	AT&T Mobility	\$240.93
466028	04/18/2023	Open	AT&T Mobility	\$21.99
466029	04/18/2023	Open	AT&T Mobility	\$119.78
466030	04/18/2023	Open	B & H Foto & Electronics Corp	\$4,800.71
466031	04/18/2023	Open	Bandit Systems Inc dba Bandit Systems	\$1,301.48
466032	04/18/2023	Open	Bearing Engineering Company	\$29.36
466033	04/18/2023	Open	Benitez Security Services, Inc	\$57,003.00
466034	04/18/2023	Open	Bergkamp Incorporated	\$3,676.99
466035	04/18/2023	Open	Breakout Prison Outreach dba California Youth Outr	\$16,181.83
466036	04/18/2023	Open	Cagwin & Dorward, LLC	\$1,003.00
466037	04/18/2023	Open	CALIFA Group	\$5,853.51
466038	04/18/2023	Open	California Towing and Transport	\$526.00
466039	04/18/2023	Open	California Water Service	\$299.69
466040	04/18/2023	Open	California Water Service	\$15,763.55
466041	04/18/2023	Open	CDW-G	\$26,841.31
466042	04/18/2023	Open	Cintas	\$125.50
466043	04/18/2023	Open	CMP-1 Llc dba The Pointe at Harden Ranch	\$5,003.83
466044	04/18/2023	Open	CMP-1, LLC dba Cambridge Court Apartments Homes	\$4,400.00
466045	04/18/2023	Open	Coalition of Homeless Services Providers	\$4,888.32
466046	04/18/2023	Open	Coast Automotive Warehouse Inc	\$542.31
466047	04/18/2023	Open	Colantuono, Highsmith & Whatley, PC	\$569.03
466048	04/18/2023	Open	Comcast (Business)	\$167.73
466049	04/18/2023	Open	Community Homeless Solutions	\$46,797.60

Pages: 1 of 7

Payment Register
From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count		
<u>Check</u>				
466050	04/18/2023	Open	Condor Security Of America Inc	\$4,332.51
466051	04/18/2023	Open	CSC Of Salinas	\$49.02
466052	04/18/2023	Open	Dal-Tile Distribution, Inc	\$2,410.38
466053	04/18/2023	Open	Demco	\$33,535.57
466054	04/18/2023	Open	Direct TV LLC	\$17.99
466055	04/18/2023	Open	Docks and Doors LLC	\$829.54
466056	04/18/2023	Open	Don Chapin Inc	\$1,237.96
466057	04/18/2023	Open	Don Chapin Inc	\$36,461.52
466058	04/18/2023	Open	Downtown Streets, Inc	\$10,733.12
466059	04/18/2023	Open	East Bay Tire Company	\$5,874.28
466060	04/18/2023	Open	Economic & Planning Systems, Inc.	\$16,927.95
466061	04/18/2023	Open	Elani Trejo Petty Cash	\$101.36
466062	04/18/2023	Open	Fastenal Company	\$69.97
466063	04/18/2023	Open	Ferguson US Hodings, Inc dba Ferguson Enterprises	\$446.86
466064	04/18/2023	Open	First Alarm	\$456.21
466065	04/18/2023	Open	First Alarm Security & Patrol Inc dba An Allied Un	\$3,064.95
466066	04/18/2023	Open	Global Water Technology, Inc	\$1,375.00
466067	04/18/2023	Open	Golden State Emergency Vehicle Service Inc	\$630.38
466068	04/18/2023	Open	Government Forms and Supplies LLC	\$44.91
166069	04/18/2023	Open	Granite Construction Company	\$3,643.71
466070	04/18/2023	Open	Granite Rock Co	\$301.62
466071	04/18/2023	Open	Green Valley Industrial Supply	\$208.71
466072	04/18/2023	Open	Grey House Publishing, Inc dba Salem Press Product	\$2,995.00
466073	04/18/2023	Open	Hilda Garcia Petty Cash Custodian	\$125.00
466074	04/18/2023	Open	Home Depot Credit Services	\$5,259.06
466075	04/18/2023	Open	HROD, Inc	\$7,000.00
466076	04/18/2023	Open	Hydro Turf	\$514.93
466077	04/18/2023	Open	Ingram Book Company	\$3,189.44
466078	04/18/2023	Open	Interactive Data, LLC dba IDI	\$147.00
466079	04/18/2023	Open	Iteris Inc	\$1,660.60
466080	04/18/2023	Open	Jahaira Paola Navarro dba Dance Into Fitness with	\$1,183.00
466081	04/18/2023	Open	Jam Services Inc	\$7,625.65
466082	04/18/2023	Open	Jayson F. Cardinalli dba Clean Brothers	\$9,720.00
466083	04/18/2023	Open	Jesse And Evan Inc dba La Plaza Bakery	\$340.84
466084	04/18/2023	Open	Jimenez Autobody Parts, Inc dba C & J Auto Parts	\$710.13
466085	04/18/2023	Open	Joaquin Vasquez Dba Rose Backflow Services	\$3,571.42
466086	04/18/2023	Open	Johnson Associates	\$678.56
466087	04/18/2023	Open	Jose Daniel Barrera dba Signa Signs & Graphics	\$2,608.71
466088	04/18/2023	Open	K9 Tactical Gear Inc	\$1,395.10
466089	04/18/2023	Open	Karla's Janitorial & Suppliers, LLC	\$3,150.00
466090	04/18/2023	Open	Kelly-Moore Paint Company	\$185.71
466091	04/18/2023	Open	Kimball Midwest	\$1,062.37
466092	04/18/2023	Open	Kurt Ashley dba Secure Solutions	\$13,414.71

Pages: 2 of 7

Payment Register
From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count		
<u>Check</u>				
466093	04/18/2023	Open	LAZ KARP Associates, LLC	\$64,155.89
466094	04/18/2023	Open	Mackay Motor Parts, Inc dba Napa Auto Parts	\$15.54
466095	04/18/2023	Open	McLaughlin Painting	\$25,560.00
466096	04/18/2023	Open	MCSI Water Systems Management	\$900.72
466097	04/18/2023	Open	Midwest Tape, LLC dba Midwest Tape	\$10,449.72
466098	04/18/2023	Open	MNS Engineers, Inc	\$48,020.38
466099	04/18/2023	Open	Monterey Bay Analytical Services, Inc	\$1,726.00
466100	04/18/2023	Open	Monterey County Health Department	\$2,485.97
466101	04/18/2023	Open	Monterey County The Herald	\$315.35
466102	04/18/2023	Open	Monterey County Weekly	\$2,079.00
466103	04/18/2023	Open	Monterey Transfer and Storage Inc	\$86.50
466104	04/18/2023	Open	MP 21 Soledad Street, L.P.	\$8,841.00
466105	04/18/2023	Open	MP 21 Soledad Street, L.P.	\$1,200.00
466106	04/18/2023	Open	My Jeep	\$73.46
466107	04/18/2023	Open	Natividad Medical Center	\$248.00
466108	04/18/2023	Open	North American Catholic Educational Programming Fo	\$4,800.00
466109	04/18/2023	Open	Office Depot Business Service Division	\$453.97
466110	04/18/2023	Open	One Workplace L Ferrari, LLC dba Peninsula Busines	\$3,327.82
466111	04/18/2023	Open	Operation Freedom Paws	\$351.00
466112	04/18/2023	Open	Overhead Door Company Of Salinas	\$1,780.00
466113	04/18/2023	Open	Pacific Gas and Electric Company	\$3,940.63
466114	04/18/2023	Open	Pacific Truck Parts Inc	\$836.77
466115	04/18/2023	Open	Pape Machinery, Inc.	\$158,613.20
466116	04/18/2023	Open	Pinnacle Medical Group Inc dba Pinnacle Healthcare	\$328.00
466117	04/18/2023	Open	Place Works Inc	\$30,081.08
466118	04/18/2023	Open	PlayCore Wisconsin Inc dba GameTlme	\$1,494.79
466119	04/18/2023	Open	Premier Builders, Inc.	\$174,909.71
466120	04/18/2023	Open	Public Sector Personnel Consultants	\$30,000.00
466121	04/18/2023	Open	Pure Water	\$107.76
466122	04/18/2023	Open	RDO Equipment Company	\$34.54
466123	04/18/2023	Open	Republic Services of Salinas	\$1,418.50
466124	04/18/2023	Open	Republic Services, Inc dba Allied Waste Services	\$7,506.99
466125	04/18/2023	Open	Rincon Consultants, Inc.	\$3,360.75
466126	04/18/2023	Open	S & L Investments dba Salinas Valley ProSquad	\$1,124.11
466127	04/18/2023	Open	Salinas Valley Solid Waste Authority	\$1,051.90
466128	04/18/2023	Open	San Diego Police Equipment Company	\$11,529.81
466129	04/18/2023	Open	San Lorenzo Lumber	\$882.29
466130	04/18/2023	Open	Sentry Alarm System	\$1,057.50
466131	04/18/2023	Open	Shaw HR Consulting Inc	\$285.00
466132	04/18/2023	Open	Shawn Miguel Russell dba Russell Investigations	\$8,480.16
466133	04/18/2023	Open	Smart and Final Iris	\$336.34
466134	04/18/2023	Open	Smith and Enright Landscaping	\$74,341.93
466135	04/18/2023	Open	Steven Criste	\$1,000.00

Pages: 3 of 7

Payment Register
From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count		
<u>Check</u>				
466136	04/18/2023	Open	Stommel Inc dba Lehr	\$886.03
466137	04/18/2023	Open	Sturdy Oil Company	\$71,714.17
466138	04/18/2023	Open	Sunstar Media	\$25.00
466139	04/18/2023	Open	Target Pest Control	\$230.00
466140	04/18/2023	Open	TK Elevator Corporation	\$7,466.61
466141	04/18/2023	Open	Tri County Fire Protection	\$807.59
466142	04/18/2023	Open	U.S. Bank National Association dba U.S. Bank Equip	\$344.98
466143	04/18/2023	Open	U.S. Bank National Association ND	\$18,419.57
466144	04/18/2023	Open	Uline, Inc	\$457.88
466145	04/18/2023	Open	United Parcel Service	\$39.65
466146	04/18/2023	Open	Valley Fabrication Inc	\$39.71
466147	04/18/2023	Open	Valley Saw Shop	\$222.56
466148	04/18/2023	Open	Vals Plumbing and Heating Inc	\$1,402.71
466149	04/18/2023	Open	Veritiv Operating Company Formerly xpedx	\$1,406.53
466150	04/18/2023	Open	Verizon Wireless	\$3,876.39
466151	04/18/2023	Open	Verizon Wireless	\$750.37
466152	04/18/2023	Open	Verizon Wireless	\$40.01
466153	04/18/2023	Open	W W Grainger Inc	\$2,283.38
166154	04/18/2023	Open	Wald, Ruhnke & Dost Architects, LLP	\$398.00
166155	04/18/2023	Open	Walmart c/o Capitol One	\$200.14
466156	04/18/2023	Open	WCDJR LLC dba Watsonville Chrysler Dodge Jeep Ram	\$2,914.08
466157	04/18/2023	Open	Worldpac	\$159.06
466158	04/18/2023	Open	Bill Moore and Associates	\$365.66
466159	04/18/2023	Open	Cal Property Management	\$286.51
466160	04/18/2023	Open	Corinne Diane Garcia Trust	\$100.00
466161	04/18/2023	Open	Discover Aviation, INC	\$234.86
466162	04/20/2023	Open	Bartel Associates LLC	\$28,695.00
466163	04/20/2023	Open	Dick's Sporting Goods Inc	\$11,509.43
466164	04/20/2023	Open	Hinderliter De Llamas and Associates	\$1,959.46
466165	04/20/2023	Open	MGT Of America Inc	\$6,000.00
466166	04/20/2023	Open	Monterey County Convention And Visitors Bureau	\$42,665.18
466167	04/20/2023	Open	Monterey County Office of Education	\$31,250.00
466168	04/20/2023	Open	Regional Government Services	\$1,551.13
466169	04/20/2023	Open	Rexford Title, Inc	\$179,752.50
466170	04/25/2023	Open	Brett Godown	\$104.32
466171	04/25/2023	Open	Gerardo Magana	\$220.75
466172	04/25/2023	Open	Katherine Bonilla	\$572.71
466173	04/25/2023	Open	Kim Picaso	\$127.00
466174	04/25/2023	Open	Luis Bravo	\$89.50
466175	04/25/2023	Open	Pedro Gomez	\$150.00
466176	04/25/2023	Open	Robert Asamoto	\$150.00
466177	04/25/2023	Open	Robert Miller	\$419.84
466178	04/25/2023	Open	Rodolfo Roman	\$89.50

Pages: 4 of 7

Payment Register
From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count		
<u>Check</u>				
466179	04/25/2023	Open	ABAG Power Purchasing Pool	\$18,920.31
466180	04/25/2023	Open	Ace High Designs, Inc.	\$379.06
466181	04/25/2023	Open	ADB Safegate Americas Holding Inc dba ADB Safegate	\$965.66
466182	04/25/2023	Open	Alco Water	\$4,889.30
466183	04/25/2023	Open	Alhambra and Sierra Spring DS Waters of America LP	\$201.85
466184	04/25/2023	Open	Alhambra and Sierra Spring DS Waters of America LP	\$298.78
466185	04/25/2023	Open	All Pets Hospital	\$115.10
466186	04/25/2023	Open	All Safe Security Alarm	\$155.00
466187	04/25/2023	Open	Alliant Insurance Services, Inc.	\$580.00
466188	04/25/2023	Open	Alliant Insurance Services, Inc.	\$4,102.00
466189	04/25/2023	Open	Amazon.Com	\$316.01
466190	04/25/2023	Open	American Supply Company	\$1,332.47
466191	04/25/2023	Open	AP Triton, LLC	\$1,938.80
466192	04/25/2023	Open	Assured Aggregates Company Inc	\$2,473.50
466193	04/25/2023	Open	B&N Motors, LLC dba Toyota Salinas	\$72.32
466194	04/25/2023	Open	Bear Electrical Solutions Inc	\$26,049.00
466195	04/25/2023	Open	Beatriz A Barajas - Petty Cash Custodian	\$40.52
466196	04/25/2023	Open	Breakout Prison Outreach dba California Youth Outr	\$18,340.04
466197	04/25/2023	Open	BrightView Landscape Services, Inc	\$8,376.16
466198	04/25/2023	Open	Brodart Company	\$69.96
466199	04/25/2023	Open	ByWater Solutions, LLC	\$10,000.00
466200	04/25/2023	Open	Cadence Team, Inc	\$13,425.00
466201	04/25/2023	Open	California Towing and Transport	\$1,271.00
466202	04/25/2023	Open	Canon Solutions America Inc	\$205.74
466203	04/25/2023	Open	Carl Warren & Company, LLC	\$3,900.00
466204	04/25/2023	Open	CDW-G	\$665.48
466205	04/25/2023	Open	Central Coast YMCA	\$14,121.00
466206	04/25/2023	Open	Cintas	\$53.37
466207	04/25/2023	Open	Coast Automotive Warehouse Inc	\$94.92
466208	04/25/2023	Open	Comcast	\$2,852.76
466209	04/25/2023	Open	Comcast (Business)	\$577.26
466210	04/25/2023	Open	Community Homeless Solutions	\$133,274.39
466211	04/25/2023	Open	Consolidated Electrical Distributors, Inc.	\$121.97
466212	04/25/2023	Open	CSC Of Salinas	\$51.93
466213	04/25/2023	Open	Dataflow Business Systems Inc	\$65.40
466214	04/25/2023	Open	Demco	\$410.40
466215	04/25/2023	Open	Direct TV LLC	\$64.73
466216	04/25/2023	Open	Disaster Kleenup Specialist, Inc.	\$1,170.20
466217	04/25/2023	Open	East Bay Tire Company	\$858.28
466218	04/25/2023	Open	Ecology Action of Santa Cruz	\$3,200.76
466219	04/25/2023	Open	Eden Council for Hope and Opportunity	\$8,746.91
466220	04/25/2023	Open	Envision Ware Inc	\$2,505.00
466221	04/25/2023	Open	Extra Space Management Inc	\$670.60

Pages: 5 of 7

Payment Register
From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count		
<u>Check</u>				
466222	04/25/2023	Open	Extra Space Management Inc	\$691.40
466223	04/25/2023	Open	FAST Services	\$250.00
466224	04/25/2023	Open	Fastenal Company	\$37.29
466225	04/25/2023	Open	Ferguson US Hodings, Inc dba Ferguson Enterprises	\$891.39
466226	04/25/2023	Open	First Alarm Security & Patrol Inc dba An Allied Un	\$6,129.45
466227	04/25/2023	Open	Glasswork by Design	\$680.00
466228	04/25/2023	Open	Gold Star Motors dba Gold Star Buick GMC	\$75.15
466229	04/25/2023	Open	Golden State Emergency Vehicle Service Inc	\$158.91
466230	04/25/2023	Open	Goldfarb and Lipman	\$224.00
466231	04/25/2023	Open	Granite Rock Co	\$4,477.79
466232	04/25/2023	Open	Green Rubber Kennedy Ag	\$1,410.11
466233	04/25/2023	Open	Harris and Associates	\$896.50
466234	04/25/2023	Open	Hydro Turf	\$133.28
466235	04/25/2023	Open	Ingram Book Company	\$2,025.61
466236	04/25/2023	Open	Interstate Battery System Inc	\$116.01
466237	04/25/2023	Open	Jason Louis dba The Briefing Room, LLC	\$3,390.66
466238	04/25/2023	Open	Joaquin Vasquez Dba Rose Backflow Services	\$162.50
466239	04/25/2023	Open	John Allen dba California Hawaiian Mobile Estates	\$4,953.52
166240	04/25/2023	Open	Johnson Associates	\$218.39
166241	04/25/2023	Open	Jose Luis Corral dba Salinas Pizza	\$115.66
166242	04/25/2023	Open	JS Inc dba Steinbeck Lodge	\$105,840.00
466243	04/25/2023	Open	JT Hose & Fittings	\$665.48
466244	04/25/2023	Open	Kelly-Moore Paint Company	\$603.91
466245	04/25/2023	Open	Kimley Horn And Assoc Inc	\$8,425.00
466246	04/25/2023	Open	Lakeshore Learning Materials	\$819.85
466247	04/25/2023	Open	Law Offices of Roy C Gunter III	\$977.75
466248	04/25/2023	Open	Leon De Asis	\$2,000.00
466249	04/25/2023	Open	Life Assist	\$1,943.93
466250	04/25/2023	Open	Long Valley Leasing	\$815.11
466251	04/25/2023	Open	Mackay Motor Parts, Inc dba Napa Auto Parts	\$154.79
466252	04/25/2023	Open	Marina Hotels CI LLC dba Country Inn & Suites	\$115,769.00
466253	04/25/2023	Open	Matthew G Norton Co dba NWB Salinas LLC	\$233.10
466254	04/25/2023	Open	Matthew G Norton Co dba NWB Salinas LLC	\$233.10
466255	04/25/2023	Open	Matthew G Norton Co dba NWB Salinas LLC	\$136.85
466256	04/25/2023	Open	Midwest Tape, LLC dba Midwest Tape	\$319.86
466257	04/25/2023	Open	Mike Signs	\$5,281.96
466258	04/25/2023	Open	MJ Communications, Inc	\$125.00
466259	04/25/2023	Open	Monterey County Convention And Visitors Bureau	\$19,646.47
466260	04/25/2023	Open	Monterey County Mayors Association	\$1,575.83
466261	04/25/2023	Open	Monterey County Mayors Association Monterey County Sheriffs Office	\$126,665.58
466262	04/25/2023	Open	Monterey County The Herald	\$402.80
466263	04/25/2023	Open	Monterey County Women Lawyers Association	\$120.00
466264	04/25/2023	Open	Natividad Medical Center	\$120.00 \$124.00

Pages: 6 of 7

Payment Register

From Payment Date: 4/12/2023 - To Payment Date: 4/25/2023

Number	Date	Status	Payee Name	Transaction Amount
General Acc	ount - General Ac	count	•	
<u>Check</u>				
466265	04/25/2023	Open	O'Reilly Auto Parts	\$178.02
466266	04/25/2023	Open	Office Depot Business Service Division	\$565.28
466267	04/25/2023	Open	One Workplace L Ferrari, LLC dba Peninsula Busines	\$5,360.45
466268	04/25/2023	Open	Pacific Gas and Electric Company	\$2,917.22
466269	04/25/2023	Open	Pacific Gas and Electric Company	\$131,540.85
466270	04/25/2023	Open	Pacific Products and Services LLC	\$108.23
466271	04/25/2023	Open	Pacific Truck Parts Inc	\$213.45
466272	04/25/2023	Open	Pape Machinery, Inc.	\$18,551.74
466273	04/25/2023	Open	Pedro C Estrada Dba Estrada Janitorial Service	\$450.00
466274	04/25/2023	Open	R3 Consulting Group, Inc.	\$1,178.75
466275	04/25/2023	Open	Rent-A-Fence.com, Inc	\$108.16
466276	04/25/2023	Open	Republic Services of Salinas	\$572.34
466277	04/25/2023	Open	Russell Auria Pest Control Services	\$345.00
466278	04/25/2023	Open	Russell Branson dba Russ Branson Consulting	\$6,673.13
466279	04/25/2023	Open	Safeway Sign Company	\$2,677.39
466280	04/25/2023	Open	Salinas Californian	\$2,852.01
466281	04/25/2023	Open	Salinas Californian	\$829.24
466282	04/25/2023	Open	Salinas Valley Ford Inc	\$57,112.88
466283	04/25/2023	Open	Salinas Valley Tourism And Visitors Bureau	\$10,000.00
466284	04/25/2023	Open	San Lorenzo Lumber	\$21.12
166285	04/25/2023	Open	Savant Solutions, Inc	\$3,315.50
466286	04/25/2023	Open	Smart and Final Iris	\$175.53
466287	04/25/2023	Open	Smith and Enright Landscaping	\$24,839.73
466288	04/25/2023	Open	State Water Resource Control Board	\$1,738.00
466289	04/25/2023	Open	Stommel Inc dba Lehr	\$2,179.68
466290	04/25/2023	Open	Sturdy Oil Company	\$1,398.45
466291	04/25/2023	Open	Target Pest Control	\$220.00
466292	04/25/2023	Open	The Peavey Corporation dba Lynn Peavey Company	\$235.49
466293	04/25/2023	Open	Thomson-West/Barclays	\$347.69
466294	04/25/2023	Open	Tiffanys Body Shop	\$2,209.54
466295	04/25/2023	Open	U.S. Bank National Association ND	\$29,192.32
466296	04/25/2023	Open	United Site Services	\$375.10
466297	04/25/2023	Open	Vintage Contractors, Inc	\$17,145.44
466298	04/25/2023	Open	W W Grainger Inc	\$89.52
466299	04/25/2023	Open	Wayne Lagger dba LPS Tactical & Personal Security	\$983.28
466300	04/25/2023	Open	WCAF, LLC dba Watsonville Ford	\$179.20
466301	04/25/2023	Open	WCDJR LLC dba Watsonville Chrysler Dodge Jeep Ram	\$716.76
466302	04/25/2023	Open	Western Growers Service Corp.	\$10,000.00
466303	04/25/2023	Open	Willdan Financial Services	\$12,675.00
466304	04/25/2023	Open	Worldpac	\$1,113.24
Type Check	Totals:			\$2,657,402.46

Pages: 7 of 7

General Account - General Account Totals



200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-254, Version: 1

Professional Service Agreement with the Transportation Agency for Monterey County for the Alisal Safe Routes to School Plan Non-Infrastructure Phase

Approve a Resolution authorizing the City Manager to execute an Agreement for Professional Services between the City of Salinas and the Transportation Agency for Monterey County for a total compensation amount not to exceed \$84,998.80 to for the Alisal Safe Routes to School Plan Non-Infrastructure Phase.

DATE: MAY 2, 2023

DEPARTMENT: PUBLIC WORKS DEPARTMENT

FROM: DAVID JACOBS P.E., L.S., PUBLIC WORKS DIRECTOR

ANDREW EASTERLING, TRAFFIC ENGINEER

TITLE: AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE

CITY OF SALINAS AND THE TRANSPORTATION AGENCY FOR MONTEREY COUNTY FOR THE ALISAL SAFE ROUTES

TO SCHOOL PLAN NON-INFRASTRUCTURE PHASE

RECOMMENDED MOTION:

A motion to approve a resolution authorizing the City Manager to execute an Agreement for Professional Services between the City of Salinas and the Transportation Agency for Monterey County for a total compensation amount not to exceed \$84,998.80 to for the Alisal Safe Routes to School Plan Non-Infrastructure Phase.

EXECUTIVE SUMMARY:

The City of Salinas partnered with the Transportation Agency for Monterey County (TAMC) to secure Active Transportation Grant Program funding for the Alisal Safe Routes to School Plan. TAMC was the co-applicant with a scope of work for non-infrastructure items, specifically encouragement and education programs. It is recommended that the City Council approve an Agreement for Professional Services between the City of Salinas (City) and the Transportation Agency for Monterey County for the Alisal Safe Routes to School Plan Non-Infrastructure Phase.

BACKGROUND:

On June 15, 2022, the City in partnership with the Transportation Agency for Monterey County (TAMC) submitted an application to the Active Transportation Grant Program to request funding for improvements identified in the Salinas Safe Routes to Schools Plan (Attachment 1), including the pedestrian hybrid beacon (PHB) system on Williams Rd, plus funds to replace street trees and install radar feedback signage. In addition to funding for infrastructure improvements, the application included non-infrastructure funding for classroom bicycle/pedestrian education workshops, bike rodeos, and walk/bike to school encouragement days. The City was successful in its grant application and was selected to be awarded grant funds in the amount of \$998,000, whereas \$913,000 of grant funding was to be allocated for infrastructure, and \$85,000 was to be allocated towards the non-infrastructure elements. TAMC's scope of work remains unchanged

from the grant application and is included as an exhibit in the Agreement for Professional Services between the City of and the Transportation Agency for Monterey County (Attachment 2).

On March 21, 2023, the City Council approved Resolution 22608 (Attachment 3) to authorize the establishment of a new CIP Account "Alisal Safe Routes to School Project" appropriation totaling \$998,000 and corresponding revenue budget for the Alisal Safe Routes to School Project with no matching funds required. Now that the CIP account has been established, the item is coming back to Council to consider approving a professional service agreement with TAMC for the non-infrastructure components. Within the next few months this project will come back to City Council to award the construction contract following the advertisement of the project.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

This item supports the City Council's goal of "public safety".

DEPARTMENTAL COORDINATION:

The Public Works Department and Finance Department manage the project accounting. The Public Works Department will manage the construction phase of the grant funded project.

FISCAL AND SUSTAINABILITY IMPACT:

There is no impact to the General Fund. There is sufficient funding in CIP 9360 (Alisal Safe Routes to School Plan), which is fully funded through a state grant with no local match.

ATTACHMENTS:

Resolution

Attachment 1: Salinas Safe Routes to Schools Plan

Attachment 2: Agreement for Professional Services between the City of and the Transportation

Agency for Monterey County

Attachment 3: Resolution 22608

RESOLUTION No.	(N.C.S.)

A RESOLUTION AUTHORIZING: 1) THE CITY MANAGER TO EXECUTE AN AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF SALINAS AND THE TRANSPORTATION AGENCY FOR MONTEREY COUNTY FOR A TOTAL COMPENSATION AMOUNT NOT TO EXCEED \$84,998.80 FOR THE ALISAL SAFE ROUTES TO SCHOOL PLAN NON-INFRASTRUCTURE PHASE; AND 2) THE ESTABLISHMENT OF A CIP 9360 (ALISAL SAFE ROUTES TO SCHOOL PLAN) APPROPRIATION OF UP TO \$84,998.80 AND USE OF CIP 9360 (ALISAL SAFE ROUTES TO SCHOOL PLAN) FUND BALANCE FOR THE ALISAL SAFE ROUTES TO SCHOOL PLAN NON-INFRASTRUCTURE PHASE.

WHEREAS, the City of Salinas partnered with the Transportation Agency for Monterey County (TAMC) to secure Active Transportation Grant Program funding for the Alisal Safe Routes to School Plan; and

WHEREAS, TAMC was the co-applicant with a scope of work for non-infrastructure items, specifically encouragement and education programs; and

WHEREAS, the City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

NOW, THEREFORE, BE IT RESOLVED BY THE SALINAS CITY COUNCIL that the Salinas City Council approves a Resolution authorizing the City Manager to execute an Agreement for Professional Services between the City of Salinas and the Transportation Agency for Monterey County for a total compensation amount not to exceed \$84,998.80 to for the Alisal Safe Routes to School Plan Non-Infrastructure Phase.

PASSED AND APPROVED this 2nd day of May 2023 by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	APPROVED:

	Kimb!	ley	Craig,	Mayor
--	-------	-----	--------	-------

ATTEST:	
Patricia M. Barajas, City Clerk	

AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF SALINAS AND THE TRANSPORTATION AGENCY FOR MONTEREY COUNTY



Contents

	ГALS	
1.	Scope of Service.	. 4
2.	Term; Completion Schedule.	
3.	Compensation.	
4.	Billing.	
5.	Meet & Confer.	. 5
6.	Additional Copies	. 5
7.	Responsibility of TAMC	. 5
8.	Responsibility of City.	. 5
9.	Acceptance of Work Not a Release.	. 6
10.	Indemnification and Hold Harmless.	. 6
11.	Insurance.	. 6
12.	Access to Records.	. 6
13.	Non-Assignability	. 6
14.	Changes to Scope of Work.	. 6
15.	Ownership of Documents.	. 7
16.	Termination.	. 7
17.	Compliance with Laws, Rules, and Regulations.	. 8
18.	Exhibits Incorporated.	. 8
19.	Independent Contractor.	. 8
20.	Integration and Entire Agreement.	. 8
21.	Jurisdiction and Venue.	. 8
22.	Severability	. 8
23.	Notices.	. 8
24.	Nondiscrimination	. 9
25.	Conflict of Interest.	. 9
26.	Headings.	10
27.	Attorneys' Fees	10
28.	Non-Exclusive Agreement.	10
29.	Rights and Obligations Under Agreement.	10
30.	Licenses	10
31.	Counterparts.	10

32. Legal Representation.	10
33. Joint Representation.	10
34. Warranty of Authority	
35. No Waiver of Rights.	
Exhibit A- Insurance Requirements	
Exhibit B- Scope of Service	

AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF SALINAS AND THE TRANSPORTATION AGENCY FOR MONTEREY COUNTY

This Agreement for Professional Services (the "Agreement" and/or "Contract") is made and entered into this _____ day of January, 2023, between the **City of Salinas**, a California Charter city and municipal corporation (hereinafter "City"), and **the Transportation Agency for Monterey County**, a joint powers authority (hereinafter "TAMC").

RECITALS

WHEREAS, TAMC represents that he, she, or it is specially trained, experienced, and competent to perform the special services which will be required by this Agreement; and

WHEREAS, TAMC is willing to render such professional services, as hereinafter defined, on the following terms and conditions.

NOW, THEREFORE, City and TAMC agree as follows:

TERMS

- 1. <u>Scope of Service.</u> The project contemplated and the scope of TAMC's services are described in **Exhibit B**, attached hereto and incorporated herein by reference.
- **Term; Completion Schedule.** This Agreement shall commence on August 1, 2023, and shall terminate on December 31, 2027, unless extended in writing by either party upon (30) days written notice. This Agreement may be extended only upon mutual written consent of the parties, and may be terminated only pursuant to the terms of this Agreement.
- 3. <u>Compensation.</u> City hereby agrees to pay TAMC for services rendered the City pursuant to this Agreement on a time and materials basis according to the rates of compensation as set forth in <u>Exhibit B</u>. The total amount of compensation to be paid under this Agreement shall not exceed eighty-four thousand, nine hundred ninety-eight dollars and eighty cents (\$84,998.80).
- **Billing.** TAMC shall submit to City an itemized invoice, prepared in a form satisfactory to City, describing its services and costs for the period covered by the invoice. Except as specifically authorized by City, TAMC shall not bill City for duplicate services performed by more than one person. TAMC's bills shall include the following information to which such services cost or pertain:
 - (A) A brief description of services performed;
 - **(B)** The date the services were performed;
 - (C) The number of hours spent and by whom;

- **(D)** A brief description of any costs incurred; and
- **(E)** The TAMC's signature.

Any such invoices shall be in full accord with any and all applicable provisions of this Agreement.

City shall make payment on each such invoice within thirty (30) days of receipt; provided, however, that if TAMC submits an invoice which is incorrect, incomplete, or not in accord with the provisions of this Agreement, City shall not be obligated to process any payment to TAMC until thirty (30) days after a correct and complying invoice has been submitted by TAMC. The City shall process undisputed portion immediately.

- **Meet & Confer.** TAMC agrees to meet and confer with City or its agents or employees with regard to services as set forth herein as may be required by the City to ensure timely and adequate performance of the Agreement.
- **Additional Copies.** If City requires additional copies of reports, or any other material which TAMC is required to furnish as part of the services under this Agreement, TAMC shall provide such additional copies as are requested, and City shall compensate TAMC for the actual costs related to the production of such copies by TAMC.
- **Responsibility of TAMC.** By executing this Agreement, TAMC agrees that the services to be provided and work to be performed under this Agreement shall be performed in a fully competent manner. By executing this Agreement, TAMC further agrees and represents to City that the TAMC possesses, or shall arrange to secure from others, all of the necessary professional capabilities, experience, resources, and facilities necessary to provide the City the services contemplated under this Agreement and that City relies upon the professional skills of TAMC to do and perform TAMC's work. TAMC further agrees and represents that TAMC shall follow the current, generally accepted practices in this area to the profession to make findings, render opinions, prepare factual presentations, and provide professional advice and recommendations regarding the projects for which the services are rendered under this Agreement.
- **8.** Responsibility of City. To the extent appropriate to the projects to be completed by TAMC pursuant to this Agreement, City shall:
- (A) Assist TAMC by placing at its disposal all available information pertinent to the projects, including but not limited to, previous reports and any other data relative to the projects. Nothing contained herein shall obligate City to incur any expense in connection with completion of studies or acquisition of information not otherwise in the possession of City.
- **(B)** Examine all studies, reports, sketches, drawings, specifications, proposals, and other documents presented by TAMC, and render verbally or in writing as may be appropriate, decisions pertaining thereto within a reasonable time so as not to delay the services of TAMC.

- (C) Steve Carrigan, City Manager, or his designee, shall act as City's representative with respect to the work to be performed under this Agreement. Such person shall have the complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements, and systems pertinent to TAMC's services. City may unilaterally change its representative upon notice to the TAMC.
- **(D)** Give prompt written notice to TAMC whenever City observes or otherwise becomes aware of any defect in a project.
- 9. <u>Acceptance of Work Not a Release</u>. Acceptance by the City of the work to be performed under this Agreement does not operate as a release of TAMC from professional responsibility for the work performed.

10. Indemnification and Hold Harmless.

TAMC shall defend, indemnify, and hold harmless the City and its officers, officials, employees, volunteers, and agents from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with TAMC's performance of work hereunder, including the performance of work of any of TAMC's subcontractors or agents, or TAMC's failure to comply with any of its obligations contained in the agreement, except such loss or damage which was caused by the sole negligence or willful misconduct of the City.

- 11. <u>Insurance.</u> TAMC shall procure and maintain for the duration of this Agreement insurance meeting the requirements specified in **Exhibit A** hereto.
- 12. Access to Records. TAMC shall maintain all preparatory books, records, documents, accounting ledgers, and similar materials including but not limited to calculation and survey notes relating to work performed for the City under this Agreement on file for at least three (3) years following the date of final payment to TAMC by City. Any duly authorized representative(s) of City shall have access to such records for the purpose of inspection, audit, and copying at reasonable times during TAMC's usual and customary business hours. TAMC shall provide proper facilities to City's representative(s) for such access and inspection.
- 13. <u>Non-Assignability.</u> It is recognized by the parties hereto that a substantial inducement to City for entering into this Agreement was, and is, the professional reputation and competence of TAMC. This Agreement is personal to TAMC and shall not be assigned by it without express written approval of the City.
- 14. <u>Changes to Scope of Work.</u> City may at any time, and upon a minimum of ten (10) days written notice, seek to modify the scope of services to be provided for any project to be completed under this Agreement. TAMC shall, upon receipt of said notice, determine the impact on both time and compensation of such change in scope and notify City in writing. Upon agreement between City and TAMC as to the extent of said impacts to time and compensation, an amendment to this Agreement shall be prepared describing such changes. Execution of the

amendment by City and TAMC shall constitute the TAMC's notice to proceed with the changed scope.

15. Ownership of Documents. Title to all final documents, including drawings, specifications, data, reports, summaries, correspondence, photographs, computer software (if purchased on the City's behalf), video and audio tapes, software output, and any other materials with respect to work performed under this Agreement shall vest with City at such time as City has compensated TAMC, as provided herein, for the services rendered by TAMC in connection with which they were prepared. City agrees to hold harmless and indemnify the TAMC against all damages, claims, lawsuits, and losses of any kind including defense costs arising out of any use of said documents, drawings, and/or specifications on any other project without written authorization of the TAMC.

16. Termination.

- (A) City shall have the authority to terminate this Agreement, upon ten days written notice to TAMC, as follows:
 - (1) If in the City's reasonable opinion the conduct of the TAMC is such that the interest of the City may be impaired or prejudiced.
- **(B)** Upon termination, TAMC shall be entitled to payment of such amount as fairly compensates TAMC for all work satisfactorily performed up to the date of termination based upon the TAMC's rates shown in **Exhibit B** and/or Section 3 of this Agreement, except that:
 - (1) In the event of termination by the City for TAMC's default, City shall deduct from the amount due TAMC the total amount of additional expenses incurred by City as a result of such default. Such deduction from amounts due TAMC are made to compensate City for its actual additional costs incurred in securing satisfactory performance of the terms of this Agreement, including but not limited to, costs of engaging another organization(s) for such purposes.
- **(C)** In the event that this Agreement is terminated by City for a reasonable cause, TAMC shall:
 - (1) Upon receipt of written notice of such termination promptly cease all services on this project, unless otherwise directed by City; and
 - (2) Deliver to City all documents, data, reports, summaries, correspondence, photographs, computer software output, video and audio tapes, and any other materials provided to TAMC or prepared by or for TAMC or the City in connection with this Agreement. Such material is to be delivered to City in completed form; however, notwithstanding the provisions of Section 15 herein, City may condition payment for

services rendered to the date of termination upon TAMC's delivery to the City of such material.

- **(D)** In the event that this Agreement is terminated by City for any reason, City is hereby expressly permitted to assume the projects and complete them by any means, including but not limited to, an agreement with another party.
- **(E)** The rights and remedy of the City and TAMC provided under this Section are not exclusive and are in addition to any other rights and remedies provided by law or appearing in any other section of this Agreement.
- 17. <u>Compliance with Laws, Rules, and Regulations.</u> Services performed by TAMC pursuant to this Agreement shall be performed in accordance and full compliance with all applicable federal, state, and City laws and any rules or regulations promulgated thereunder.
- **18.** Exhibits Incorporated. All exhibits referred to in this Agreement and attached to it are hereby incorporated in it by this reference. In the event there is a conflict between any of the terms of this Agreement and any of the terms of any exhibit to the Agreement, the terms of the Agreement shall control the respective duties and liabilities of the parties.
- **19.** <u>Independent Contractor.</u> It is expressly understood and agreed by both parties that TAMC, while engaged in carrying out and complying with any of the terms and conditions of this Agreement, is an independent contractor and not an employee of the City. TAMC expressly warrants not to represent, at any time or in any manner, that TAMC is an employee or servant of the City.
- **20.** <u>Integration and Entire Agreement.</u> This Agreement represents the entire understanding of City and TAMC as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters contained herein. This Agreement may not be modified or altered except by amendment in writing signed by both parties.
- **21.** <u>Jurisdiction and Venue.</u> This Agreement shall be governed by and construed in accordance with the laws of the State of California, County of Monterey, and City of Salinas. Jurisdiction of litigation arising from this Agreement shall be in the State of California, in the County of Monterey or in the appropriate federal court with jurisdiction over the matter.
- **22.** Severability. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said laws, but the remainder of the Agreement shall continue to be in full force and effect.

23. Notices.

(A) Written notices to the City hereunder shall, until further notice by City, be addressed to:

City Manager City of Salinas 200 Lincoln Avenue Salinas, California 93901

With a copy to:

City Attorney
City of Salinas
200 Lincoln Avenue
Salinas, California 93901

(B) Written notices to the TAMC shall, until further notice by the TAMC, be addressed to:

Todd A. Muck
Executive Director
55 B Plaza Circle
Salinas, California 93901
Todd@tamcmonterey.org
(831) 775-0903

- (C) The execution of any such notices by the City Manager shall be effective as to TAMC as if it were by resolution or order of the City Council, and TAMC shall not question the authority of the City Manager to execute any such notice.
- **(D)** All such notices shall either be delivered personally to the other party's designee named above, or shall be deposited in the United States Mail, properly addressed as aforesaid, postage fully prepaid, and shall be effective the day following such deposit in the mail.
- **24. Nondiscrimination.** During the performance of this Agreement, TAMC shall not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, creed, sex, national origin, familial status, sexual orientation, age (over 40 years) or disability. TAMC shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, ancestry, creed, sex, national origin, familial status, sexual orientation, age (over 40 years) or disability.
- 25. <u>Conflict of Interest.</u> TAMC warrants and declares that it presently has no interest, and shall not acquire any interest, direct or indirect, financial or otherwise, in any manner or degree which will render the services required under the provisions of this Agreement a violation of any applicable local, state or federal law. TAMC further declares that, in the performance of this Agreement, no subcontractor or person having such an interest shall be employed. In the event that any conflict of interest should nevertheless hereinafter arise, TAMC shall promptly notify City of the existence of such conflict of interest so that City may determine whether to terminate

this Agreement. TAMC further warrants its compliance with the Political Reform Act (Government Code section 81000 et seq.) and Salinas City Code Chapter 2A that apply to TAMC as the result of TAMC's performance of the work or services pursuant to the terms of this Agreement.

- **Headings.** The section headings appearing herein shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning or intent of the provisions of this Agreement.
- **Attorneys' Fees.** In case suit shall be brought to interpret or to enforce this Agreement, or because of the breach of any other covenant or provision herein contained, the prevailing party in such action shall be entitled to recover their reasonable attorneys' fees in addition to such costs as may be allowed by the Court. City's attorneys' fees, if awarded, shall be calculated at the market rate.
- **28. Non-Exclusive Agreement.** This Agreement is non-exclusive and both City and TAMC expressly reserves the right to contract with other entities for the same or similar services.
- **29.** Rights and Obligations Under Agreement. By entering into this Agreement, the parties do not intend to create any obligations express or implied other than those set out herein; further, this Agreement shall not create any rights in any party not a signatory hereto.
- **10.** <u>Licenses.</u> If a license of any kind, which term is intended to include evidence of registration, is required of TAMC, its representatives, agents or subcontractors by federal, state or local law, TAMC warrants that such license has been obtained, is valid and in good standing, and that any applicable bond posted in accordance with applicable laws and regulations.
- 31. <u>Counterparts.</u> This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute a single agreement.
- 32. <u>Legal Representation.</u> Each party affirms that it has been represented, if it so chose, by legal counsel of its own choosing regarding the preparation and the negotiation of this Agreement and the matters and claims set forth herein, and that each of them has read this Agreement and is fully aware of its contents and its legal effect. Neither party is relying on any statement of the other party outside the terms set forth in this Agreement as an inducement to enter into this Agreement.
- **33. Joint Representation.** The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any party. No presumptions or rules of interpretation based upon the identity of the party preparing or drafting the Agreement, or any part thereof, shall be applicable or invoked.
- **Warranty of Authority.** Each party represents and warrants that it has the right, power, and authority to enter into this Agreement. Each party further represents and warrants that it has given any and all notices, and obtained any and all consents, powers, and authorities, necessary to permit it, and the persons entering into this Agreement for it, to enter into this Agreement.

35. No Waiver of Rights. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. The failure to provide notice of any breach of this Agreement or failure to comply with any of the terms of this Agreement shall not constitute a waiver thereof. Failure on the part of either party to enforce any provision of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provision or any other provision. A waiver by the City of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the date first written above.

CITY OF SALINAS
Steve Carrigan
City Manager
APPROVED AS TO FORM:
☐ Christopher A. Callihan, City Attorney, or
☐ Rhonda Combs, Assistant City Attorney
TAMC
By: Todd Muck
Its: Executive Director

Form: Professional Services Agreement v. January 2021 The Transportation Agency for Monterey County April 2023

Insurance Requirements

TAMC shall procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the TAMC, his agents, representatives, employees, or subcontractors. With respect to General Liability and Professional Liability, coverage should be maintained for a minimum of five (5) years after Agreement completion.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

- (A) Commercial General Liability ("CGL"): Insurance Services Office Form ("ISO") CG 00 01 covering CGL on an occurrence basis, including products and completed operations, property damage, bodily injury, and personal & advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
- **(B)** Automobile Liability: ISO Form CA 0001 covering any auto, or if TAMC has no owned autos, hired and non-owned, with limits no less than \$1,000,000 per accident for bodily injury and property damage.
- **(C) Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.
- (D) Professional Liability (also known as Errors and Omissions) insurance appropriate to the work being performed, with limits no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate per policy period of one year.

If the TAMC maintains broader coverage and/or higher limits than the minimums shown above, the City of Salinas requires and shall be entitled to the broader coverage and/or higher limits maintained by the TAMC. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

OTHER INSURANCE PROVISIONS

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status

The City of Salinas, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the TAMC including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the TAMC's insurance (at least as broad as ISO Form CG 20 10, CG 11 85, or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).

Primary Coverage

For any claims related to this Agreement or the project described within this Agreement, the **TAMC's insurance coverage shall be primary coverage** at least as broad as ISO Form CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the TAMC's insurance and shall not contribute with it.

Notice of Cancellation

Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City.

Waiver of Subrogation

TAMC hereby grants to City a waiver of any right to subrogation which any insurer of said TAMC may acquire against the City by virtue of the payment of any loss under such insurance. TAMC agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City of Salinas for all work performed by the TAMC, its employees, agents, and subcontractors.

Self-Insured Retentions

Self-insured retentions must be declared by TAMC to and approved by the City. At the option of the City, TAMC shall provide coverage to reduce or eliminate such self-insured retentions as respects the City, its officers, officials, employees, and volunteers; or the TAMC shall provide evidence satisfactory to the City guaranteeing payment of losses and related investigations, claim administrations, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

Claims Made Policies

If any of the required policies provide coverage on a claims-made basis:

- 1. The Retroactive Date must be shown and must be before the date of this Agreement or the beginning of Agreement work.
- 2. Insurance must be maintained and evidence of insurance must be provided *for at least five* (5) years after completion of the Agreement of work.
- 3. If coverage is canceled or non-renewed, and not *replaced with another claims-made policy form with a Retroactive Dat*e prior to the Agreement effective date, the TAMC must purchase "extended reporting" coverage for a minimum of *five (5)* years after completion of Agreement work.
- 4. A copy of the claims reporting requirements must be submitted to the City for review.

Verification of Coverage

TAMC shall furnish the City with original certificates and amendatory endorsements or copies of the applicable insurance language effecting coverage required by this Agreement. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the TAMC's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

Subcontractors

TAMC shall require and verify that all sub-TAMCs and/or subcontractors maintain insurance meeting all the requirements stated herein, and TAMC shall ensure that Entity is an additional insured on insurance required from such sub-TAMCs and/or subcontractors.

Special Risks or Circumstances

City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Maintenance of Insurance

Maintenance of insurance by TAMC as specified shall in no way be interpreted as relieving TAMC of its indemnification obligations or any responsibility whatsoever and the TAMC may carry, at its own expense, such additional insurance as it deems necessary.

Exhibit B- Scope of Service

Scope of Service; Compensation

Exhil	oit 25-R ATP Non-Infrastructure Project Wo	rk Plan									
Fill in the following items:											
Date: (1)											
Implementing Agency Name: (2)	ity of Salinas										
Project Number: (3)	2										
Project Location(s): (4a)	sal Community School										
"" (4b)	al High School										
" " (4c)											
" " (4d)											
Project Description: (5)	incorporate safe walking and bicycling as part of daily life and provide p incremental travel behavior change steps to result in long-lasting health elementary school students, low-income families in the project area. All bilingual.	y habits. Particula	r focus on engaging								
<i>For Department use only</i> You will not be able to fill in the fo	ollowing items. Items will auto-populate once you've entered all "Ta	sk" tabs that app	lies:								
	Task Summary:										
Click the links below to navigate to "Task Details" tabs:											
Task											
	Task Name	ATP Cost	Non-ATP Cost								
Task "A"	Task Name PROJECT MANAGEMENT & COORDINATION	ATP Cost \$ 3,202.04									
<u>Task "A"</u> <u>Task "B"</u>			\$ -								
Task "B" Task "C"	PROJECT MANAGEMENT & COORDINATION	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00	\$ - \$ - \$ -								
<u>Task "B"</u> <u>Task "C"</u> <u>Task "D"</u>	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES	\$ 3,202.04 \$ 7,802.40	\$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00	\$ - \$ - \$								
<u>Task "B"</u> <u>Task "C"</u> <u>Task "D"</u>	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36	\$ - \$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36 \$ -	\$ - \$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E" Task "F" Task "G" Task "H"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36 \$ -	\$ - \$ - \$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E" Task "F" Task "G" Task "H" Task "I"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36 \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E" Task "F" Task "G" Task "H"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION REPORTING/INVOICING	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36 \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E" Task "F" Task "G" Task "H" Task "I"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION REPORTING/INVOICING ATP Total:	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36 \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -								
Task "B" Task "C" Task "D" Task "E" Task "F" Task "G" Task "H" Task "I"	PROJECT MANAGEMENT & COORDINATION SRTS KICK-OFF ACTIVITIES SRTS ENGAGEMENT & EDUCATION REPORTING/INVOICING	\$ 3,202.04 \$ 7,802.40 \$ 72,971.00 \$ 1,023.36 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -								

					"A" DETAIL					
Та	isk Name (5a):		IANAGEMENT & CO				0	4:4:		
Task S	Summary (5b):	hire for consult		gencies and subsequent	montnly partner co	pordination meetings.	Con	npetitive request for propo	sais proces	ss will be done to
		l = l						Dell'esselles (Ob)		
	Start Date	End Date		ask Activities (6a):				Deliverables (6b):		
1.	Sep-23	Jun-27		meeting with partner				Meeting Notes		
2.	Sep-23	Jun-27		Coordination meeting NI Consultant Service				Log of Meeting Note Consultant Contract		
3. 4.	Sep-23 Sep-23	Jun-27 Jun-27	KFF IOI	INI Consultant Service	#5			Consultant Contrac	ı.	
5.	3ep-23	Juli-27								
6.										
7.										
8.										
9.										
10.										
		<u> </u>		Sta	aff Costs (7):					
	Staff T	ime (Agency	(7a):	ATP or Non-ATP (select one)	Staff Hours	Rate Per Hour		ATP Total \$	Non-	ATP Total \$
Party 1 -	Principa	al Transportation	n Planner (TAMC)	ATP	10	\$150.00	\$	1,500.00		
Party 2 -	·	•	tion Coordinator (IP)	ATP	8	\$96.44	\$	771.52		
Party 3 -	Hea	alth Program Co	pordinator (IP)	ATP	4	\$105.84	\$	423.36		
Party 4 -	Public	Health Progran	m Manager II (IP)	ATP	4	\$126.79	\$	507.16		
Party 5 -										
Party 6 -										
	•				Su	btotal Agency Costs:	\$	3,202.04	\$	-
	Staff Tim	ne (Consulta	nt) (7b):	ATP or Non-ATP (select one)	Staff Hours	Rate Per Hour		ATP Total \$	Non-	ATP Total \$
Party 1 -										
Party 2 -										
Party 3 -										
						tal Consultant Costs:	\$	-	\$	-
				Total Stat	ff Costs (Agency	& Consultant) (7c):	\$	3,202.04	\$	-
				Indi	rect Costs (8)					
Approve	d ICAP (8a)?	7	If Approved I	CAP box is checked, pr		64%		ATP Indirect Costs (8c):		
				Tas	sk Notes (9):					
r Team- I	year of Task A	`								
V	ma4 ha -1-1	EIII im Alt - E- "	uden itama Thatai		er Costs (10):	halammillt	!!-	and author from the face of		d in the lt!
You will	not be able to	fill in the follo	wing items. The totals		er costs tab:	below will automati	cally	calculate from informat	on entered	d in the itemized
								ATP Total \$	Non-	ATP Total \$
	To fill o		cost for each "Other O	Cost",		Travel (10a):	\$	-	\$	-
		clic	k below:			Equipment (10b):	\$	-	\$	-
					Sup	plies/Materials (10c):	\$	-	\$	-
	Item	ized "Other (Costs" Section			Incentives (10d):	\$	-	\$	-
						er Direct Costs (10e):	\$	-	\$	-
						er Direct Costs (10f):	\$	-	\$	-
						Other Costs (10g):	\$	-	\$	-
					TASK G	RAND TOTAL (11):	\$	3,202.04	\$	-

Task "A" Other Costs:												
Itemized Travel Cost (10a)												
Please provide an itemized "travel" cost estimate for all travel costs applicable to this task												
	Travel (10a)											
Type of Travel	ATP or Non-ATP (select one)	Quantity	Units	Cost \$	ATP Total \$	Non-ATP Total \$						
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
				Total:	\$ -	\$ -						
			Tot	al Travel Cost:	\$	-						

Itemized Equipment Cost (10b)										
Please provide an itemized "equipment" cost estimate for all equipment cost applicable to this task										
Equipment (10b)										
Type of Equipment	ATP Total \$	Non-ATP Total \$								
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
			Total:	\$ -	\$ -					
		Total Eq	uipment Cost:	\$	-					

	Itemized Supplies/Materials Cost (10c)										
	Please provide an itemized "supplies/materials" cost estimate for all supplies/materials cost applicable to this task										
	Supplies/Materials (10c)										
	Type of Supplies/Materials	ATP Total \$	Non-ATP Total \$								
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
				Total:	\$ -	\$ -					
		Total	Supplies/N	Materials Cost:	\$	-					

Task "A" Other Costs:									
Itemized Incentives Cost (10d)									
Please provide an itemized "incentives" co	st estimate for all incentives costs	applicable t	o this task						
Incentives (10d)									
Type of Incentives	ATP Total \$	Non-ATP Total \$							
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
			Total:	\$ -	\$ -				
		Total Inc	centives Cost:	\$	_				

Itemized Other Direct Costs (10e)										
Please provide an itemized "other direct" cost estimate for all other costs applicable to this task										
Other Direct Costs (10e)										
Type of Other Direct Costs	ATP Total \$	Non-ATP Total \$								
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
			Total:	\$ -	\$ -					
	\$	-								

	Itemized Other Direct Costs (10f)										
	Please provide an itemized "other direct" cost estimate for all other costs applicable to this task										
	Other Direct Costs (10f)										
	Type of Other Direct Costs	ATP Total \$	Non-ATP Total \$								
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
	·		•	Total:	\$ -	\$ -					
			Total Oth	er Direct Cost:	\$	-					

	TASK "B" DETAIL										
Task I	Name (5a):				SRTS KICK-C	FF ACTIVITIES					
Task Su	ımmary (5b):	importance of contacts/cha	of a collaborative public	health approach in a	ctive transport	ation option to en	parents and community to pr hance community/student hea d parents about upcoming SR	alth. Determine lead SRTS			
	Start Date	End Date	4	Activities (6a):			Deliverables (6b):				
1.	Sep-23	Jun-27	Advertise SRTS kick- school community.	off activities to pare	nts and	Copies of f	fliers and press releases fro	n kick-off activities.			
2.	Sep-23	Jun-27	Conduct SRTS kick-covirtually to promote so required.				Photos/records of the act	ivities.			
3.	Sep-23	Jun-27	Identify at least one s act as the SRTS cont	•	hool site to	Names o	f staff who will be SRTS cor	tact support staff.			
4.											
5.											
6.											
7.											
8.											
9.											
10.											
				Staff	Costs (7):						
	Staff Ti	me (Agency) (7a):	ATP or Non-ATP (select one)	Staff Hours	Rate Per Hour	ATP Total \$	Non-ATP Total \$			
Party 1 -	Chronic D	isease Preven	tion Coordinator (IP)	ATP	40	\$96.44	\$ 3,857.60				
Party 2 -	Chronic D	isease Preven	tion Specialist II (IP)	ATP	40	\$84.67	\$ 3,386.80				
Party 3 -							·				
Party 4 -											
Party 5 -											
Party 6 -											
					Subto	otal Agency Costs:	\$ 7,244.40	\$ -			
	Staff Tim	e (Consulta	nt) (7b):	ATP or Non-ATP (select one)	Staff Hours	Rate Per Hour	ATP Total \$	Non-ATP Total \$			
Party 1 -											
Party 2 -											
Party 3 -											
				•	Subtota	Consultant Cost):	\$ -	\$ -			
				Total Staff Co	sts (Agency &	Consultant) (7c):	\$ 7,244.40	\$ -			
				Indirec	t Costs (8)						
Approve	ed ICAP (8a)?	√	If Approved ICA	box is checked, pro	vide Rate (8b):	64%	ATP Indirect Costs (8c):				
дриото	a ioni (ou).		п дррготов года		Notes (9):	0470	ATT munect costs (cc).				
Team- 1	year of Task B.			Idan	Notes (3).						
	,										
					2 (42)						
You wi	Il not he able to	o fill in the fol	lowing items. The totals		Costs (10): s" category lis	ted below will aut	omatically calculate from info	rmation entered in the			
	iii iiot be abie t		lowing items. The totals		ther costs tab:	tou bolow will dut		mation entered in the			
							ATP Total \$	Non-ATP Total \$			
	To fill ou	ıt an itemized	cost for each "Other Co	ost",		Travel (10a):	\$ 58.00	\$ -			
		clic	k below:			Equipment (10b):	\$ -	\$ -			
					Suppli	es/Materials (10c):	\$ 500.00	\$ -			
	14	1 "0"	O4-11 C41			Incentives (10d):	\$ -	\$ -			
	Itemi	zed "Other	Costs" Section		Other D	Direct Costs (10e):	\$ -	\$ -			
					Other	Direct Costs (10f):	\$ -	\$ -			
					Total	Other Costs (9g):	\$ 558.00	\$ -			
					TASK GR	AND TOTAL (10):	\$ 7,802.40	\$ -			
		_									

Task "B" Other Costs:												
	Itemized Travel Cost (10a)											
Please provide an itemized "travel" cost estimate for all travel costs applicable to this task												
Type of Travel	Type of Travel ATP or Non-ATP (select one) Quantity Units Cost \$											
Mileage to and from sites and activities (IP)	ATP	100	miles	\$0.58	\$ 58.00							
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
			•	Total:	\$ 58.00	\$ -						
			Tota	l Travel Cost:	\$	58.00						

Itemized Equipment Cost (10b)										
Please provide an itemized "equipment" cost estimate for all equipment cost applicable to this task										
Equipment (10b)										
	Type of Equipment	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$				
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
Total:						\$ -				
Total Equipment Cost:						\$ -				

	Itemized Supplies/Materials Cost (10c)										
Please provide an itemized "supplies/materials" cost estimate for all supplies/materials cost applicable to this task											
Supplies/Materials (10c)											
	Type of Supplies/Materials	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$					
1.	Office Supplies (IP)	ATP	1	500.00	\$ 500.00						
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
Total						\$ -					
Total Supplies/Materials Cost:						\$ 500.00					

Task "B" (Task "B" Other Costs:								
Itemized Ince	ntives Cost (10d)								
Please provide an itemized "incentives" cost est	timate for all incentives costs	applicable t	to this task						
Incent	tives (10d)								
Type of Incentives	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$				
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
			Total:	\$ -	\$ -				
		Total Inco	entives Cost:	\$	-				

	Itemized Other Direct	t Costs (10e)				
	Please provide an itemized "other direct" cost estima	te for all other costs a	pplicable to	this task		
	Other Direct Cost	s (10e)				
	Type of Other Direct Costs	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
		•		Total:	\$ -	\$ -
			Total Other	Direct Cost:	\$	-

	Itemized Other Direct Co	osts (10f)				
	Please provide an itemized "other direct" cost estimate for	all other costs a	pplicable to	this task		
	Other Direct Costs (10	f)				
	Type of Other Direct Costs	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
				Total:	\$ -	\$ -
		\$				

TASK "C" DETAIL Task Name (5a): SRTS ENGAGEMENT & EDUCATION Conduct educational presentations to 2nd-5th grades so that students learn how to safely use the project corridor. Conduct "Walk-around-the-block" pedestrian safety Task Summary (5b): Itrainings for all 2nd grade classes and bicycle safety trainings and rodeos for all 5th grade classes at Alisal Community. Work with High School students and community members to paint sidewalks and celebrate Walk & Bike to school day at the High School and Alisal Community Start Date End Date Task Activities (6a): Deliverables (6b): Sep-23 Jun-27 Develop program activites, may be completed virtually as needed. Program activities matrix Pedestrian Safety Presentations for 3rd and 4th grades in person or Approx. 24 Presentations, Copies of Presentations, Photos, Number of 2. Sep-23 Jun-27 Students Served & Evaluation Activity Results virtual (all 3rd and 4th grades for one elementary school for one year) 3 Sep-23 Jun-27 Approx. 12 presentations. Log of Presentation Events, Photos, Number Conduct pedestrian safety presentations for all 2nd grade classrooms of Students Served and Evaluation Activity Results. 4. Sep-23 Jun-27 Conduct pedestrian safety Walk-Around-the-Block for all 2nd grade Approx. 12 field trips. Log of Field Trip Events, Photos, Number of Students Served and Evaluation Activity Results. classrooms Sep-23 Jun-27 Approx. 12 classes. Log of Presentation Events, Photos, Number of Conduct bicycle safety presentations for all 5th grade classrooms Students Served and Evaluation Activity Results. Jun-27 6. Sep-23 Approx. 12 rodeos. Log of Rodeo Events, Photos, Number of Students Conduct bicycle safety rodeos for all 5th grade classrooms Served and Evaluation Activity Results Work with Alisal High School students and community members to Event Flyers; Press Release, Photos, Number of Students Served & paint sidewalks marking safe routes to school and conduct Walk & 7. Sep-23 Jun-27 **Evaluation of Activity Results** Bike to School Day events at two schools 8. Staff Costs (7): ATP or Non-ATP Staff Rate Non-ATP Total \$ Staff Time (Agency) (7a): ATP Total \$ (select one) Hours Per Hour Party 1 - Chronic Disease Prevention Coordinator (IP) ATP 40 \$96.44 3,857.60 ATP 40 \$84.67 3,386.80 Party 2 -Chronic Disease Prevention Specialist II (IP) \$ ATP Party 3 lealth Program Coordinator (IP) 8 \$105.84 846.72 Public Health Program Manager II (IP) ATP 1 \$126.79 507.16 1.050.00 Party 5 -Principal Transportation Planner ATP 7 \$150.00 \$ Associate Transportation Planner ATP 10 \$120.00 1,200.00 Party 6 -\$ Party 7 -Transportation Planner ATP 20 \$90.00 1,800.00 Subtotal Agency Costs: \$ 12,648.28 \$ ATP or Non-ATP Staff Rate Staff Time (Consultant) (7b): ATP Total \$ Non-ATP Total \$ (select one) Hours Per Hour ATP Party 1 -\$24.870.36 24.870.36 Consultant - Pedestrian Safety Trainings (12 trainings Party 2 -Consultant - Bicycle Safety Trainings (12 trainings) ATP 1 \$28.545.12 28.545.12 Party 3 -Subtotal Consultant Costs 53,415.48 \$ Total Staff Costs (Agency & Consultant) (7c): 66,063.76 \$ Indirect Costs (8) Approved ICAP (8a)? 1 If Approved ICAP box is checked, provide Rate (8b): 64% ATP Indirect Costs (8c): Task Notes (9): P team- One year of Task C Other Costs (10): You will not be able to fill in the following items. The totals for each "Other Costs" category listed below will automatically calculate from information entered in the itemized other costs tab Non-ATP Total \$ ATP Total \$ Travel (10a): 58.00 To fill out an itemized cost for each "Other Cost", click below: Equipment (10b): Supplies/Materials (10c): 400.00 Incentives (10d): 700.00 Itemized "Other Costs" Section Other Direct Costs (10e): 5,749.24 Other Direct Costs (10f): Total Other Costs (10g): \$ 6,907.24 \$ TASK GRAND TOTAL (11): \$ 72,971.00 \$

	Task "C" Other Costs:								
	Ite	mized Travel Co	st (10a)						
	Please provide an itemized "trav	vel" cost estimate for	all travel costs ap	plicable to th	nis task				
	Travel (10a)								
Type of Travel		ATP or Non-ATP (select one)	Quantity	Units	Cost \$	ATP Total \$	Non-ATP Total \$		
1.	Reimbursable mileage to and from school sites and SRTS events (IP)	ATP	100	miles	\$0.58	\$ 58.00			
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.			<u>-</u>						
12.									
				•	Total:	\$ 58.00	\$ -		
				Total	Travel Cost:	\$	58.00		

	Itemized Equipment	Cost (10b)				
	Please provide an itemized "equipment" cost estimate for	r all equipment cost	s applicable	to this task		
	Equipment (10	b)				
	Type of Equipment	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
				Total:	\$ -	\$ -
			Total Equip	pment Cost:	\$	-

	Itemized Supplies	/Materials Cost (10c)			•	•		
	Please provide an itemized "supplies/materials" cost est	imate for all supplies/materia	als costs app	olicable to thi	is task			
	Supplies/M	Materials (10c)						
	Type of Supplies/Materials	ATP or Non-ATP (select one)	Quantity	Quantity	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.	Duplicating Costs for outreach and presentations (IP)	ATP	100	1.00	\$ 100.00			
2.	Educational Materials for outreach and presentations (IP)	ATP	100	2.00	\$ 200.00			
3.	Printing for outreach and education (IP)	ATP	100	1.00	\$ 100.00			
4.	Custom Stencils							
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
				Total:	\$ 400.00	\$ -		
		Total Su	pplies/Mat	erials Cost:	\$	400.00		

	Task "C" Other	Costs:				
	Itemized Incentives (Cost (10d)				
	Please provide an itemized "incentives" cost estimate for	all incentives costs	applicable	to this task		
	Incentives (10d)					
	Type of Incentives	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.	Reflective arm bands for pedestrian presentations (IP)	ATP	200	3.50	\$ 700.00	
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
				Total:	\$ 700.00	\$ -
			Total Ince	ntives Cost:	\$	700.00

	Itemized Other Direct	t Costs (10e)					
	Please provide an itemized "other direct" cost estima	te for all other costs a	pplicable to	this task			
	Other Direct Cost	s (10e)					
	Type of Other Direct Costs	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$		Non-ATP Total \$
1.	IT/ERP/Telecom/ERP Reserve (costs for 1 year 1 staff) (IP)	ATP	1	5,749.24	\$	5,749.24	
2.	Graphic Design	ATP	1		\$	-	
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
		•	•	Total:	\$	5,749.24	\$ -
		Te	otal Other	Direct Cost:	\$		5,749.24

	Itemized Oth	er Direct Costs (10f)				
	Please provide an itemized "other direct" co	ost estimate for all other costs a	pplicable to	this task		
	Other D	Direct Costs (10f)				
	Type of Other Direct Costs	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
		•		Total:	\$ -	\$ -
		To	otal Other I	Direct Cost:	\$	-

				TASK	"D" DETAIL					
Ta	ask Name (5a)	REPORTING	G/INVOICING							
Task	Summary (5b)	: Provide quarte	erly reports and invoices t	o submit to Caltrans (4	invoices and repo	orts)				
	Start Date	End Date	Та	sk Activities (6a):				Deliverables (6b):		
1.	Sep-23	Jun-27		Invoices			Invoid	ces and back-up docur	nentation	
2.	Sep-23	Jun-27		Reporting				Quarterly reports		
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
				Staff	Costs (7):					
	Staff T	ime (Agency)) (7a):	ATP or Non-ATP (select one)	Staff Hours	Rate Per Hour		ATP Total \$	Non-ATF	' Total \$
Party 1 -	Hel	ath Program Co	oordinator (IP)	ATP	4	\$105.84	\$	423.36		
Party 2 -	Prir	ncipal Transport	ation Planner	ATP	4	\$150.00	\$	600.00		
Party 3 -										
Party 4 -										
Party 5 -										
Party 6 -										
, ,					Subt	otal Agency Costs:	\$	1,023.36	\$	-
	Staff Tim	ne (Consultar	nt) (7b):	ATP or Non-ATP (select one)	Staff Hours	Rate Per Hour		ATP Total \$	Non-ATF	' Total \$
Party 1 -										
Party 2 -										
Party 3 -										
1 dity 0					Subtotal	Consultant Costs:	\$		\$	_
				Total Staff		Consultant) (7c):		1,023.36		-
					ct Costs (8)	(1.5).	Ψ	1,020.00	•	
Annro	ved ICAP (8a)?	· 7	If Approved IC	AP box is checked, p		64%	Ι.	ATP Indirect Costs (8c):		
Approv	veu icar (oa)		ii Approved io		Notes (9):	04%	,	ATP indirect Costs (60).		
You will n	ot be able to fi	ill in the follow	ing items. The totals for	each "Other Costs" of		elow will automati	cally	calculate from information	on entered in	the itemized
				othei	r costs tab:			ATP Total \$	Non-ATF	Total ¢
	T- (11)		and for a let you			Travel (10a):	¢		\$	
	To fill o		cost for each "Other Co k below:	ost",			-	<u>-</u>		
		Olic			C!!	Equipment (10b):	_	-	\$	-
					Suppli	es/Materials (10c):	-	-	\$	-
	lte	emized "Oth	ner Costs" Section		O+h	Incentives (10d):		-	\$	-
						Direct Costs (10e):		-	\$	-
						Direct Costs (10f):	-	-	\$	-
						Other Costs (10g):		-	\$	-
					TASK GR	AND TOTAL (11):	\$	1,023.36	\$	-

	Task "D" Other (Costs:				
	Itemized Travel Cos	st (10a)				
Please provide	an itemized "travel" cost estimate for a	II travel costs ap	plicable to th	nis task		
	Travel (10a)					
Type of Travel	ATP or Non-ATP (select one)	Quantity	Units	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
	<u>. </u>			Total:	\$ -	\$ -
			Total	Travel Cost:	\$	-

	Itemized Equipment	Cost (10b)				
	Please provide an itemized "equipment" cost estimate fo	r all equipment cost	s applicable	to this task		
	Equipment (10)	p)				
	Type of Equipment	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
				Total:	\$ -	\$ -
			Total Equi	pment Cost:	\$	-

	Itemized Supplies/Material	s Cost (10c)				
	Please provide an itemized "supplies/materials" cost estimate for all	supplies/materia	ls costs ap	olicable to thi	s task	
	Supplies/Materials (10	c)				
	Type of Supplies/Materials	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.		·		•		
11.						
12.						
	·			Total:	\$ -	\$ -
		Total Su	pplies/Mat	erials Cost:	\$	

	Task "D" Othe	er Costs:				
	Itemized Incentive	s Cost (10d)				
	Please provide an itemized "incentives" cost estimate	for all incentives costs	s applicable	to this task		
	Incentives (1	0d)				
	Type of Incentives	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.				•		
10.						
11.						
12.						
		•		Total:	\$ -	\$ -
			Total Ince	ntives Cost:	\$	-

	Itemized Other Direct Costs (10e)					
	Please provide an itemized "other direct" cost estimate for all other costs applicable to this task					
	Other Direct Costs	i (10e)				
	Type of Other Direct Costs	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
	Total:			\$ -	\$ -	
	Total Other Direct Cost:		\$ -			

	Itemized Other	Direct Costs (10f)				
	Please provide an itemized "other direct" cost estimate for all other costs applicable to this task					
	Other Direct	t Costs (10f)				
	Type of Other Direct Costs	ATP or Non-ATP (select one)	Quantity	Cost \$	ATP Total \$	Non-ATP Total \$
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.	·					
		• •	•	Total:	\$ -	\$ -
Total Other Direct Cost:			\$	-		

RESOLUTION NO. 22608 (N.C.S.)

A RESOLUTION TO: 1) APPROVE THE PLANS AND SPECIFICATIONS FOR THE ALISAL SAFE ROUTES TO SCHOOL PROJECT; 2) APPROVE THE CATEGORICAL EXEMPTION FOR THE ALISAL SAFE ROUTES TO SCHOOL PROJECT; 3) AUTHORIZE THE PUBLIC WORKS DIRECTOR TO EXECUTE ALL AGREEMENTS AND ANY REQUIRED PAPERWORK WITH CALTRANS FOR THE ACTIVE TRANSPORTATION GRANT PROGRAM; AND 4) AUTHORIZE THE ESTABLISHMENT OF A NEW CIP ACCOUNT "ALISAL SAFE ROUTES TO SCHOOL PROJECT" WITH THE ESTABLISHMENT OF SPECIAL CONST ASSIST – FED & ST FUND APPROPRIATION TOTALING \$998,000 AND CORRESPONDING REVENUE BUDGET FOR THE ALISAL SAFE ROUTES TO SCHOOL PROJECT WITH NO MATCHING FUNDS REQUIRED.

WHEREAS, On December 14, 2021, City Council approved Resolution 22267 to appropriate \$750,000 of anticipated funding from the American Rescue Plan Act towards improving the marked midblock crosswalk on Williams Road, and to direct staff to proceed with implementation to fully effectuate the intent of the Resolution; and

WHEREAS, City staff has completed plans, and specifications for the Alisal Safe Routes to School Project which includes a pedestrian hybrid beacon system on Williams Road; and

WHEREAS, the City was successful in an Active Transportation Program grant application and was selected to be awarded grant funds in the amount of \$998,000 for the improvements; and

WHEREAS, the City may need to enter into grant agreements or submit paperwork to Caltrans for the grant funding, and staff recommends that the Council authorize the director to execute all agreements and any required paperwork with Caltrans for the Active Transportation Program; and

WHEREAS, the City has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301, Class 1(c)) because the actions consists of operation and minor alteration of an existing City street.

NOW, THEREFORE, BE IT RESOLVED BY THE SALINAS CITY COUNCIL approves a Resolution to approve the Plans and Specifications for the Alisal Safe Routes to School Project;

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution to approve the Categorical Exemption for the Alisal Safe Routes to School Project pursuant to CEQA Guidelines Section 15301, Class 1(c); and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution to authorize the Public Works Director to execute all agreements and any required paperwork with Caltrans for the Active Transportation Grant Program; and

BE IT FURTHER RESOLVED that the establishment of a new CIP Account "Alisal Safe Routes to School Project," with appropriations totaling \$998,000, transfer of \$998,000 from the Special Const Assist – Fed & St Fund to the CIP Fund, and a corresponding revenue budget for the Alisal Safe Routes to School Project with no matching funds required.

PASSED AND APPROVED this 21st day of March 2023, by the following vote:

AYES: Councilmembers Barrera, Gonzalez, McShane, Osornio, Rocha, Sandoval and Mayor Craig

NOES: None

ABSENT: None

ABSTAIN: None

APPROVED:

— DocuSigned by:

Kimbley I are

E554E94F4CE64C8...

Kimbley Craig, Mayor

ATTEST:

Patricia Barajas

Patricia M. Barajas, City Clerk



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-262, Version: 1

2021 Chip Seal Project, CIP No. 9981

Approve a Resolution accepting the 2021 Chip Seal Project, CIP No. 9981 for maintenance and responsibility.

DATE: MAY 2, 2023

DEPARTMENT: PUBLIC WORKS DEPARTMENT

FROM: DAVID JACOBS, P.E., L.S., PUBLIC WORKS DIRECTOR

THRU: ADRIANA ROBLE, P.E., CITY ENGINEER

BY: ELISE RAMIREZ, P.E., SENIOR CIVIL ENGINEER

PATRICK FUNG, ASSISTANT ENGINEER

TITLE: 2021 CHIP SEAL PROJECT, CIP NO. 9981

RECOMMENDED MOTION:

A motion to approve a resolution accepting the 2021 Chip Seal Project, CIP No. 9981 for maintenance and responsibility.

EXECUTIVE SUMMARY:

The 2021 Chip Seal Project focused on preventative maintenance for several arterial roadways, including West/East Bernal Drive, East Rossi Street, Calle Cebu, Abbott Street, North Sanborn Road, East Boronda Road, Airport Boulevard, Roy Diaz Street, and West Blanco Road. The project called for 15 lane-miles of roadway crack sealing, greater than 1.25 million square feet of chip seal, and installation of new signs and striping. Chip seals have a typical useful life of 5 to 7 years.

BACKGROUND:

On August 18, 2020, the City Council approved a contract with Pavement Engineering Inc. for ongoing pavement condition surveys, updates to the Street Saver Pavement Management Program (PMP) database, and pavement condition reports (Resolution No. 21932). The last Pavement Management System Update was presented to the City Council on March 16, 2021. Public Works staff utilizes the Street Saver PMP for project level pavement analysis. It is a budgeting and inventory tool and a record for work history and pavement condition.

On February 11, 2020, the City Council accepted Safe Streets Pilot Program grant funds from the Transportation Agency of Monterey County (TAMC) to install buffered bike lanes, signal modifications and improved roadway geometry at East Rossi Street (Resolutions No. 21784) as identified in the Chinatown Revitalization Plan. The new striping and pedestrian improvements for East Rossi Street were incorporated into the 2021 Chip Seal Project plans.

On June 22, 2021, the City Council approved Resolution No. 22128 approving the plans and specifications for the 2021 Chip Seal Project and awarding the construction contract to VSS International, Inc. in the amount of \$963,000.

Construction commenced on September 20, 2021. Existing striping removal and crack sealing were completed, but due to the cooler and often damp weather unsuitable for chip seal application during October 2021, the City and VSS International, Inc. agreed to suspend the project through the Winter and resume in May 2022.

Work resumed on May 16, 2022, and the project was deemed substantially complete on July 15, 2022.

Two Contract Change Orders (CCO) were approved for this project: CCO No. 1 approved striping plan revisions at no additional cost. CCO No. 2 approved a material change for fog seal, resulting in a credit of \$10,525.

The Contractor completed the work 24 calendar days beyond the allowed 40 contract working days. Section 4 of the project specifications require the Contractor to pay the City \$1,000.00 per calendar day beyond the allotted contractual working days in liquidated damages. Therefore, \$24,000.00 will be withheld from the final retention payment.

The total construction cost, including Contract Change Orders and Liquidated Damages, is \$928,425.00.

Staff worked with the Contractor and subcontractors to ensure all applicable labor and prevailing wage requirements were met prior to acceptance of this project. To date, all labor compliance discrepancies have been resolved.

CEQA CONSIDERATION:

Categorically exempt: The City of Salinas has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 1530l(c), Class 1), because the project maintains existing roadways.

Furthermore, the project does not qualify for any of the exceptions to the categorical exemptions found in the CEQA Guidelines Section 15300.2.

STRATEGIC PLAN INITIATIVE:

This project relates to the Council's Goals of Infrastructure and Environmental Sustainability and Public Safety by maintaining the City's existing roadways and installing new striping and signage to enhance vehicular and pedestrian safety.

DEPARTMENTAL COORDINATION:

Public Works staff and Finance staff collaborated on the funding of the 2021 Chip Seal Project.

FISCAL AND SUSTAINABILITY IMPACT:

The 2021 Chip Seal Project was funded with Measure X Bond funds and TAMC Safe Streets Pilot Program grant funds (CIP 9290). The total construction cost was \$928,425.00, and the project was completed within the approved budget. There is no impact to the General Fund.

ATTACHMENTS:

• Resolution

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL ACCEPTING THE 2021 CHIP SEAL PROJECT, CIP NO. 9981, FOR MAINTENANCE AND RESPONSIBILITY

WHEREAS, the City of Salinas maintains approximately 292 centerline miles of roads; and

WHEREAS, the 2021 Chip Seal Project, CIP No. 9981, called for the installation of chip seal, fog seal, and new pavement striping on various existing arterial streets throughout the City; and

WHEREAS, on June 22, 2021, the City Council approved a resolution awarding the 2021 Chip Seal Project, CIP No. 9981, to VSS International, Inc. in the amount of \$963,000.00; and

WHEREAS, the City of Salinas determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301 (C), Class 1) because the project maintains existing roadways; and

WHEREAS, on February 11, 2020, the City Council accepted Safe Streets Pilot Program grant funds from the Transportation Agency of Monterey County (TAMC) for improvements at East Rossi Street, which were incorporated into the 2021 Chip Seal Project plans; and

WHEREAS, the project commenced on September 20, 2021 but was suspended until May 2022 due to unsuitable weather for chip seal application; and

WHEREAS, work resumed on May 16, 2022 and was substantially complete on July 15, 2022; and

WHEREAS, VSS International, Inc. completed the project 24 calendar days beyond the contract completion time, and in accordance with Section 4 of the project specifications, VSS International, Inc. is required to pay to the City of Salinas \$1,000.00 per calendar day above the allotted working days, for a total of \$24,000.00 in liquidated damages; and

WHEREAS, the work has been inspected to meet the requirements of the project plans and specifications.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council accepts the 2021 Chip Seal Project, CIP No. 9981, for maintenance and responsibility.

		3	,		,	
	PASSED	AND APPROVEI	D this 2 nd day of May 202	23, by the fo	llowing vote:	
AYES	:					
NOES	5:					

ABSENT:	
ABSTAIN:	
	APPROVED:
	Kimbley Craig, Mayor
ATTEST:	
Patricia M. Barajas, City Clerk	



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-266, Version: 1

Agreement with Race Forward to Provide Race Equity Training

Approve a Resolution authorizing the City Manager to sign an agreement with Race Forward to provide race equity training for City staff and elected officials for \$237,600.



DATE: MAY 2, 2023

DEPARTMENT: LIBRARY AND COMMUNITY SERVICES DEPARTMENT

FROM: KRISTAN LUNDQUIST, LIBRARY AND COMMUNITY

SERVICES DIRECTOR

BY: JOSE ARREOLA, COMMUNITY SAFETY ADMINISTRATOR

TITLE: APPROVAL OF AN AGREEMENT WITH RACE FORWARD TO

PROVIDE RACE EQUITY TRAINING FOR CITY STAFF AND

ELECTED OFFICIALS

RECOMMENDED MOTION:

A motion to approve a resolution authorizing the City Manager to sign an agreement with Race Forward to provide race equity training for City staff and elected officials for \$237,600.

BACKGROUND:

In August of 2014, the City of Salinas led by the City Manager, Public Works Director, and the Chief of Police began working with Building Healthy Communities East Salinas to collaborate on a Governing for Racial Equity (GRE) Initiative. Building Healthy Communities East Salinas is a California Endowment funded Initiative.

The California Endowment (TCE) sponsored trainings at the City of Salinas began in November of 2014. Fifty city employees in leadership positions trained in GRE while fifty community leaders also trained. Each group trained for two full days followed by a daylong group training for all one hundred participants at the local Hartnell Community College. The training was innovative and the first of its kind in the country. The GRE training conducted by Race Forward blended with Trauma Informed Healing training done by the National Compadres Network. Out of this training came the development of a GRE steering committee made up of equal parts community and City leadership. The goals of the steering committee were to:

- Tell the Salinas story.
- Develop ongoing city trainings.
- Develop ongoing community trainings.
- Expand community engagement.
- Conduct or begin actual new projects, policies or practices.

The development of the Salinas case study "Building the We" and the short documentary by the same name are how we "tell the Salinas Story". Additional trainings of another 100 city employees happened in 2016. Some smaller scale community trainings have also occurred. In late 2016 city staff and leadership decided to join the Government Alliance for Race and Equity

(GARE) to develop a cross department team that could work together to create a Racial Equity Impact Assessment tool. A team of ten city staff created in January 2017 trained for a full year in GARE together and went on to do a second-year implementation track in 2018. A new smaller group completed the introductory training in 2019.

The GARE trainings from 2017-2019 occurred monthly in Oakland. The County of Monterey has also been sending a team since 2017. The monthly travel for such large teams and the amount of time spent in traffic for the day long trainings has taken a toll. In 2019 members of the GRE steering committee joined the cross-sector collective, "Towards A Racially Equitable Monterey County" (TREMC) Together with the County of Monterey, Building Healthy Communities and other agencies we brought GARE to Monterey County in 2020 to improve participation and make the training more accessible. Fifteen city staff from all departments participated in this training. In 2021-2022 a smaller team of about 5 city staff participated in the Monterey County Learning to Action cohort, "COLIBRI" (Collaboratively Organizing for Liberation, Inclusion and Breaking Racial Inequities). Out of this cohort an action plan was developed to do equitable community engagement by improving the City's outreach processes and strategies. This plan resulted in the engagement of over 6,000 residents through meetings, pop-ups and an online survey on the budget priorities of residents. Now we will partner with Race Forward to train all staff in governing for race equity.

Race Forward was founded in 1981 and brings systemic analysis and an innovative approach to complex race issues to help people take effective action toward racial equity. Race Forward is home to the <u>Government Alliance on Race and Equity (GARE)</u>, a national network of local government working to achieve racial equity and advance opportunities for all. Race Forward also presents <u>Facing Race</u>, the country's largest multiracial conference on racial justice. Race Forward helped design and deliver the Monterey County Learning to Action cohort, "COLIBRI" in 2021 and 2022. Race Forward's training/workshops present core racial equity concepts, and then focus further on content and application to support training participants in bringing key ideas into their daily work.

The key outcomes for these trainings are:

- To shift the understanding of racism from the individual to the system focus, to assist participants in thinking through how to utilize this framework in policy making.
- To provide an orientation to the role, responsibilities, and opportunities for government to advance racial equity.
- Focus on normalizing racial equity as a core value with clear definitions of key terminology, operationalizing racial equity via new policies and institutional practice, and organizing, both internally and in partnership with other institutions and the community.
- Introduction to a racial equity tool that can be used in decisions relating to policies, practices, programs and budget and share effective communications strategies.

The goal is to train all city staff and elected officials. We will complete most of the trainings late Spring through to the Fall of 2023. Half of the trainings will be in person and the other half will be virtual. Each training is one full day. The terms of the contract will allow us one year through May 2024 to complete trainings for all staff.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The continuation of GRE training supports the following City Council Goals:

☐ Effective & Culturally Responsive Government

- o Invest in training and development opportunities to build skills and capacity.
- o Provide Diversity, Equity and Inclusion training for policymakers.

DEPARTMENTAL COORDINATION:

The Library & Community Services Department has coordinated and collaborated with designees from the Police, Fire, Administration, Finance, Human Resource, Public Works and Community Development Departments who have been training together on Governing for Racial Equity through a cross department team that trains on Governing for Racial Equity since 2017. Recently this cross-sector group along with Policy makers attending the 2022 Facing Race Conference in Phoenix Arizona

FISCAL AND SUSTAINABILITY IMPACT:

The funds are appropriated and available in expenditure accounts 1100.55.6248-63.6010 (\$187,236) and 3255.55.7354-63.6010 (\$50,364).

ATTACHMENTS:

Resolution

Professional Services Agreement

RESOLUTION NO. _____ (N.C.S.)

RESOLUTION AUTHORIZING THE APPROVAL OF AN AGREEMENT WITH RACE FORWARD TO PROVIDE RACE EQUITY TRAINING FOR CITY STAFF AND **ELECTED OFFICIALS**

WHEREAS, the City of Salinas is committed to advancing equity in policy and practice for its employees and residents; and

WHEREAS, the City of Salinas is committed to training and development in the Government Alliance on Race Equity; and

WHEREAS, City of Salinas and the City Council seeks to deepen collective shared understanding of structural racism and its role in perpetuating health and other key life inequities; and

WHEREAS, the City of Salinas Council goal of effective & culturally responsive government includes "investing in training and development opportunities to build skill and capacity" and "Provide Diversity, Equity and Inclusion training for policymakers" and

WHEREAS, the \$237,600 in funds for these trainings are appropriated and available in expenditure accounts 1100.55.6248-63.6010 (\$187,236) and 3255.55.7354-63.6010 (\$50,364) and

WHEREAS, the implementation of healing-informed Governing Alliance for Racial Equity (GARE) practice across all departments that allows City of Salinas to make substantive progress toward institutional change; and

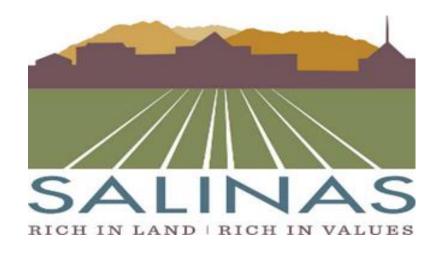
NOW, THEREFORE, BE IT RESOLVED that the City Manager is hereby authorized on behalf of the City Council to sign an agreement with Race Forward including any amendments thereof.

RE IT FURTHER RESOLVED that the City Council hereby authorizes the approval of fficials.

an agreement with Race Forward to provide Race Equity training for city staff and elected of
PASSED AND APPROVED this 2nd day of May 2023 by the following vote:
AYES:
NOES:
ABSENT:
ABSTAIN:

	APPROVED:
	Kimbley Craig, Mayor
ATTEST:	
Patricia M. Barajas, City Clerk	

AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF SALINAS AND RACE FORWARD



Contents

	ΓALS 1S	
1.	Scope of Service.	
2.	Term; Completion Schedule.	
3.	Compensation.	
4.	Billing.	
5.	Meet & Confer.	
6.	Additional Copies.	
7.	Responsibility of Consultant.	
8.	Responsibility of City.	
9.	Acceptance of Work Not a Release.	
10.	Indemnification and Hold Harmless.	
11.	Insurance.	. 6
12.	Access to Records.	. 6
13.	Non-Assignability.	. 6
14.	Changes to Scope of Work.	. 7
15.	Ownership of Documents.	. 7
16.	Termination	. 7
17.	Compliance with Laws, Rules, and Regulations.	. 8
18.	Exhibits Incorporated.	. 8
19.	Independent Contractor.	. 8
20.	Integration and Entire Agreement.	. 8
21.	Jurisdiction and Venue	. 9
22.	Severability	. 9
23.	Notices.	. 9
24.	Nondiscrimination	10
25.	Conflict of Interest.	10
26.	Headings.	10
27.	Attorneys' Fees	10
28.	Non-Exclusive Agreement.	10
29.	Rights and Obligations Under Agreement.	10
30.	Licenses	10
31.	Counterparts.	10

32. Legal Representation.	11
33. Joint Representation.	11
34. Warranty of Authority	11
35. No Waiver of Rights.	11
Exhibit A- Insurance Requirements	13
Exhibit B- Scope of Service	16

AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF SALINAS AND RACE FORWARD

This Agreement for Professional Services (the "Agreement" and/or "Contract") is made and entered into this 23rd day of May 2023, between the **City of Salinas**, a California Charter city and municipal corporation (hereinafter "City"), and **Race Forward** a [California corporation/limited liability company (hereinafter "Consultant").

RECITALS

WHEREAS, Consultant represents that he, she, or it is specially trained, experienced, and competent to perform the special services which will be required by this Agreement; and

WHEREAS, Consultant is willing to render such professional services, as hereinafter defined, on the following terms and conditions.

NOW, THEREFORE, City and Consultant agree as follows:

TERMS

- **1. Scope of Service.** The project contemplated and the scope of Consultant's services are described in **Exhibit B**, attached hereto and incorporated herein by reference.
- **2.** Term; Completion Schedule. This Agreement shall commence on May 23, 2023, and shall terminate on May 31, 2024, unless extended in writing by either party upon (30) days written notice. This Agreement may be extended only upon mutual written consent of the parties and may be terminated only pursuant to the terms of this Agreement.
- 3. <u>Compensation.</u> City hereby agrees to pay Consultant for services rendered the City pursuant to this Agreement on a time and materials basis according to the rates of compensation of or as set forth in <u>Exhibit B</u>. The total amount of compensation to be paid under this Agreement shall not exceed **two hundred thirty-seven thousand six hundred dollars** (\$237,600).
- **<u>Billing.</u>** Consultant shall submit to City an itemized invoice, prepared in a form satisfactory to City, describing its services and costs for the period covered by the invoice. Except as specifically authorized by City, Consultant shall not bill City for duplicate services performed by more than one person. Consultant's bills shall include the following information to which such services cost or pertain:
 - (A) A brief description of services performed;
 - **(B)** The date the services were performed;
 - (C) The number of hours spent and by whom;

- (**D**) A brief description of any costs incurred; and
- **(E)** The Consultant's signature.

Any such invoices shall be in full accord with any and all applicable provisions of this Agreement.

City shall make payment on each such invoice within thirty (30) days of receipt; provided, however, that if Consultant submits an invoice which is incorrect, incomplete, or not in accord with the provisions of this Agreement, City shall not be obligated to process any payment to Consultant until thirty (30) days after a correct and complying invoice has been submitted by Consultant. The City shall process undisputed portion immediately.

- **Meet & Confer.** Consultant agrees to meet and confer with City or its agents or employees with regard to services as set forth herein as may be required by the City to ensure timely and adequate performance of the Agreement.
- **Additional Copies.** If City requires additional copies of reports, or any other material which Consultant is required to furnish as part of the services under this Agreement, Consultant shall provide such additional copies as are requested, and City shall compensate Consultant for the actual costs related to the production of such copies by Consultant.
- **Responsibility of Consultant.** By executing this Agreement, Consultant agrees that the services to be provided and work to be performed under this Agreement shall be performed in a fully competent manner. By executing this Agreement, Consultant further agrees and represents to City that the Consultant possesses, or shall arrange to secure from others, all of the necessary professional capabilities, experience, resources, and facilities necessary to provide the City the services contemplated under this Agreement and that City relies upon the professional skills of Consultant to do and perform Consultant's work. Consultant further agrees and represents that Consultant shall follow the current, generally accepted practices in this area to the profession to make findings, render opinions, prepare factual presentations, and provide professional advice and recommendations regarding the projects for which the services are rendered under this Agreement.
- **Responsibility of City.** To the extent appropriate to the projects to be completed by Consultant pursuant to this Agreement, City shall:
- (A) Assist Consultant by placing at its disposal all available information pertinent to the projects, including but not limited to, previous reports and any other data relative to the projects. Nothing contained herein shall obligate City to incur any expense in connection with completion of studies or acquisition of information not otherwise in the possession of City.
- **(B)** Examine all studies, reports, sketches, drawings, specifications, proposals, and other documents presented by Consultant, and render verbally or in writing as may be appropriate, decisions pertaining thereto within a reasonable time so as not to delay the services of Consultant.

- (C) Steve Carrigan, City Manager, or his designee, shall act as City's representative with respect to the work to be performed under this Agreement. Such person shall have the complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements, and systems pertinent to Consultant's services. City may unilaterally change its representative upon notice to the Consultant.
- **(D)** Give prompt written notice to Consultant whenever City observes or otherwise becomes aware of any defect in a project.
 - **(F)** Will provide lunch and snacks for attendees and trainers, workshop materials for attendees, be in-charge of reserving venue and printing handouts.
 - (G) will confirm with Consultant that covid-19 protocols are in place.
- **Acceptance of Work Not a Release.** Acceptance by the City of the work to be performed under this Agreement does not operate as a release of Consultant from professional responsibility for the work performed.

10. Indemnification and Hold Harmless.

Consultant shall defend, indemnify, and hold harmless the City and its officers, officials, employees, volunteers, and agents from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with Consultant's performance of work hereunder, including the performance of work of any of Consultant's subcontractors or agents, or Consultant's failure to comply with any of its obligations contained in the agreement, except such loss or damage which was caused by the sole negligence or willful misconduct of the City.

- 11. <u>Insurance.</u> Consultant shall procure and maintain for the duration of this Agreement insurance meeting the requirements specified in <u>Exhibit A</u> hereto.
- **Access to Records.** Consultant shall maintain all preparatory books, records, documents, accounting ledgers, and similar materials including but not limited to calculation and survey notes relating to work performed for the City under this Agreement on file for at least three (3) years following the date of final payment to Consultant by City. Any duly authorized representative(s) of City shall have access to such records for the purpose of inspection, audit, and copying at reasonable times during Consultant's usual and customary business hours. Consultant shall provide proper facilities to City's representative(s) for such access and inspection.
- 13. <u>Non-Assignability.</u> It is recognized by the parties hereto that a substantial inducement to City for entering into this Agreement was, and is, the professional reputation and competence of

Consultant. This Agreement is personal to Consultant and shall not be assigned by it without express written approval of the City.

- 14. <u>Changes to Scope of Work.</u> City may at any time, and upon a minimum of ten (10) days written notice, seek to modify the scope of services to be provided for any project to be completed under this Agreement. Consultant shall, upon receipt of said notice, determine the impact on both time and compensation of such change in scope and notify City in writing. Upon agreement between City and Consultant as to the extent of said impacts to time and compensation, an amendment to this Agreement shall be prepared describing such changes. Execution of the amendment by City and Consultant shall constitute the Consultant's notice to proceed with the changed scope.
- **15.** Ownership of Documents. Title to all final documents, including drawings, specifications, data, reports, summaries, correspondence, photographs, computer software (if purchased on the City's behalf), video and audio tapes, software output, and any other materials with respect to work performed under this Agreement shall vest with City at such time as City has compensated Consultant, as provided herein, for the services rendered by Consultant in connection with which they were prepared. City agrees to hold harmless and indemnify the Consultant against all damages, claims, lawsuits, and losses of any kind including defense costs arising out of any use of said documents, drawings, and/or specifications on any other project without written authorization of the Consultant.

16. <u>Termination.</u>

- (A) City shall have the authority to terminate this Agreement, upon ten days written notice to Consultant, as follows:
 - (1) If in the City's opinion the conduct of the Consultant is such that the interest of the City may be impaired or prejudiced, or
 - (2) For any reason whatsoever.
- **(B)** Upon termination, Consultant shall be entitled to payment of such amount as fairly compensates Consultant for all work satisfactorily performed up to the date of termination based upon the Consultant's rates shown in **Exhibit B** and/or Section 3 of this Agreement, except that:
 - (1) In the event of termination by the City for Consultant's default, City shall deduct from the amount due Consultant the total amount of additional expenses incurred by City as a result of such default. Such deduction from amounts due Consultant are made to compensate City for its actual additional costs incurred in securing satisfactory performance of the terms of this Agreement, including but not limited to, costs of engaging another consultant(s) for such purposes. In the event that such additional expenses shall exceed amounts otherwise due and payable to Consultant hereunder, Consultant shall pay City the full amount of such expense.

- (C) In the event that this Agreement is terminated by City for any reason, Consultant shall:
 - (1) Upon receipt of written notice of such termination promptly cease all services on this project, unless otherwise directed by City; and
 - (2) Deliver to City all documents, data, reports, summaries, correspondence, photographs, computer software output, video and audio tapes, and any other materials provided to Consultant or prepared by or for Consultant or the City in connection with this Agreement. Such material is to be delivered to City in completed form; however, notwithstanding the provisions of Section 15 herein, City may condition payment for services rendered to the date of termination upon Consultant's delivery to the City of such material.
- **(D)** In the event that this Agreement is terminated by City for any reason, City is hereby expressly permitted to assume the projects and complete them by any means, including but not limited to, an agreement with another party.
- **(E)** The rights and remedy of the City and Consultant provided under this Section are not exclusive and are in addition to any other rights and remedies provided by law or appearing in any other section of this Agreement.
- **17.** <u>Compliance with Laws, Rules, and Regulations.</u> Services performed by Consultant pursuant to this Agreement shall be performed in accordance and full compliance with all applicable federal, state, and City laws and any rules or regulations promulgated thereunder.
- **18.** Exhibits Incorporated. All exhibits referred to in this Agreement and attached to it are hereby incorporated in it by this reference. In the event there is a conflict between any of the terms of this Agreement and any of the terms of any exhibit to the Agreement, the terms of the Agreement shall control the respective duties and liabilities of the parties.
- **19.** <u>Independent Contractor.</u> It is expressly understood and agreed by both parties that Consultant, while engaged in carrying out and complying with any of the terms and conditions of this Agreement, is an independent contractor and not an employee of the City. Consultant expressly warrants not to represent, at any time or in any manner, that Consultant is an employee or servant of the City.
- **20.** <u>Integration and Entire Agreement.</u> This Agreement represents the entire understanding of City and Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters contained herein. This Agreement may not be modified or altered except by amendment in writing signed by both parties.

- **21.** <u>Jurisdiction and Venue.</u> This Agreement shall be governed by and construed in accordance with the laws of the State of California, County of Monterey, and City of Salinas. Jurisdiction of litigation arising from this Agreement shall be in the State of California, in the County of Monterey or in the appropriate federal court with jurisdiction over the matter.
- **22. Severability.** If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said laws, but the remainder of the Agreement shall continue to be in full force and effect.

23. Notices.

(A) Written notices to the City hereunder shall, until further notice by City, be addressed to:

City Manager City of Salinas 200 Lincoln Avenue Salinas, California 93901

With a copy to:

City Attorney City of Salinas 200 Lincoln Avenue Salinas, California 93901

(B) Written notices to the Consultant shall, until further notice by the Consultant, be addressed to:

Julie Nelson Senior Vice President of Programs 900 Alice Street, Suite 400 Oakland, CA 94607 510.653.3415 jnelson@raceforward.org

- (C) The execution of any such notices by the City Manager shall be effective as to Consultant as if it were by resolution or order of the City Council, and Consultant shall not question the authority of the City Manager to execute any such notice.
- (**D**) All such notices shall either be delivered personally to the other party's designee named above, or shall be deposited in the United States Mail, properly addressed as aforesaid, postage fully prepaid, and shall be effective the day following such deposit in the mail.

- **24. Nondiscrimination.** During the performance of this Agreement, Consultant shall not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, creed, sex, national origin, familial status, sexual orientation, age (over 40 years) or disability. Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, ancestry, creed, sex, national origin, familial status, sexual orientation, age (over 40 years) or disability.
- 25. Conflict of Interest. Consultant warrants and declares that it presently has no interest, and shall not acquire any interest, direct or indirect, financial or otherwise, in any manner or degree which will render the services required under the provisions of this Agreement a violation of any applicable local, state or federal law. Consultant further declares that, in the performance of this Agreement, no subcontractor or person having such an interest shall be employed. In the event that any conflict of interest should nevertheless hereinafter arise, Consultant shall promptly notify City of the existence of such conflict of interest so that City may determine whether to terminate this Agreement. Consultant further warrants its compliance with the Political Reform Act (Government Code section 81000 et seq.) and Salinas City Code Chapter 2A that apply to Consultant as the result of Consultant's performance of the work or services pursuant to the terms of this Agreement.
- **26. Headings.** The section headings appearing herein shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning or intent of the provisions of this Agreement.
- **Attorneys' Fees.** In case suit shall be brought to interpret or to enforce this Agreement, or because of the breach of any other covenant or provision herein contained, the prevailing party in such action shall be entitled to recover their reasonable attorneys' fees in addition to such costs as may be allowed by the Court. City's attorneys' fees, if awarded, shall be calculated at the market rate.
- **28.** <u>Non-Exclusive Agreement.</u> This Agreement is non-exclusive and both City and Consultant expressly reserves the right to contract with other entities for the same or similar services.
- **29.** Rights and Obligations Under Agreement. By entering into this Agreement, the parties do not intend to create any obligations express or implied other than those set out herein; further, this Agreement shall not create any rights in any party not a signatory hereto.
- **10.** <u>Licenses.</u> If a license of any kind, which term is intended to include evidence of registration, is required of Consultant, its representatives, agents or subcontractors by federal, state or local law, Consultant warrants that such license has been obtained, is valid and in good standing, and that any applicable bond posted in accordance with applicable laws and regulations.
- **31.** Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute a single agreement.

- **132.** Legal Representation. Each party affirms that it has been represented, if it so chose, by legal counsel of its own choosing regarding the preparation and the negotiation of this Agreement and the matters and claims set forth herein, and that each of them has read this Agreement and is fully aware of its contents and its legal effect. Neither party is relying on any statement of the other party outside the terms set forth in this Agreement as an inducement to enter into this Agreement.
- **33. Joint Representation.** The language of all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against any party. No presumptions or rules of interpretation based upon the identity of the party preparing or drafting the Agreement, or any part thereof, shall be applicable or invoked.
- **Warranty of Authority.** Each party represents and warrants that it has the right, power, and authority to enter into this Agreement. Each party further represents and warrants that it has given any and all notices, and obtained any and all consents, powers, and authorities, necessary to permit it, and the persons entering into this Agreement for it, to enter into this Agreement.
- 35. No Waiver of Rights. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. The failure to provide notice of any breach of this Agreement or failure to comply with any of the terms of this Agreement shall not constitute a waiver thereof. Failure on the part of either party to enforce any provision of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provision or any other provision. A waiver by the City of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the date first written above.

CITY O	CITY OF SALINAS				
Steve Ca	arrigan				
City Ma	nager				
F	APPROVED AS TO FORM:				
-	Christopher A. Callihan, City Attorney, or				
	Rhonda Combs, Assistant City Attorney				
L	Riiolida Collios, Assistant City Attorney				

CONSULTANT

Julia Nelson Senior Vice President of Programs

Insurance Requirements

Consultant shall procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Consultant, his agents, representatives, employees, or subcontractors. With respect to General Liability and Professional Liability, coverage should be maintained for a minimum of five (5) years after Agreement completion.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

- (A) Commercial General Liability ("CGL"): Insurance Services Office Form ("ISO") CG 00 01 covering CGL on an occurrence basis, including products and completed operations, property damage, bodily injury, and personal & advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
- **(B) Automobile Liability:** ISO Form CA 0001 covering any auto, or if Consultant has no owned autos, hired and non-owned, with limits no less than \$1,000,000 per accident for bodily injury and property damage.
- **(C) Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with a limit of no less than **\$1,000,000** per accident for bodily injury or disease.
- (D) Professional Liability (also known as Errors and Omissions) insurance appropriate to the work being performed, with limits no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate per policy period of one year.

If the Consultant maintains broader coverage and/or higher limits than the minimums shown above, the City of Salinas requires and shall be entitled to the broader coverage and/or higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

OTHER INSURANCE PROVISIONS

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status

The City of Salinas, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Consultant's insurance (at least as broad as ISO Form CG 20 10, CG 11 85, or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).

Primary Coverage

For any claims related to this Agreement or the project described within this Agreement, the **Consultant's insurance coverage shall be primary coverage** at least as broad as ISO Form CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

Notice of Cancellation

Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City.

Waiver of Subrogation

Consultant hereby grants to City a waiver of any right to subrogation which any insurer of said Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City of Salinas for all work performed by the Consultant, its employees, agents, and subcontractors.

Self-Insured Retentions

Self-insured retentions must be declared by Consultant to and approved by the City. At the option of the City, Consultant shall provide coverage to reduce or eliminate such self-insured retentions as respects the City, its officers, officials, employees, and volunteers; or the consultant shall provide evidence satisfactory to the City guaranteeing payment of losses and related investigations, claim administrations, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

Claims Made Policies

If any of the required policies provide coverage on a claims-made basis:

- 1. The Retroactive Date must be shown and must be before the date of this Agreement or the beginning of Agreement work.
- 2. Insurance must be maintained and evidence of insurance must be provided *for at least five* (5) years after completion of the Agreement of work.
- 3. If coverage is canceled or non-renewed, and not *replaced with another claims-made policy form with a Retroactive Dat*e prior to the Agreement effective date, the Consultant must purchase "extended reporting" coverage for a minimum of *five* (5) years after completion of Agreement work.
- 4. A copy of the claims reporting requirements must be submitted to the City for review.

Verification of Coverage

Consultant shall furnish the City with original certificates and amendatory endorsements or copies of the applicable insurance language effecting coverage required by this Agreement. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

Subcontractors

Consultant shall require and verify that all sub-consultants and/or subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that Entity is an additional insured on insurance required from such sub-consultants and/or subcontractors.

Special Risks or Circumstances

City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Maintenance of Insurance

Maintenance of insurance by Consultant as specified shall in no way be interpreted as relieving Consultant of its indemnification obligations or any responsibility whatsoever and the Consultant may carry, at its own expense, such additional insurance as it deems necessary.

SCOPE OF WORK

Normalize

Normalizing conversations about race includes developing and sharing a racial equity framework as well as operating with urgency and accountability. We have a highly skilled team of expert facilitators who have a long standing history of working for government and training government employees and executives. Our trainings have been attended by government employees from across the country and we have assisted in the creation of core teams in jurisdictions as large as New York City which now has a city wide task for to address systemic racism. The combination of our skilled facilitators and curriculum helps to move individuals who are unwilling to acknowledge that racism is real and current to a place of action. The goal is to have individuals leave with the understanding that this is just the starting point and that in this moment we are setting the foundation for the county as a whole to be able to move forward with more equitable practices, policies and procedures that will better serve Black, Indegenious and People of color communities.

In California Santa Clara county has established a county wide Diversity, Equity and Belonging department; and will be launching a equity in budgeting tool requiring each county agency to utilize it during their budget creation process. The tool asks pointed questions to determine the material impacts of budgeting on communities of color to ensure that they are receiving the funding they need.

In Boston there is a cohort that was created through executive order for government, non profit, and community members to embark on a racial equity year long process together. We are facilitating a cohort model of trainings for them which will result in an equity action plan that will be co-created, cross sector with Black, Indegnious and people of color at the foreground of design, implementation, and access.

• Advancing Racial Equity: The Role of Government (full day workshop) – This workshop provides an orientation to the role, responsibilities and opportunities for government to advance racial equity. We focus on normalizing racial equity as a core value with clear definitions of key terminology, operationalizing racial equity via new policies and institutional practice, and organizing, both internally and in partnership with other institutions and the community. We introduce a racial equity tool that can be used in decisions relating to policies, practices, programs and budget and share effective communications strategies. Participants gain increased understanding of racial equity terminology, including implicit and explicit bias and individual, institutional, and structural racism; gain skill at identifying and addressing institutional and structural racism; and increase capacity to advance racial equity in the workplace. Our primary focus in this training is to shift the understanding of racism from the individual to the systems focus, to assist participants in thinking through how to utilize this framework in policy making.

Scope of Work

Scope of Work

Date	Activity	Item cost	Total COST
May 2023 to May 2024	Advancing Racial Equity-The Role of Government 6 trainings for Salinas City Staff and Leadership Normalizing: One full-day workshop on Advancing Racial Equity-The Role of Government • Facilitation by 2 RF facilitators for up to 50 participants • One hour of planning time between the facilitators and representatives of Salinas City Staff • One day of preparation and planning time for the training for each facilitator. Note: This is for Race Forward's planning time. • Debrief session 60 minutes in length covering, participant experience, evaluations, and potential next steps following the training. • Training will be done in person by Race Forward If this is an in-person training: • Salinas City will provide lunch and snacks for attendees and trainers, workshop materials for attendees, be incharge of reserving venue and printing handouts. • Salinas City will confirm with RF that covid-19 protocols are in place.	\$15,000 x 6	\$90,000
May 2023 - May 2024	Advancing Racial Equity-The Role of Government 9 trainings for Salinas City Staff and Leadership Normalizing: One full-day workshop on Advancing Racial Equity-The Role of Government	\$15,000 x 9	\$135,000
	 Facilitation by 2 RF facilitators for up to 50 participants One hour of planning time between the facilitators and representatives of Salinas City Staff 		

	 One day of preparation and planning time for the training for each facilitator. Note: This is for Race Forward's planning time. Debrief session 60 minutes in length covering, participant experience, evaluations, and potential next steps following the training. Training will be done over zoom provided by Race Forward 		
May 2023- May 2024	Technical assistance/coaching and support for Salinas City Staff for 12 months bank of 5 hours a month for Salinas staff.		\$ 21,000
Facilitator Travel Fee	This fee covers 2 facilitators travel fees for each training.	\$3000 x 6	\$18,000
	GARE DISCOUNT 10%		- \$26,400
TOTAL			\$237,600

 $^{^{*}}$ If trainings are in person we will have to include a travel fee of \$3,000 per training and client will need to provide all printed materials + catering



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-272, Version: 1

City of Salinas and Housing Authority of the County of Monterey Memorandum of Understanding

Approve a Resolution authorizing the City Manager or designee to execute a Memorandum of Understanding between the City of Salinas and the Housing Authority of the County of Monterey for the completion of required U.S. Department of Housing and Urban Development Environmental Review Records; and the City Manager or designee to approve any future, necessary revisions, amendments and/or modifications.

DATE: MAY 2, 2023

DEPARTMENT: COMMUNITY DEVELOPMENT DEPARTMENT

FROM: MEGAN HUNTER, COMMUNITY DEVELOPMENT DIRECTOR

THROUGH: ROD POWELL, PLANNING MANAGER

BY: LUIS OCHOA, SR. COMMUNITY DEVELOPMENT ANALYST

TITLE: CITY OF SALINAS AND HOUSING AUTHORITY OF THE COUNTY

OF MONTEREY MEMORANDUM OF UNDERSTANDING

RECOMMENDED MOTION:

A motion to approve a Resolution authorizing:

- 1. the City Manager or designee to execute a Memorandum of Understanding (MOU) between the City of Salinas (City) and the Housing Authority of the County of Monterey (HACM) for the completion of required U.S. Department of Housing and Urban Development (HUD) Environmental Review Records; and
- 2. the City Manager or designee to approve any future, necessary revisions, amendments and/or modifications to the MOU to continue to remain compliant with HUD regulations and guidance.

EXECUTIVE SUMMARY:

On December 19, 2022, HUD notified the City and HACM of its contingent intent to grant a waiver of 24 CFR Part 58 to allow the use of 85 HUD Section 8 Project-Based Vouchers (PBVs) to support the Step Up in Salinas Homekey Project. In accordance with this stipulated notice and guidance, the City and HACM have collaborated and prepared a required, proposed MOU outlining the specific roles and responsibilities of each entity regarding the completion of required HUD Environmental Reviews.

BACKGROUND:

In July 2020 the California Department of Housing and Community Development (HCD) released a Notice of Funding Availability (NOFA) for its emerging Homekey Program identifying an available new source of significant funding intended to rapidly sustain and expand the inventory of affordable housing for people experiencing homelessness. As part of this program, local jurisdictions are able to develop collaborative partnerships to quickly acquire and convert existing motels and hotels to permanent housing. On October 13, 2020, the City Council authorized the City to enter into a Co-

Application through the California Department of Housing and Community Development (HCD) with Shangri-La and Step Up on Second for the Good Nite Inn Hotel located at 545 Work Street. The Project application identified the acquisition and conversion of the existing 103-room hotel located at 545 Work Street, Salinas, CA 93901 to 101 units of interim housing in the first year allowing for limited renovation and conversion to affordable permanent supportive housing thereafter with a preference to house those experiencing chronic homelessness.

HCD awarded the project \$9.2 million in October 2020 allowing a limited partnership, 545 Work Street LP, to acquire the property in December 2020. On January 6, 2022, the City of Salinas and 545 Work Street LP executed a Regulatory Agreement and Declaration of Restrictive Covenants to ensure necessary affordability covenants for all units. Simultaneously, the project's development and operational partners, Shangri La Industries (SLI) and Step Up, submitted an application to the Housing Authority of the County of Monterey (HACM) on August 19, 2020, to request an award of PBVs to support and sustain housing and support services for the project's future residents. Shortly thereafter, on December 7, 2020, HACM notified the project partners of its conditional award of eighty-five (85) PBVs to the project with an approximate value of \$1,378,020 dollars annually for a period of twenty-five (25) years. A final award letter from HACM for the 85 PBVs was sent on June 15, 2021.

In May 2021, following the issuance of building permits, SLI initiated its rehabilitation activities of the project using HCD Homekey funds before completing the Environmental Assessment and obtaining the Authority to Use Grant Funds (AUGF) from HUD. Unknowingly, this resulted in a violation as HUD considers this action as a prohibited choice-limiting action. On July 23, 2021, HUD notified HACM and the City of the regulatory violation and informed the City of the option to submit a request to HUD to review the circumstances of the violation and consider approving the project.

DISCUSSION:

The City, HACM, SLI, and Step Up have been in continuous collaboration with HUD regarding approval of the waiver associated with the PVB award. HUD's December 19, 2022, letter indicating approval also imposed seven (7) conditions of compliance related to the finalization of the project's required environmental assessment – one being the execution of an appropriate Memorandum of Understanding between the City and HACM regarding roles and responsibilities for the completion of all future HUD environment review records.

The City and HACM have been collaborating since January of 2023 to craft the proposed MOU. HACM plans to present the MOU to their Board of Commissioners on April 24, 2023, for final approval. HUD has stipulated the submission of a jointly approved and executed MOU by no later than June 17, 2023.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The proposed MOU supports City of Salinas Strategic Plan 2022-2025 Goals and Strategies of *Housing and Affordable Housing*.

DEPARTMENTAL COORDINATION:

This agenda item originates from the City's Community Development Department (CDD), Housing and Community Development Division under significant, formal collaboration with HUD, HACM, SLI, and Step Up, and in consultation with the City Attorney.

FISCAL AND SUSTAINABILITY IMPACT:

Execution of the proposed MOU to satisfy HUD's conditional approval of the waiver will create 85 ongoing, extremely affordable housing opportunities for Salinas residents and will significantly contribute to the ongoing operational support of the Step Up in Salinas Homekey project. This item has no fiscal impact to the City.

ATTACHMENTS:

Resolution
Draft Memorandum of Understanding
HUD Waiver Conditional Approval

RESOLUTION No. _____ (N.C.S.)

A RESOLUTION APPROVING THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SALINAS AND THE HOUSING AUTHORITY OF THE COUNTY OF MONTEREY FOR THE COMPLETION OF HUD ENVIRONMENTAL REVIEW RECORDS

- **WHEREAS,** in July 2020 the California Department of Housing and Community Development released a Notice of Funding Availability for the Homekey Program to make funding available to rapidly sustain and expand the inventory of housing people experiencing homelessness; and
- **WHEREAS**, on October 13, 2020, the City Council authorized the City to enter into a Co-Application through HCD with Shangri La Industries and Step Up on Second for the Good Nite Inn Hotel located at 545 Work Street; and
- **WHEREAS**, in October of 2020, the City and its development partners were awarded \$9.2 million in HCD Homekey Program funds to purchase the Good Nite Inn Hotel and provide operational support; and
- **WHEREAS**, on January 6, 2022, the City of Salinas and 545 Work Street LP signed a Regulatory Agreement and Declaration of Restrictive Covenants to ensure lasting affordable housing options at the project; and
- **WHEREAS**, on August 19, 2020, Shangri La Industries and Step Up, submitted an application to the Housing Authority (HACM) of the County of Monterey to request Section 8 Project Based Vouchers; and
- **WHEREAS**, on December 7, 2020, HACM conditionally awarded eighty-five (85) HUD Section 8 PBVs to the project for twenty-five (25) years with an approximate total value of \$34,450,500 towards the development and operations of the project; and
- **WHEREAS**, in May of 2021, Shangri La Industries and Step Up commenced initial rehabilitation activities at the site using State HCD Homekey funds prior to receiving the final award letter for the 85 PBVs from HACM on June 15, 2021; and
- **WHEREAS**, on July 23, 2021, Public and Indian Housing Office in consultation with the Office of Environment and Energy issued a Notice of Regulatory Violation to HACM and the City related to the premature work at the Step Up in Salinas Homekey site prior to completion of the National Environmental Policy Act (NEPA) clearance; and
- **WHEREAS**, on December 19, 2022, the City and HACM received a letter from the Office of Environment and Energy providing conditional approval of the request for a waiver of 24 CFR Part 58 due to the initiated work prior to the NEPA clearance; and

WHEREAS, the conditional approval for the waiver imposed seven (7) conditions of compliance related to the finalization of the project's required environmental assessment – one being the execution of an appropriate Memorandum of Understanding between the City and HACM regarding roles and responsibilities for the completion of all future HUD environment review records that HACM and the City complete; and

WHEREAS, on April 24, 2023, Housing HACM's Board approved the Memorandum of Understanding (MOU) between the City and HACM for the Completion of HUD Environmental Review Records; and

WHEREAS, an executed MOU between the City and HACM must be submitted to HUD no later than June 17, 2023; and

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council hereby authorizes the City Manager or designee to execute Memorandum of Understanding (MOU) between the City of Salinas (City) and the Housing Authority of the County of Monterey (HACM) for the Completion of HUD Environmental Reviews; and

BE IT FURTHER RESOLVED that the Salinas City Council hereby authorizes the City Manager or designee to approve any future revisions, amendments and/or modifications to the MOU provided that at all terms and conditions of the MOU are met.

PASSED AND APPROVED this 2nd day of May 2023 by the following vote:

AYES:		
NOES:		
ABSENT:		
ABSTAIN:		
	APPROVED:	
ATTEST:	Kimbley Craig, Mayor	
Patricia M. Barajas, City Clerk		

MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SALINAS LOCAL JURISDICTION AND THE HOUSING AUTHORITY OF THE COUNTY OF MONTEREY FOR THE COMPLETION OF HUD ENVIRONMENTAL REVIEW RECORDS

THIS MEMORANDUM OF UNDERSTANDING (MOU) is made on May 3, 2023, by and between the Housing Authority of the County of Monterey, an incorporated public housing authority (hereinafter referred to as the PHA) and the City of Salinas, a local jurisdiction, a body politic and incorporated, acting as the Responsible Entity (hereinafter referred to as RE).

WHEREAS, the PHA is a housing choice voucher only PHA under Section 8 of the United States Housing Act of 1937, and may elect to pursue housing projects and/or activities with federal financial assistance subject to environmental reviews pursuant to the National Environmental Policy Act of 1969 (NEPA) and implementing regulations of the Council on Environmental Quality, including but not limited to the regulations at 40 CFR Parts 1500-1508, and implementing regulations of the U.S. Department of Housing and Urban Development (HUD), including but not limited to HUD's regulations at 24 CFR Part 58; and

WHEREAS, as the recipient of federal financial assistance, the PHA may secure assistance for completing environmental reviews by the unit of general local government where the project is located as the RE authorized to assume environmental review obligations pursuant to 24 CFR 58.2(a)(7)(ii)(B); and

WHEREAS, the RE certifies it is authorized to: (1) assume responsibility for environmental review, decision making and action under NEPA and each provision of law designated in 24 CFR 58.5 applicable to any and all of the HUD financial assistance awarded to the PHA; (2) accept jurisdiction of the Federal courts for enforcement of these environmental responsibilities; and (3) execute the certification portion of HUD's Request for Release of Funds (RROF) and certifications as set forth in 24 CFR 58.4, 58.13, and 58.71; and

WHEREAS, the PHA requested the RE to complete the environmental review record with respect to the PHA's projects or activities pursuant to the conditions and provisions set forth in this MOU and the RE accepts responsibility to act as the responsible Federal agency under NEPA and the laws and authorities in 24 CFR 58.5 with respect to said projects and activities.

NOW THEREFORE, in consideration of the mutual promises and the terms and conditions set forth below, the PHA and RE hereby agree as follows:

Article 1. Incorporation of recitals: The recitals sets forth above are incorporated by reference as if fully set forth herein and made a part hereof.

Article 2. Duties and Responsibilities of RE:

- 1. RE will perform and/or manage all environmental reviews and prepare all necessary documentation in support of the environmental review record for all activities pursuant to the PHA's projects and any accompanying documents necessary to be submitted to HUD, in full compliance with:
 - a) HUD's "Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities" (24 CFR Part 58);
 - b) Section 102 of NEPA;
 - c) Related provisions of the Council on Environment Quality regulations contained in 40 CFR Parts 1500 through 1508; and
 - d) All other applicable Federal and State regulations.
- 2. Where appropriate and necessary in the environmental review process, RE will issue Findings of No Significant Impact (FONSIs) or Findings of Significant Impact (FOSI), determine whether to hold public hearings, prepare environmental impact statements and records of decision, issue notices of FONSIs and notices of intent to Request Release of Funds (RROF), and prepare requests for release of funds.
- 3. RE may retain consultants and experts for special reviews or investigations and obtain other outside services deemed necessary by RE to its functions hereunder. Prior to retaining any such experts, consultants or outside services, RE shall discuss the need for and scope of such work or services with the PHA. Should the need arise, the PHA shall pay the cost of any such experts, consultants or outside services to complete the environmental review record.

Article 3: Duties and Responsibilities of PHA:

- 1. PHA procures at PHA's expense and provides RE with all available project and environmental information needed by RE in connection with activities pursuant to this MOU, including, without limitation, existing relevant information and any reports of investigation or study required to conduct an environmental review consistent with law and regulations.
- 2. PHA provides RE with documentation that adequately describes the full scope, purpose, and interrelationships of the subject HUD assisted project, which may include privately financed or non-federally assisted PHA financing, and any other documents and/or information requested by RE that RE reasonably believes is necessary to perform services required under this MOU and that are within the PHA's possession or control.
- 3. PHA serves as liaison with local community groups and residents regarding all aspects of RE services under this MOU, including, but not limited to, scheduling meetings and participating in public meetings. PHA provides the RE with prior written notice of all meetings related to MOU services in order to allow the RE the opportunity to participate in such meetings.

- 4. PHA reimburses RE for expenses incurred for performing services under this MOU, including, but not limited to:
 - a. costs of publishing notices;
 - b. necessary travel expenses;
 - c. postage and express package delivery charges;
 - d. fees and expenses of experts, consultants and outside services retained by the RE:
 - e. RE's staff time devoted to performance of MOU services; and
 - f. actual costs incurred associated with any surveys or investigations.
- 5. PHA monitors environmental mitigation or procures such services to ensure compliance with environmental conditions specified in the authorization to use HUD funds or HUD approvals.
- 6. PHA provides the Five Year and Annual Plans to the RE in order to facilitate integration between RE planning and PHA activities and projects that require environmental reviews, including development, modernization, or other capital activities.
- 7. PHA communicates to stakeholders the requirements for environmental reviews before any partner or stakeholder in the development makes a choice-limiting action upon submission of an application for HUD financial assistance.

Article 4: Duties and Responsibilities of RE for RE Projects:

- 1. RE procures at RE's expense and provides PHA with all available project and environmental information needed by PHA in connection with activities pursuant to this MOU, including, without limitation, existing relevant information and any reports of investigation or study required to conduct an environmental review consistent with law and regulations.
- 2. RE provides PHA with documentation that adequately describes the full scope, purpose, and interrelationships of the subject HUD assisted project, which may include privately financed or non-federally assisted PHA financing, and any other documents and/or information requested by PHA that PHA reasonably believes is necessary to perform services required under this MOU and that are within the RE's possession or control.
- 3. RE serves as liaison with local community groups and residents regarding all aspects of RE services under this MOU, including, but not limited to, scheduling meetings and participating in public meetings. RE provides the PHA with prior written notice of all meetings related to MOU services in order to allow the PHA the opportunity to participate in such meetings.
- 4. RE monitors environmental mitigation or procures such services to ensure compliance with environmental conditions specified in the authorization to use HUD funds or HUD approvals.
- 5. RE communicates to stakeholders the requirements for environmental reviews before any partner or stakeholder in the development makes a choice-limiting

action upon submission of an application for HUD financial assistance.

6. RE is responsible for providing an environmental review, subsidy layering information, and ensuring that all contracted units meet HUD's HQS standards for proposals selected in accordance with 24 CFR 983.51 to receive assistance such as Project Based Voucher units.

Article 5. Agreement terms

- 1. This MOU is effective for a period of 2 years or until terminated by the PHA pursuant to the provisions of this MOU.
- 2. PHA may terminate this MOU at any time by giving 90 days written notice to RE.
- 3. RE may terminate this MOU for cause upon <u>90</u> days' notice to PHA, including a statement of the reasons therefore, and after an opportunity for a hearing is afforded. As used herein, cause shall include any failure of PHA to promptly reimburse RE for costs, any other non-performance by PHA under this MOU or any material failure by PHA to comply with any term of this MOU.

ARTICLE 6. Conditions

- 1. No official, employee or agent of either party shall be charged personally by the other or by an assignee or subcontractor with any liability or expenses of defense or be held personally liable under any term or provision of this MOU, because of such party's execution or attempted execution of this MOU, or because of any breach thereof.
- 2. This MOU constitutes the entire agreement between the parties with respect to the subject matter hereof, and no other warranties, inducements, considerations, promises, or interpretations shall be implied or impressed upon this MOU that are not expressly addressed herein.
- 3. No changes or modifications of this MOU are binding unless made in writing and executed by the duly authorized officers of both the PHA and RE.
- 4. PHA and RE shall at all times observe and comply with all applicable laws, ordinances, rules, regulations, and executive orders of the federal, state and local government now existing or hereinafter in effect, which may in any manner affect the performance of this MOU.
- 5. Whenever under this MOU either party, by a proper authority, waives either party's performance in any respect or waives a requirement or condition of either party's performance, the waiver so granted, whether express or implied, shall only apply to the particular instance and shall not be deemed a waiver forever for subsequent instances of the performance, requirement, or condition. No such waiver shall be construed as a modification of the MOU regardless of the number of times either party may have waived the performance, requirement, or condition.

ARTICLE 7. Authority and notice

- 1. Each person signing this MOU represents and warrants that such person has the requisite power and authority to enter into, execute, and deliver this MOU and that this MOU is a valid and legally binding and enforceable obligation in accordance with its terms.
- 2. All verbal and written communication, including required reports and submissions, shall be transmitted between RE and PHA as noted below.

Any notices sent to City shall be electronically transmitted to:

meganh@ci.salinas.ca.us

rodp@ci.salinas.ca.us

luis.ochoa@ci.salinas.ca.us

Any notices sent to the PHA shall be electronically transmitted to:

zboykin@hamonterey.org

csahagun@hamonterey.org

IN WITNESS WHEREOF, the City of Salinas, a local jurisdiction, and the Housing Authority of the County of Monterey have executed this Memorandum of Understanding as of the date first written above and under the laws of the State of California.

City of Salinas, Local Jurisdiction	Date
Steven S. Carrigan, City Manager	
The Housing Authority of the County of Monterey	Date
Zulieka Boykin, Executive Director	

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-7000

OFFICE OF COMMUNITY PLANNING AND DEVELOPMENT

MEMORANDUM FOR: Marion M. McFadden, Principal Deputy Assistant Secretary for

Community Planning and Development (CPD), D

THROUGH: Elizabeth S. Hendrix, Acting Deputy Assistant Secretary for

 $Grant\ Programs,\ DG \qquad \text{ELIZABETH\ HENDRIX}_{0,0}^{\text{Digitally signed by: ELIZABETH\ HENDRIX}$

Community Planning and Development

Date: 2022 12 12 09:54:27 -05:00*

FROM: Kristin L. Fontenot, Director, Office of Environment and Energy,

(OEE), DGE KRISTIN FONTENOT Digitally signed by KRISTIN FONTENOT Date: 2022.12.09 15:30:24-05'00'

SUBJECT: Request for Waiver - 24 CFR 58.22(a) Limitation on Activities

Pending Clearance

Section 8 Project-based Vouchers - City of Salinas Homekey project

Enclosed is a letter from the City of Salinas requesting HUD review the circumstances of the violation of 24 CFR 58.22(a) and approve the Request for a Waiver of 24 CFR Part 58¹ to use Project-Based Vouchers (PBVs) to support the Salinas Homekey project and Memoranda from HUD's Regional Environmental officer and the Director of Office of Public Housing (PIH), San Francisco regional office that recommend approving this waiver with conditions.

ISSUE:

The violation was discovered when the Housing Authority of the County of Monterey (HACM) discovered the City of Salinas (the City) initiated rehabilitation activities prior to completing the environmental assessment and receiving the Authority to Use Grant Funds (AUGF) and contacted PIH. The PIH office in consultation with the Office of Environment and Energy (OEE) issued a Notice of Regulatory Violation on July 23, 2021 (Attached). The City and HACM acknowledge that undertaking project activities prior to receipt of the AUGF is a regulatory violation of 24 CFR 58.22(a), Limitations on activities pending clearance.

FACTS:

Description of Project

Salinas Homekey Project (the "Project") consists of acquisition and conversion of a 103-room hotel located at 545 Work Street, Salinas, CA 93901 to 101 units of interim housing in the first year and permanent supportive housing thereafter for those experiencing chronic homelessness. The building will include two units designated for project managers.

The Project is part of the State of California (State) Homekey Program Initiative. The State Homekey Program provides grant funding to purchase and rehabilitate housing, hotels, motels, and other buildings for use as interim or permanent, longterm housing. The City partnered with

¹ HUD's *Guidance for Obtaining Waiver of 24 CFR Part 58* (2004) describes the process for obtaining a waiver when a regulatory violation of 24 CFR Part 58 has occurred.

Shangri-La Industries, LLC (Shangri-La) and Step Up on Second, Inc. (Step Up) to apply for Homekey funding. The Project was awarded \$9.2 million in Homekey Program funds.

HACM awarded eighty-five (85) Section 8 PBVs with an approximate value of \$1,378,020 dollars annually to the housing developer Step Up on Second, Inc. (Step Up). The PBV funds will be provided to the Project for a period of twenty-five (25) years and will provide a grand total of \$34,450,500 towards the development of the Project.

Description of Violation

On August 19, 2020, Shangri-La submitted an application for HUD PBV funding to HACM. After submitting the application for HUD funding and before completion of HUD's environmental review process, on November 2, 2020, Shangri La executed the purchase agreement for the Good Nite Inn property and in May 2021, Shangri-La and Step Up began rehabilitation activities at the site, using State Homekey funds. There was no premature commitment of HUD funds. On July 23, 2021, HUD notified HACM and the City of the regulatory violation and informed the City of the option to submit a request to HUD to review the circumstances of the violation and consider approving the project.

Section 26(b) of the U.S Housing Act of 1937 (USHA) (42 U.S.C. 1437x(b)) provides that the Secretary of HUD may not approve the release funds for a project unless the recipient has submitted a Request for Release of Funds and Certification (RROF/C) prior to any commitment of funds to the project. HUD's Office of General Counsel has interpreted the word "funds" in the Act to mean HUD funds. Due to the fact that no HUD funds were committed or expended in violation of the USHA there is no statutory violation.

Pursuant to 24 CFR 58.22(a):

"Neither a recipient nor any participant in the development process, including public or private nonprofit or for-profit entities, or any of their contractors, may commit HUD assistance under a program listed in § 58.1(b) on an activity or project until HUD or the state has approved the recipient's RROF and the related certification from the responsible entity. In addition, until the RROF and the related certification have been approved, neither a recipient nor any participant in the development process may commit non-HUD funds on or undertake an activity or project under a program listed in § 58.1(b) if the activity or project would have an adverse environmental impact or limit the choice of reasonable alternatives."

HUD finds that a regulatory violation occurred when Shangri-La and Step Up acquired the property at 545 Work Street and began rehabilitation activities prior to HUD approval of the RROF/C. This is a prohibited choice-limiting action that violates the second sentence of § 58.22(a).

Determination of Good Cause

HUD may approve a Request for a Waiver of Part 58 when a regulatory violation has occurred, if there is good cause to grant the waiver and no unmitigated adverse environmental

impacts will result. The party requesting HUD's review must present evidence that there is good cause to approve the waiver (i.e., the violation was inadvertent, and the project furthers HUD program goals).

The City's request notes that Shangri-La and Step Up were not aware of the City's obligation to comply with HUD's environmental review regulations at 24 CFR Part 58 prior to acquiring the property and beginning rehabilitation activities. When notified that project activities must be halted until the City completed the environmental review process, all project activities that were not determined by the City to be essential life and safety repairs were immediately halted. Additionally, the City erroneously determined that the project met the exemption at 24 CFR 58.34(a)(10) for emergency activities and was exempt from complying with the National Environmental Policy Act requirements to complete an environmental assessment or environmental impact statement.

OEE has reviewed the City's Revised Final Environmental Assessment (EA) executed June 10, 2022. A portion of the property appears to be occupied by a floodway. This is a new circumstance that was not previously identified because maps associated with previous iterations of the EA depicted the property as a pinpoint, whereas the FEMA flood map included with the Revised Final EA shows the property boundaries. In accordance with HUD's Floodplain Management regulations at 24 CFR 55.1(c), HUD may not approve a project if any area of the site is located in a floodway. There are two methods to avoid this environmental impact and bring the property into compliance with 24 CFR Part 55:

- HUD recognizes that FEMA flood maps may not represent the legal geographic boundaries
 of the project site or floodway. The City may obtain the legal description of the property
 boundaries and the location of the floodway and locate those boundaries on an official map
 to determine if the floodway is on the property. A City or County flood official may be able
 to assist. If the floodway is not located on the property, submit the official location
 descriptions and map to HUD.
- 2. If option 1 confirms that the floodway is on the property, or the City chooses not to use option 1, the portion of the property that includes the floodway must be transferred to another owner, or the property must be subdivided and the floodway portion removed from the legal description of the property, and documentation of the revised property description must be provided to HUD.

RECOMMENDATION:

The City asserts the regulatory violation was unintentional, HACM and the City have committed to receiving training and technical assistance, and the purpose of the Project to provide housing and supportive services to the homeless furthers HUD program goals.

Therefore, OEE recommends approving the waiver (after which HUD would approve the RROF/C) with the following conditions:

- (1) Within sixty days the City must submit documentation of compliance with HUD's Floodplain Management regulation above by submitting an official map from the City or County flood official that documents the floodway is not located on the property OR within ninety days submitting a copy of a deed or other document and map that documents the floodway area is removed from the property.
- (2) All current City and HACM staff that conduct or approve HUD environmental reviews shall complete all modules of HUD's Web-Based Instructional System for Environmental Review (WISER), excepting the module "Getting Started: Part 50", no later than 60 days from the date the waiver is approved. Staff that are hired to conduct or approve environmental reviews after the date the waiver is approved shall complete the WISER modules within 60 days after employment begins. Staff that do not meet the above criteria but are subsequently transferred into a role that involves conducting or approving environmental reviews shall complete the WISER modules within 60 days of the transfer. Upon completion of the WISER modules by current staff, the City and HACM shall provide HUD with a list of staff and dates of completion. The requirement to complete WISER modules does not apply to the City's Certifying Officer as defined by 24 CFR 58.2(a)(2) but does apply to potential delegates.
- (3) Prior to the Responsible Entity Agency Official finalizing any environmental review at the Exempt, Categorically Excluded Not Subject to 58.5 (CENST), or Categorically Excluded Subject to 58.5 (CEST) level, the City shall submit the draft environmental review to HUD for review and comment. Prior to the Certifying Officer finalizing any environmental review at the Environmental Assessment (EA) or Environmental Impact Statement level, the City shall submit the draft environmental review to HUD for review and comment. HUD's goal is to provide comments on draft environmental reviews within 2 weeks of receipt; however, HUD may require more time for complex CEST- or EA-level reviews. The City shall account for HUD's review time during its planning process. The requirements of this condition will be considered fulfilled when HUD has reviewed and determined there are no substantive errors or omissions on two Exemptor CENST-level reviews, one CEST-level review, and one EA-level review.
- (4) If the City intends to apply the emergency/disaster exemption at 24 CFR 58.34(a)(10) to any project, the Preparer and the Responsible Entity Agency Official shall prepare signed statements attesting to reviewing HUD's memorandum of December 11, 2012, regarding "Environmental Review Processing During Emergencies and Following Disasters under 24 CFR Part 58" and determining that, per the memorandum, the exemption is applicable to the specific project. Copies of the signed statements shall be included in the environmental review record for the specific project. This requirement remains in place until the next environmental monitoring of the City's environmental review records.
- (5) The City and HACM shall each develop policies and procedures for conducting environmental review of all HUD-funded projects. At a minimum, the policies and procedures shall describe environmental training requirements for new staff or transfer of staff as described in condition 2 and the requirement to attest to use of the HUD

memorandum when applying the emergency/disaster exemption as described in condition 4. The policies and procedures shall also describe coordination with project sponsors, subrecipients, and other partners to ensure environmental reviews are completed prior to expending HUD or non-HUD funds or undertaking activities that could adversely affect the environment or limit the choice of alternative actions. The policies and procedures shall describe how the City and HACM intend to proactively notify potential sponsors, subrecipients, and other partners of the consequences of taking action or spending funds prior to completion of the environmental review. The City and HACM shall submit their policies and procedures to HUD no later than 90 days from the date the waiver is approved.

- (6) If the City and HACM do not currently have a Memorandum of Understanding (MOU) that outlines each agency's roles and responsibilities for HUD environmental reviews, the City and HACM shall execute an MOU based on the example in HUD Notice PIH 2013-07. If the City and HACM are currently operating under such an MOU, the City and HACM shall review the MOU with respect to changes to their policies and procedures described in condition 5 and, if appropriate, amend the MOU or execute a new MOU to reflect these changes. The City and HACM shall provide HUD with a copy of the MOU upon execution, amendment, or confirmation that it meets these requirements but no later than 120 days from the date the waiver is approved.
- (7) Delegation of the Certifying Officer's authority shall be suspended upon the date the waiver request is approved. The Certifying Officer's authority may be delegated upon receipt of HUD's acknowledgement that condition 2, 3, and 5 have been satisfactorily completed.

CONTACT:

For further information, contact Kristin Fontenot, Office of Environment and Energy, at 202-655-1412 or Kristin.L.Fontenot@hud.gov.

Approve	Disapprove	Date	
DECISION:			
Attachments			

cc:

Elizabeth S. Hendrix, Deputy Assistant Secretary for Grant Programs (Acting), DG Kristin Fontenot, Director, Office of Environment and Energy, DGE



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-275, Version: 1

Main Street at Lamar Street Pedestrian Enhancements

Approve a Resolution authorizing the establishment of a new CIP account named "Main Street at Lamar Street Pedestrian Enhancements Project" and authorize the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$247,500.00; authorize the establishment of a Measure X appropriation of up to \$27,500.00 and use of Measure X fund balance as matching funds; and authorize the Public Works Director to execute all agreements and any required documents with Caltrans for the Grant Program.

DATE: MAY 2, 2023

DEPARTMENT: PUBLIC WORKS DEPARTMENT

FROM: DAVID JACOBS P.E., L.S., PUBLIC WORKS DIRECTOR

BY: ANDREW EASTERLING, TRAFFIC ENGINEER

TITLE: MAIN STREET AT LAMAR STREET PEDESTRIAN

ENHANCEMENTS

RECOMMENDED MOTION:

A motion to:

- 1) Authorize the establishment of a new CIP account named, "Main Street at Lamar Street Pedestrian Enhancements Project" with an appropriation of \$275,000;
- 2) Authorize the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$247,500;
- 3) Authorize a transfer of \$247,500 from the Special Construction Assistance Federal & State Fund (5201) to the CIP Fund (5800) for the Project and corresponding revenue budget;
- 4) Authorize a transfer of \$27,500 from the Measure X (2510) Fund to the CIP Fund (5800) for the Project and use of Measure X (2510) fund balance as matching funds for Main Street at Lamar Street Pedestrian Enhancements Project; and
- 5) Authorize the Public Works Director to execute all agreements and any required paperwork with Caltrans for the Highway Safety Improvement Program Grant Program.

EXECUTIVE SUMMARY:

On September 15, 2021, the City Council adopted the City of Salinas Vision Zero Action Plan. The Vision Zero Action Plan identified the intersection of North Main Street at Lamar Street as having the highest number of pedestrian-involved collisions for any unsignalized intersections in the City. The City submitted an application for grant funding to enhance the crosswalk, and the project was selected to receive \$247,500.00 with a 10% local match.

BACKGROUND:

"Vision Zero" is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. It is a movement that began in Europe and spread to American cities, rooted in the philosophy that no loss of life due to road crashes is acceptable or inevitable and therefore sets the goal of reducing fatalities and severe injuries to zero. Nearby cities such as Monterey, Watsonville and San Jose have all adopted a Vision Zero Policy. Vision

Zero is a multidisciplinary approach, bringing together diverse and necessary stakeholders to address this complex problem. Vision Zero acknowledges that many factors contribute to safe mobility not just roadway design, but also speeds, behaviors, technology, and policies, and sets clear goals to achieve the shared goal of zero fatalities and severe injuries. At the February 11, 2020, meeting, City Council passed Resolution No. 21790 (Attachment 1) adopting a Vision Zero Policy and directing staff to develop a Vision Zero Action Plan.

On September 15, 2021, the City Council adopted the City of Salinas Vision Zero Action Plan (Attachment 2) through Resolution No. 22184 (Attachment 3). The Action Plan was developed through a data-driven process. City staff compiled 10 years of collision data from 2009 to 2018 and created maps using geographic information systems (GIS) technology to display and filter collision data to help illustrate spatial patterns and trends. This data-driven analysis help reveal collision trends and patterns in collision type, driver factors, roadway features, vehicle factors or environmental conditions. Trends in the data help reveal emphasis areas where a higher frequency of collisions can be evaluated to achieve the goal of zero fatalities and serious injuries most effectively.

One of the emphasis areas the plan focused on were intersections with high rates of pedestrian involved collisions. The plan identified the three intersections with the highest number of pedestrian collisions which include North Sanborn Road at Garner Avenue, East Alisal Street at Griffin Street, and North Main Street at Lamar Street. North Sanborn Road at Garner Avenue, and East Alisal Street at Griffin Street are both signalized intersections, whereas Main Street at Lamar Street is uncontrolled. Because the North Main Street at Lamar Street intersection has a high pedestrian collision rate and lacks controls it was considered a good candidate for improvement in the Highway Safety Improvement Program (HSIP), and staff submitted an application for grant funding to enhance the crosswalk.

The crosswalk crossing North Main Street is approximately 80 feet long and it spans five (5) lanes of traffic. There is an existing rectangular rapid flashing beacon (RRFB) system mounted on signposts on either side of the crossing. However, due to the number of lanes, this system may not always be visible to drivers, especially when traveling at higher speeds. The City's Crosswalk Policy (Attachment 4) refers to this as a multiple-threat condition. Multiple-threat collisions occur as one vehicle slows down to allow pedestrians to cross, but a second vehicle approaching from behind in the adjacent lane may not see the pedestrian or flashing beacon. The slowing vehicle blocks the sight line of both the pedestrian and the second motorist, leading to possible pedestrian-vehicle collisions. Grant funds would be awarded to improve the crosswalk to upgrade the existing RRFB system to include overhead signs and flashing beacons. Overhead flashing beacons would mitigate the multiple-threat condition and improve the crosswalk to meet City policy.

Following the acceptance of grant funding, City staff would begin to develop plans and specifications. The project would come back to City Council to approve plans and specifications before going to construction. Additionally, Caltrans will review the project documents before authorizing the use of grant funds for construction.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

This item supports the City Council's goals of "Public Safety" and "Infrastructure and Environmental Sustainability".

DEPARTMENTAL COORDINATION:

The Public Works Department and Finance Department manage the project accounting. The Public Works Department manages construction contract, inspection, and final acceptance of construction projects.

FISCAL AND SUSTAINABILITY IMPACT:

There is no impact to the General Fund. The total project cost is estimated to be \$275,000. The Highway Safety Improvement Program requires a 10% match. If accepted, the grant amount would be \$247,500, and the City would be required to contribute \$27,500 as a local match. Staff requests the appropriation of up to \$27,500 and use of Measure X (2510) fund balance as matching funds for Main Street at Lamar Street Pedestrian Enhancements Project.

ATTACHMENTS:

Resolution

Attachment 1: Resolution 21790

Attachment 2: Vision Zero Action Plan

Attachment 3: Resolution 22184

Attachment 4: City of Salinas Crosswalk Policy

RESOLUTION No. _____ (N.C.S.)

A RESOLUTION TO: 1) AUTHORIZE THE ESTABLISHMENT OF A NEW CIP ACCOUNT NAMED, "MAIN STREET AT LAMAR STREET PEDESTRIAN ENHANCEMENTS PROJECT"; 2) AUTHORIZE THE ACCEPTANCE OF HIGHWAY SAFETY IMPROVEMENT PROGRAM GRANT FUNDS IN THE AMOUNT OF \$247,500.00; 3) AUTHORIZE THE ESTABLISHMENT OF A MEASURE X (2510) APPROPRIATION OF UP TO \$27,500.00 AND USE OF MEASURE X (2510) FUND BALANCE AS MATCHING FUNDS FOR MAIN STREET AT LAMAR STREET PEDESTRIAN ENHANCEMENTS PROJECT; AND 4)AUTHORIZE THE PUBLIC WORKS DIRECTOR TO EXECUTE ALL AGREEMENTS AND ANY REQUIRED PAPERWORK WITH CALTRANS FOR THE HIGHWAY SAFETY IMPROVEMENT PROGRAM GRANT PROGRAM.

WHEREAS, on September 15, 2021, the City Council adopted the City of Salinas Vision Zero Action Plan; and

WHEREAS, the plan identified the intersection of North Main Street at Lamar Street as having the highest number of pedestrian-involved collisions for any unsignalized intersections in the City; and

WHEREAS, the City submitted an application for grant funding to enhance the crosswalk, and the project was selected to receive \$247,500.00 with a 10% local match; and

WHEREAS, the City will need to enter into grant agreements or submit paperwork to Caltrans for the grant funding, and staff recommends that the Council authorize the director to execute all agreements and any required paperwork with Caltrans for the Highway Safety Improvement Program; and

WHEREAS, the City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

NOW, THEREFORE, BE IT RESOLVED BY THE SALINAS CITY COUNCIL approves a Resolution authorizing the establishment of a new CIP Account named, "Main Street at Lamar Street Pedestrian Enhancements Project" with an appropriation of \$275,000; and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution authorizing the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$247,500; and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution authorizing a transfer of \$247,500 from the Special Construction Assistance - Federal & State Fund (5201) to the CIP Fund (5800) for the Project and corresponding revenue budget; and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution authorizing a transfer of \$27,500 from the Measure X (2510) Fund to the CIP Fund (5800) for

the Project and use of Measure X (2510) fund balance as matching funds for Main Street at Lamar Street Pedestrian Enhancements Project; and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution to Authorizing the Public Works Director to execute all agreements and any required paperwork with Caltrans for the Highway Safety Improvement Program Grant Program.

PASSED AND APPROVED this 2nd day of May 2023 by the following vote:

AYES:		
NOES:		
ABSENT:		
ABSTAIN:		
	APPROVED:	
	Kimbley Craig, Mayor	
ATTEST:		
Patricia M. Barajas, City Clerk		

RESOLUTION NO. 21790 (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL APPROVING THE ADOPTION OF A VISION ZERO POLICY, SPECIFICALLY: A CLEAR GOAL OF ELIMINATING TRAFFIC FATALITIES AND SEVERE INJURIES ON CITY STREETS; BECOMING A VISION ZERO COMMUNITY AND JOINING THE VISION ZERO NETWORK AND ALLOCATING \$8,000 AS A LOCAL MATCH TO DEVELOP A VISION ZERO **ACTION PLAN.**

WHEREAS, on "Vision Zero" is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all; and

WHEREAS, the City of Salinas can become a Vision Zero Community and join the Vision Zero Network by meeting the following criteria: 1) Have a clear goal of eliminating traffic fatalities and severe injuries has been set; 2) The Mayor has publicly, officially committed to Vision Zero. 3) A Vision Zero plan or strategy is in place, or the Mayor has committed to doing so in clear time frame. 4) Key departments are engaged; and

WHEREAS, City staff recommends the allocation of \$8,000 as a local match to develop a Vision Zero Action Plan; and

WHEREAS, at its January 2020 meeting, the Traffic and Transportation Commission voted unanimously (7-0) to recommend to Council that the City Council approve a Resolution adopting a Vision Zero Policy and allocating \$8,000 as a local match to develop a Vision Zero Action Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF **SALINAS:** the adoption of a Vision Zero Policy, a clear goal of eliminating traffic fatalities and sever injuries on city streets; becoming a vision zero community and joining the vision zero network and allocating \$8,000 as a local match to develop a vision zero action plan.

PASSED AND APPROVED this 11th day of February 2020 by the following vote:

AYES: Councilmembers: Barrera, Cromeenes, Davis, De La Rosa, McShane and Mayor Gunter

NOES: None

ABSENT: Councilmember Villegas

ABSTAIN: None

APPROVED: DocuSigned by:

Joe Gunter, Mayor

()oe Gunter

ATTEST:

DocuSigned by:

Patricia M. Barajas, City Clerk





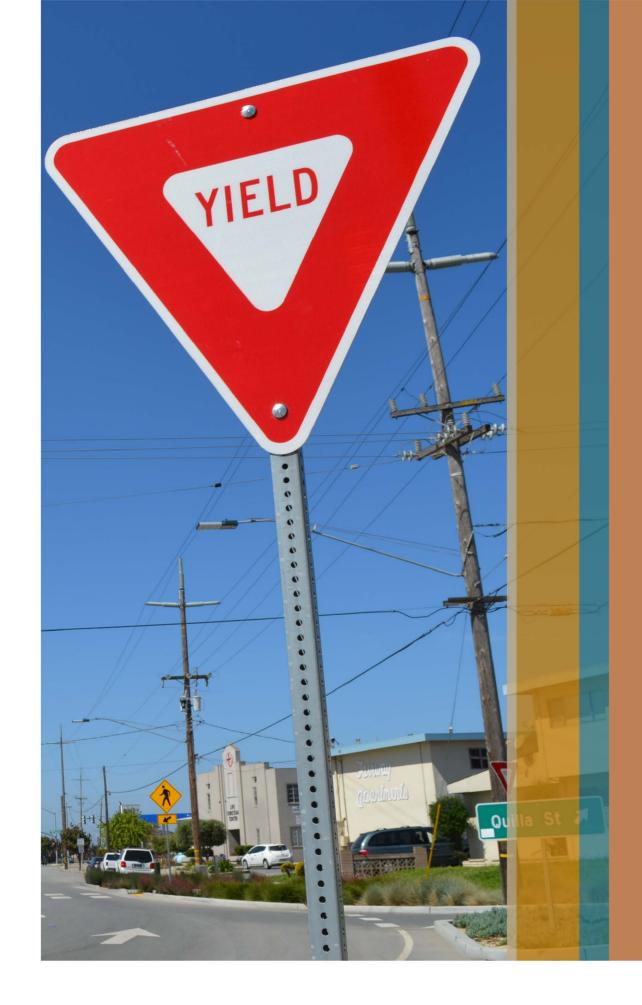












INTRODUCTION

The City of Salinas will work collaboratively in a data-driven effort to eliminate traffic-related fatalities and serious injuries.

To help achieve this goal, the City developed this Action Plan. The Plan uses historic crash data to pinpoint the factors contributing to traffic-related deaths and serious injuries, and identifies countermeasures to address those factors.

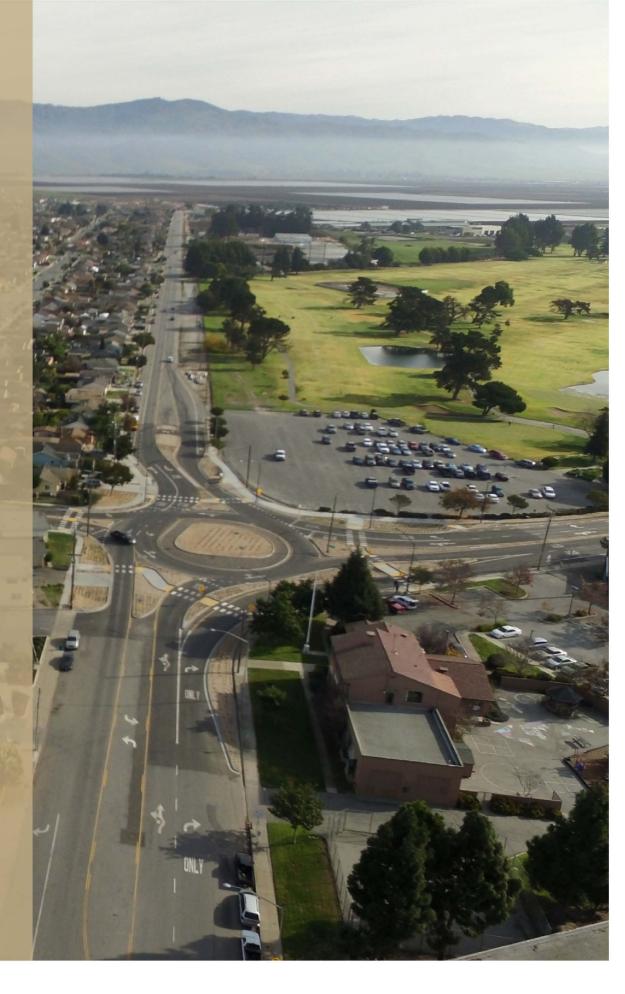
Vision Zero is an international traffic safety philosophy that rejects the notion that traffic crashes are simply "accidents", but instead preventable incidents that can and must be systematically addressed. Through Vision Zero, the City of Salinas and its partners are committed to working together, supported by a comprehensive data-driven process to create safer streets and bring the number of people killed or seriously injured down to zero.

Through Vision Zero, Salinas approaches transportation safety differently; not only addressing site specific improvements but taking a systematic and holistic approach to our transportation environment.

Tackling such a complex challenge requires reaching across multiple disciplines, working together to evaluate data differently, and investing financial and staff resources in transportation safety.

CONTENTS

INTRODUCTION	ii
LETTER FROM THE LATE MAYOR	V
A CALL TO ACTION TO MAKE OUR STREETS SAFER	2
ABOUT VISION ZERO	6
VISION ZERO STATEMENT & GUIDING PRINCIPLES.	10
VISION ZERO RESOLUTION	12
CRASH TRENDS	14
COLLISION PROFILES & COUNTERMEASURES TOOLBOX	
EXISTING EFFORTS	27
ACTION PLAN	30
ACKNOWLEDGEMENTS	44
TECHNICAL APPENDIX	





LETTER FROM THE LATE MAYOR

To the Salinas community,

As the City continues to grow, addressing traffic safety in Salinas becomes even more critical. We want to ensure that all users of our public streets, pedestrians, bicyclists, transit users, drivers and those with mobility impairments can travel safely, no matter how they choose to travel or where they are going.

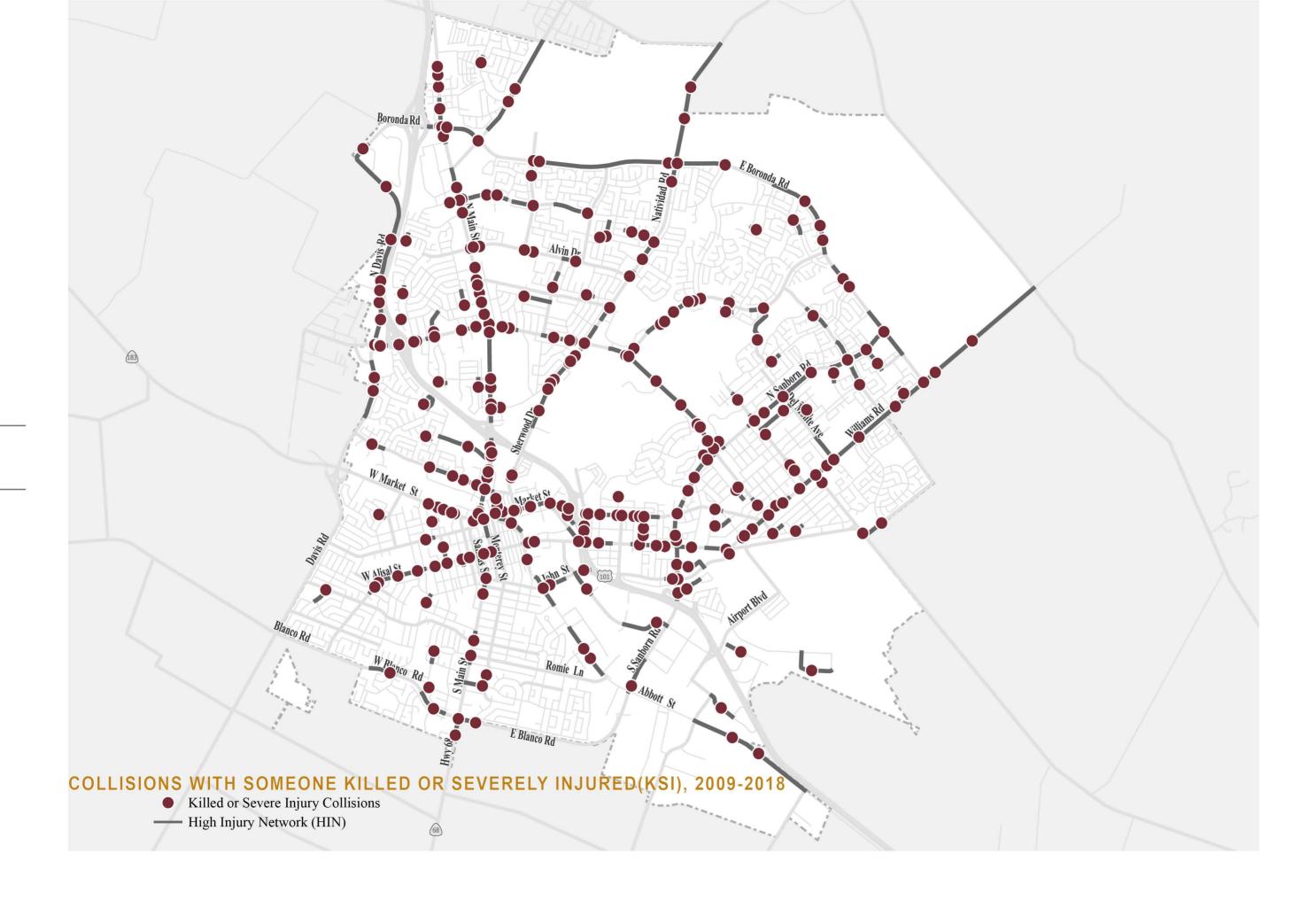
One death on a City street is one too many. I am pleased to present the City of Salinas Vision Zero Action Plan, which is committed to eliminating traffic fatalities and serious injuries on our City streets. Crashes are unacceptable and are often preventable through enforcement, education and engineering.

The City is undertaking an effort to develop a Vision Zero Action Plan, a data-driven and comprehensive process to achieve a goal of zero severe injuries and fatalities on our streets. The commitments outlined in this plan, and the actions the City will undertake to achieve them, will help strengthen and provide more opportunities for residents to prosper in a healthy, sustainable, and safe community.

Achieving Vision Zero is critically important. I am grateful to the City Council for its leadership, the hard work of City Staff and our community's participation in the planning process to make our community even stronger, and above all, a safer City.

Respectfully,
City of Salinas Late Mayor
Joe Gunter





A CALL TO ACTION

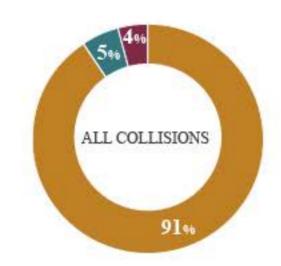
Between 2009 and 2018, sixty-two (62) lost their lives while traveling on Salinas streets. Included in these fatalities were people walking and cycling. These individuals are from all neighborhoods of Salinas, and they cross geographic and demographic boundaries. These deaths have resulted in tragic personal loss for family and friends and significantly impact the Salinas community.

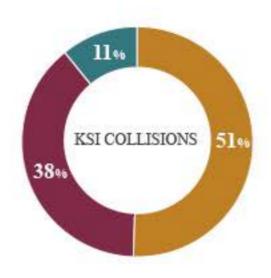
Tragedies and fatalities caused by vehicle collisions can be prevented by taking a proactive approach that prioritizes traffic safety. The loss of life extends beyond personal loss to deep community impacts, it includes personal economic costs and emotional trauma to those suffering; and significant taxpayer spending on emergency response and long-term healthcare costs. Without safe streets there is no true freedom of mobility, and as a result we compromise our public health with increasing sedentary diseases and higher carbon emissions.

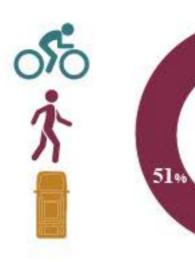
Traditionally, traffic-related deaths and severe injuries have been considered inevitable. Culturally we often hear of traffic-related deaths and severe injuries which have resulted from traffic "accidents", seeming to suggest that these occurrences are an inevitability for which no preventable solutions exist. However, vehicle collisions are often the result of individual decisions, driver behavior or the physical environment and the reality is that many of the incidents are preventable and are not inevitable.



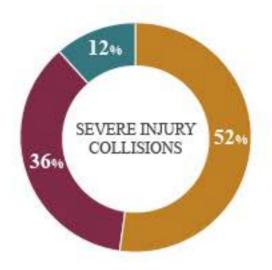
TRAVEL AND COLLISION BY MODE





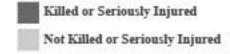


FATAL COLLISIONS



SHARE OF VICTIMS WHO WERE KILLED OR SEVERELY INJURED BY MODE









WHAT IS VISION ZERO?

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all. It is a policy that acknowledges that traffic deaths are preventable. A Vision Zero Action Plan sets a goal of eliminating traffic fatalities and severe injuries with clear measurable strategies. The strategy is a multidisciplinary approach that brings together a diverse set of stakeholders to address the complex problem of traffic safety and to achieve the shared goal of zero fatalities and severe injuries.

Vision Zero is a significant departure from the traditional approach to traffic safety in two major ways:

- 1. Vision Zero recognizes that people will sometimes make mistakes and integrates human failure in its approach. Traffic safety becomes the priority over other transportation considerations to ensure those mistakes do not result in fatalities or severe injuries.
- 2. Vision Zero is a multidisciplinary approach, bringing together different stakeholders to address the complex problem of traffic safety. Vision Zero acknowledges that many factors contribute to safe mobility including roadway design, traffic speeds, behaviors, technology, and policies. Vision Zero sets clear goals to achieve the shared goal of zero fatalities and severe injuries.

WHY VISION ZERO?

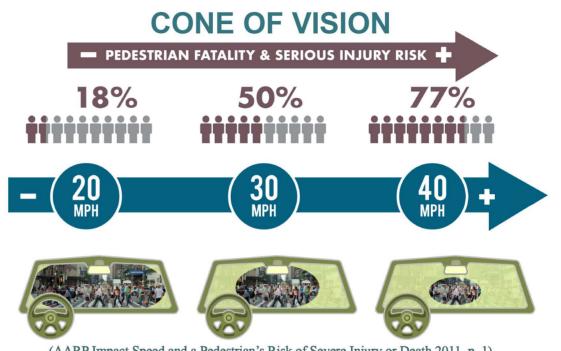
The City of Salinas is willing to do what is necessary to work towards the goal of eliminating traffic deaths and serious injuries. Only by changing the approach to transportation safety with bold interventions can the City improve one of its largest preventable public health crises.

The City of Salinas is regularly working to increase the availability of safe and comfortable multi-modal transportation choices, reduce carbon emissions, improve public health through increased physical activity, and improve quality of life for all. The adoption of the Vision Zero policy and Action Plan provides the road map to make City streets safe for all transportation modes.



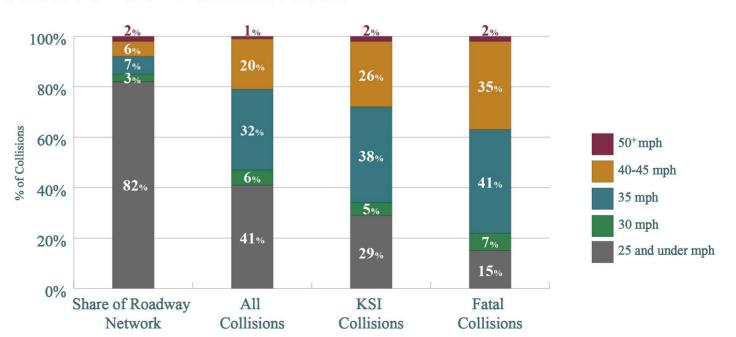
SPEED KILLS

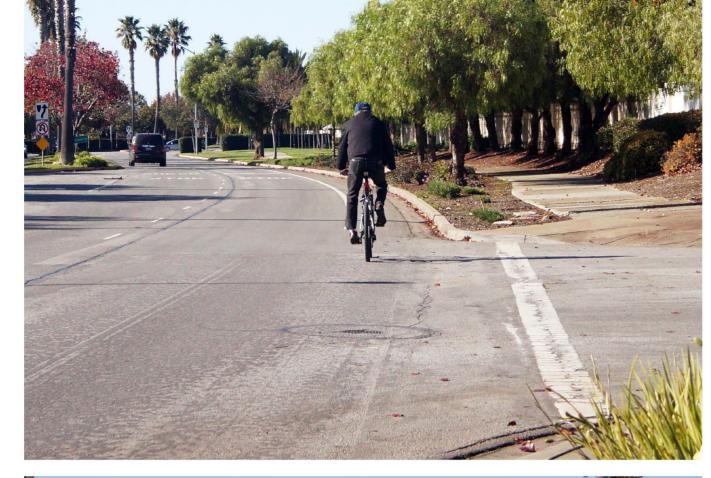
A major component of Vision Zero is the recognition that speeding kills and has an outsized impact on collision severity. In the City of Salinas 53% of all collisions and 66% of KSI collisions occur on city streets where the posted speed is 35 mph and greater. Reduction of traffic speed can be accomplished when streets are designed to reflect a range of different modes of transportation. Along with street design, public education, and targeted enforcement efforts will assist in reducing the number of people being killed or severely injured throughout the streets of Salinas.



(AARP Impact Speed and a Pedestrian's Risk of Severe Injury or Death 2011, p. 1)

POSTED SPEED OF ROADWAYS AND SEVERITY OF COLLISIONS









VISION ZERO STATEMENT

Traffic safety impacts our community, neighborhoods, health, and quality of life. No fatality or serious injury is acceptable on City streets because traffic collisions are preventable and can be addressed through education, enforcement, and engineering.



Guiding Principles

- Public safety is paramount and the top priority. Safety takes precedence over travel delays, speeds, congestion, and convenience.
- · Traffic deaths and serious injuries are preventable and unacceptable.
- · Actions towards Vision Zero is a culture change requiring a comprehensive, collaborative, and equitable approach through education, enforcement, and engineering.
- Data driven analysis will lead to influence actions towards Vision Zero.
- Vision Zero will be ongoing, and will routinely measure the performance against the Vision Zero Action Plan objectives every 5 years.
- Provide safety for vulnerable users, such as pedestrians and bicyclists.



VISION ZERO RESOLUTION

Background

- A. Traffic safety impacts our community, neighborhoods, health, and quality of life in Salinas.
- Between 2009-2018 sixty-two (62) individuals died in traffic collisions in Salinas.
- Collisions where someone was killed or seriously injured while walking or biking on Salinas streets has increased by 66%*.
- Although annual traffic collisions have decreased by 27%, there is a 7% increase in the number of KSI collisions*.(see page B2 in the Technical Appendix)

Resolution

On February 11, 2020 the Salinas City Council approved a Resolution (No. 21790) adopting a Vision Zero Policy, specifically: A clear goal of eliminating traffic fatalities and severe injuries on City streets.

- Human life is our highest priority. Traffic deaths and serious injuries are preventable, and a public health issue that must be addressed.
- Fatal and serious injuries on Salinas streets can be addressed through engineering, enforcement, and education.
- Salinas Vision Zero is a collaborative effort to eliminate traffic fatalities and serious injuries.
- Actions towards Vision Zero will be data driven based on available collision data.
- Evaluation of reaching the goal to eliminate traffic fatalities and serious injuries will be ongoing, measuring performance against the Vision Zero Plan objectives. The Vision Zero Action Plan will be updated every 5 years.

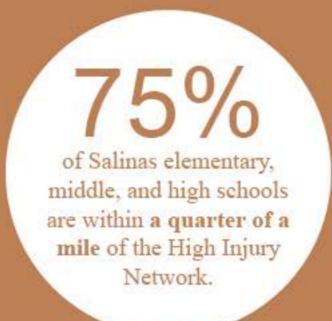
^{*}Comparing 2009 and 2018 data



CRASH TRENDS

Study Methodology

Vision Zero is a data-driven process. While developing the Action Plan, the City analyzed traffic collisions that occurred on City streets focusing primarily on fatalities or severe injuries for the years 2009 through 2018. This granted the City access to identify historic collision trends and high-risk locations. This information is utilized to provide the primary data to support key analyses.



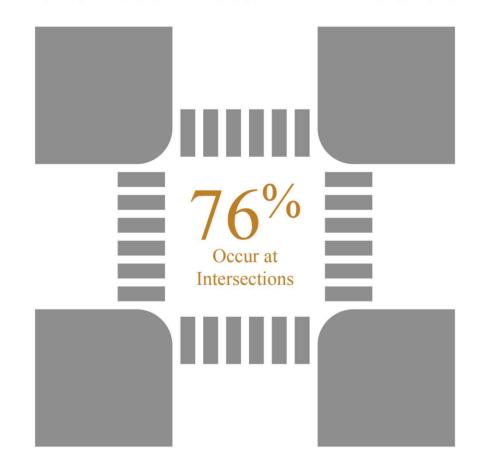
53%
of all crashes occur on the HIN, which accounts for 12% of Salinas roadways.

High Injury Network

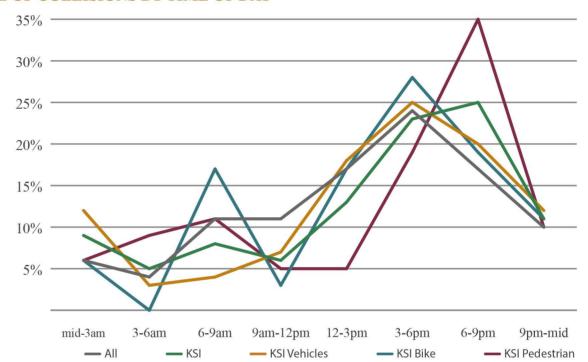
The City developed a High Injury Network, which identifies roadways with the highest level of fatal and severe injury traffic collisions for pedestrians, bicyclists, and motorists. There are 305 centerline miles of roadway within Salinas, but KSI collisions do not occur on the majority of the roads. By developing the HIN, the City is able to focus safety improvements on priority corridors where the most serious traffic collisions occur with the most frequency.

CRASH STATISTICS

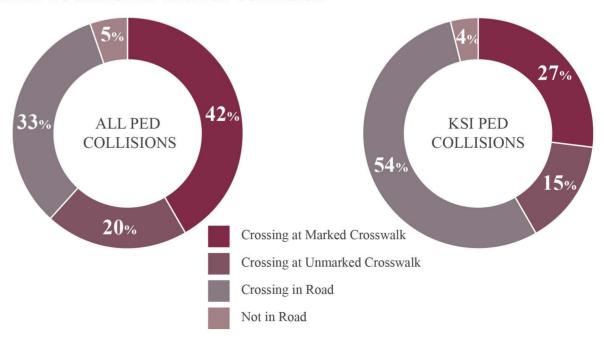
SHARE OF COLLISIONS THAT OCCURED AT INTERSECTIONS



SHARE OF COLLISIONS BY TIME OF DAY



PEDESTRIAN LOCATION AT TIME OF COLLISION



COLLISION PROFILES & COUNTERMEASURES TOOLBOX

The City developed ten collision profiles to represent the top patterns of KSI collisions occurring throughout the City of Salinas over a ten-year period (2009-2018). These collision profiles represent different types of collision characteristics, such as speed related, location of pedestrian at collision, broadside involvement with bicycle, or alcohol involved related collisions.

In the following pages the ten collision profiles are presented with details and key countermeasures. There are three key countermeasures per collision profile directed to address the trend and minimize its effect on collisions.

Collision Profile	% of All KSI (# of All KSI)	% of Auto KSI (# of Auto KSI)	% of Bicycle KSI (# of Bicycle KSI)	% of Pedestrian KSI (# of Pedestrian KSI)
Pedestrian Action	38.63% (129)		6 7	100% (129)
Broadside	27.55% (92)	40.25% (68)	55.56% (20)	3.11% (4)
Alcohol Involved	23.06% (77)	25.45% (43)	13.89% (5)	22.49% (29)
Pedestrian Violation	19.77% (66)	-	-	51.17% (66)
Auto R/W Violation	17.67% (59)	27.23% (46)	25% (9)	3.11% (4)
Head-On	12.28% (41)	19.53% (33)	2.78% (1)	5.43% (7)
Unsafe Speed	9.29% (31)	15.39% (26)	5.56% (2)	2.33% (3)
Rear-End	8.09% (27)	14.22% (24)	5.56% (2)	0.78% (1)
Improper Turning	8.09% (27)	11.85% (20)	13.89% (5)	1.56% (2)
Broadside Involved with Bicycle	5.99% (20)	-	55.56% (20)	
Total of KSI Collisions	334	169	36	129

COUNTERMEASURES

PROFILE 1: **Pedestrian Action**



Pedestrian-Activated Crosswalk Warning Beacon

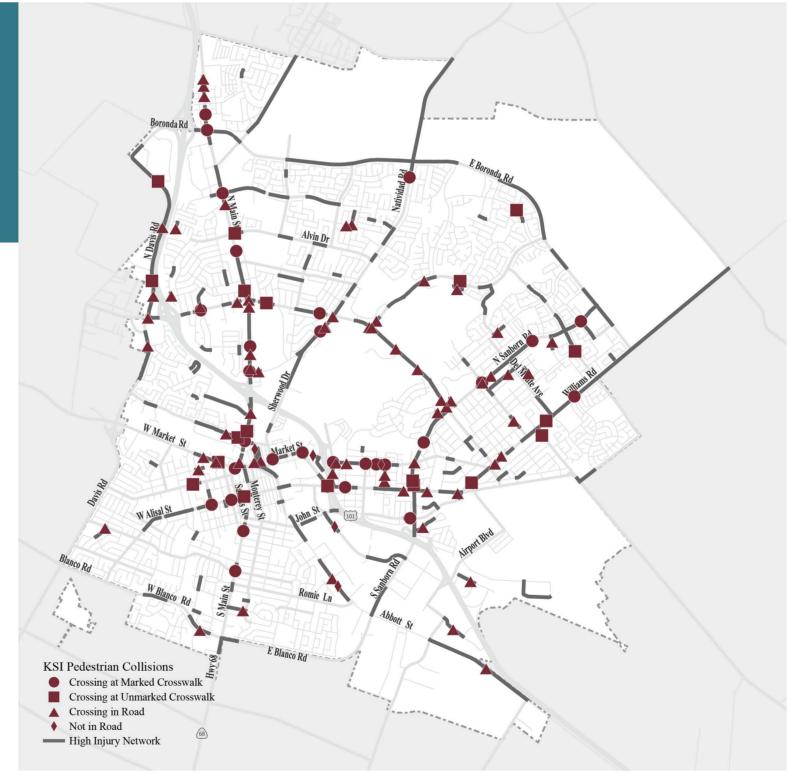


High Visibility Crosswalks



Pedestrian Hybrid Beacon





PROFILE 2: Broadside Collisions

COUNTERMEASURES



»Collision Type was reported as "Broadside"

*Definition: When one motor vehicle impacts another vehicle or bicycle close to an angle of 90 degrees 92 KSI Collisions

"Accounts for 28% of

all KSI Collisions

«30% of these collisions occured at a signalized intersection

Reduce Parking at Intersections



Intersection Control



Raised Median and Street Trees





PROFILE 3: Alcohol Involved Collisions



Traffic Education and Outreach



Enforcement







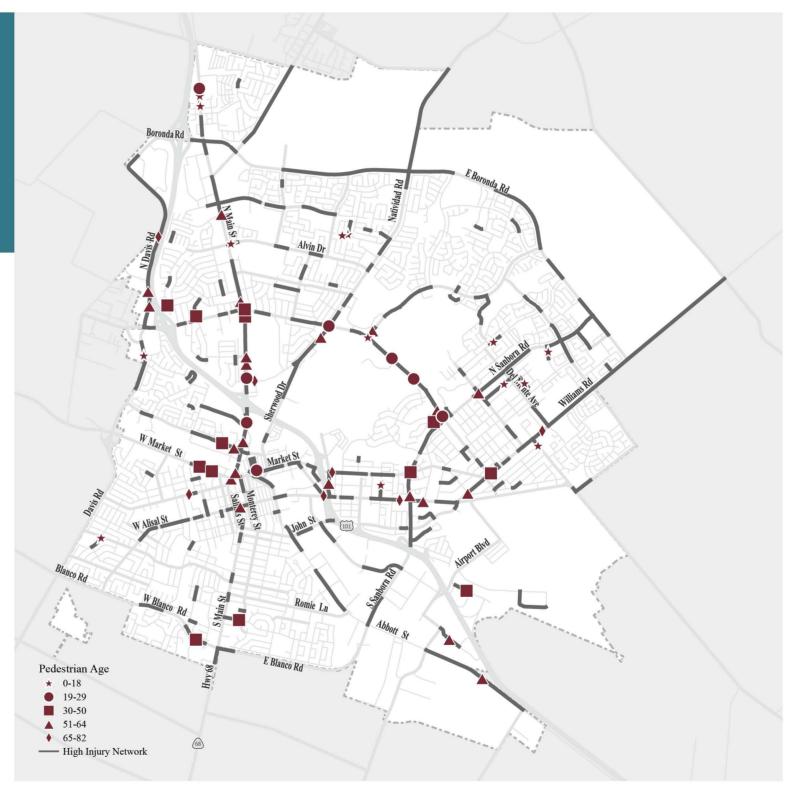
KSI Pedestrian Collisions KSI Bicycle Collisions KSI Vehicle Collisions - High Injury Network

PROFILE 4: **Pedestrian Violation Collisions**





COUNTERMEASURES



PROFILE 5: **Auto R/W Violation Collisions**





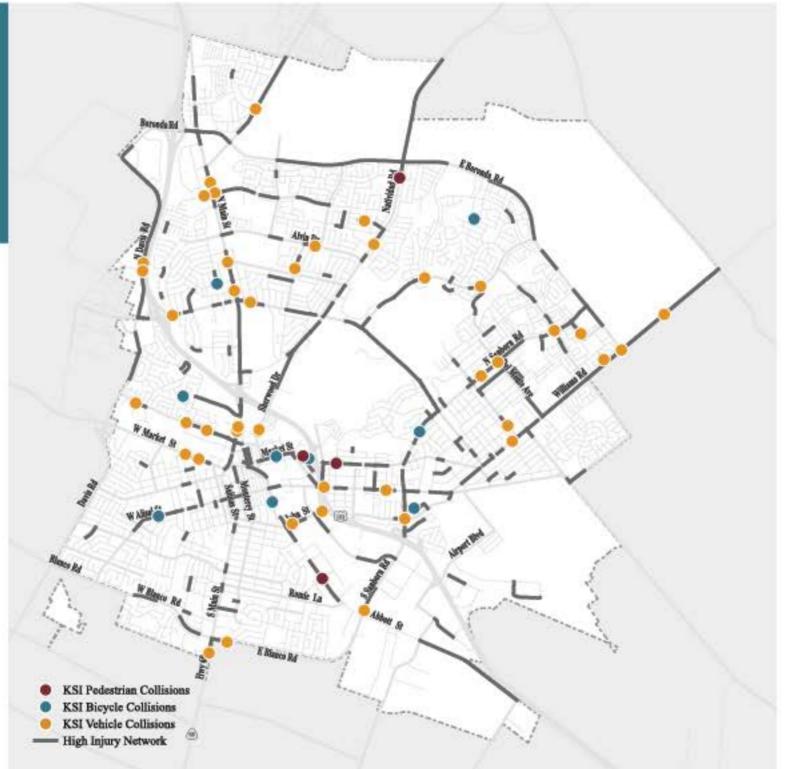


Intersection Control



Lane Reduction





PROFILE 6: Head-On Collisions

COUNTERMEASURES

*Collision Type was reported as "Head-On"

»Collisions at signalized intersctions were 100ft or less of the intersection 41 KSI Collisions

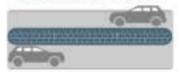
*Accounts for 12% of all KSI Collisions

*29% of these collisions occured at a signalized intersection

Vehicle Speed Feedback Sign



Raised Median



Intersection Control





ACTION PLAN

PROFILE 7: Unsafe Speed Collisions



Vehicle Speed Feedback Sign



Lane Reduction



Enforcement





PROFILE 8: Rear-End Collisions



COUNTERMEASURES



Adaptive Traffic Signal Control



Signal Timing and Phasing Improvements



Enforcement





PROFILE 9: **Improper Turning Collisions**





Lane Reduction



Intersection Control



Raised Median and Street Trees





PROFILE 10:

COUNTERMEASURES

Broadside Involved with Bicycle

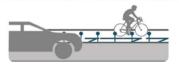
"Collision Type was reported as "Broadside"

20 KSI Collisions

»Accounts for **6%** of all KSI collisions and **56%** of KSI bicycle collisions

"25% of these collisions occured at a signalized intersection

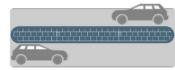
Protected Bike Lane



Reduce Parking at Intersections



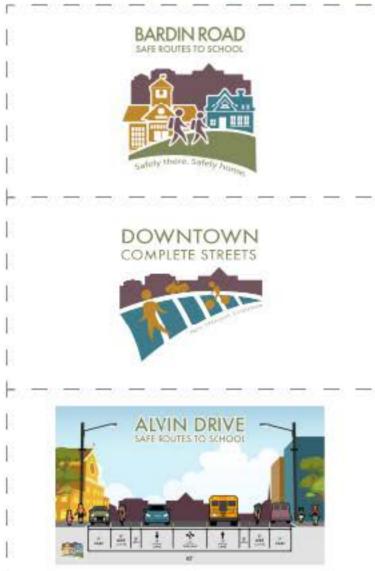
Raised Median





EXISTING EFFORTS

The City, alongside with developing this action plan and adopting the Vision Zero policy, is working on projects that aim to accomplish the goal of eliminating fatalities and severe injuries in Salinas streets. Those projects include, but not limited to, Bardin Road Safe Routes to School, Downtown Complete Streets, and Alvin Drive Safe Routes to School. In addition, the City has developed other Plan documents with focus similar to Vision Zero such as the Chinatown Revitalization Plan and the Alisal Vibrancy Plan. Safe Routes to School is a program tailored towards providing safe walkable and biking paths with designed countermeasures related to effectively reducing KSI collisions on City streets.



Bardin Road Safe Routes to School: A "Complete Streets" project that includes a dual roundabout system, buffered bike lanes, pedestrian crossing enhancements, pedestrian path improvements, and a road diet. Project limits are Bardin Rd.-Williams Rd. to Sconberg Pkwy., E. Alisal St.-Tampa St. to Bardin Rd., and a portion of Alisal Rd. east of city limits.

Downtown Complete Streets: A "Complete Streets" project that includes the enhancement for usability of streets for all users, pedestrian, transit users, bicyclists and drivers. Project includes an enhanced signal system. Project limits are Alisal St.-Blanco Rd. to Front St., Lincoln Ave.-Alisal St. to W. Market St.(SR183)

Alvin Drive Safe Routes to School: This project includes a multi-modal "complete street" corridor that provides improvements to bicycle and pedestrian facilities. A road diet is planned on Alvin Dr. - Main St. to Natividad Rd. Bicycle facilities on Maryal Dr., Linwood Dr., Chaparral St. In addition, it provides pedestrian ramps and crosswalk at key locations.



Chinatown Revitalization Plan: This plan proposes many goals such as, upgrading sidewalks and pedestrian crossings, new bike lanes, and improving bus service. The goals aim to provide a pedestrian-friendly environment and promote walkability.



Alisal Vibrancy Plan: The Alisal Vibrancy Plan will create safe, livable, and inviting environments for pedestrians, bicyclists, motorists, and public transit users of all ages and abilities. Directing investments to improve sidewalks, bicycle facilities, and pedestrian crossings will increase the mobility of residents, including youth and people without cars.



Salinas Safe Routes to School: The goal of the project is to improve safety for students biking and walking to 44 schools in Salinas. Proposed recommendations would include infrastructure recommendations such as new sidewalks, improved crosswalks, and signage, as well as, program recommendations such as bike and pedestrian safety education, crossing guards, drop-off zone management, and school carpooling.



ACTION PLAN

The City's collision trends and collision profiles allow the City of Salinas to begin taking action towards eliminating fatal and severe injury collisions. The compiled collision data is plotted on a map to identify locations where collisions or specific collision types occur at the highest frequencies. This approach allows the City to focus on these Emphasis Areas, listed below, in the network to address high priority crash types and risk factors. The City will work towards accomplishing this goal through targeted investments strategically tailored and directed towards the High Injury Network, as well as the Emphasis Areas identified below. The City will continue to implement recommendations from the Action Plan and its updates until we achieve the Vision Zero goal of eliminating all fatalities and severe injuries on Salinas streets.

The technical appendix includes the descriptions and recommendations for each of the Emphasis Areas. The recommendations for each of the locations will be improvements that the City has put together to effectively minimize the number of fatal and severe injuries throughout the City of Salinas.

Emphasis Areas

High Collision Corridors:

Focuses on prioritizing where high number of KSI collisions have occurred on corridors.

High Collision Intersections:

Focuses on prioritizing where high number of KSI collisions have occurred on intersections.

Pedestrian Involved Intersections:

Focuses on prioritizing where high number of pedestrian KSI collisions have occurred.

Bicycle Involved Corridors:

Focuses on prioritizing where high number of bicycle KSI collisions have occurred

Alcohol Involved Corridors:

Focuses on prioritizing corridors where high number of KSI collisions occurred with some amount of alcohol involved from any party.

Nearby Schools Locations:

Focuses on prioritizing locations where high number of KSIcollisions occurred nearby school

HIGH COLLISION CORRIDORS

- 1. East Market Street
- 2. Williams Road
- 3. East Laurel Drive
- 4. East Boronda Road
- 5. East Alisal Street
- 6. North Main Street
- 7. West Laurel Drive
- 8. North Sanborn Road
- 9. East Laurel Drive
- 10. Sanborn Road



HIGH COLLISION INTERSECTIONS

- 1. North Sanborn Road at Freedom Parkway
- 2. North Sanborn Road at Garner Avenue
- 3. Boronda Road at North Main Street
- 4. North Main Street at Bernal Drive
- 5. East Laurel Drive at Granada Avenue
- 6. Williams Road at Del Monte Avenue
- 7. East Alisal Street at Griffin Street
- 8. East Market Street at North Madeira Avenue
- 9. East Laurel Drive at Constitution Boulevard
- 10. East Market Street at Kern Street



PEDESTRIAN INVOLVED INTERSECTIONS

1. North Sanborn Road at Garner Avenue

2. East Alisal Street at **Griffin Street**

3. North Main Street at **Lamar Street**



BICYCLE INVOLVED CORRIDORS



- 2. West Laurel Drive
- 3. Natividad Road



ALCOHOL INVOLVED CORRIDORS

- 1. East Market Street
- 2. East Laurel Drive
- 3. Williams Road



NEAR SCHOOLS LOCATIONS

- 1. Martin Luther
 King, Jr. Elementary
- 2. Sacred Heart School
- 3. Alisal High School



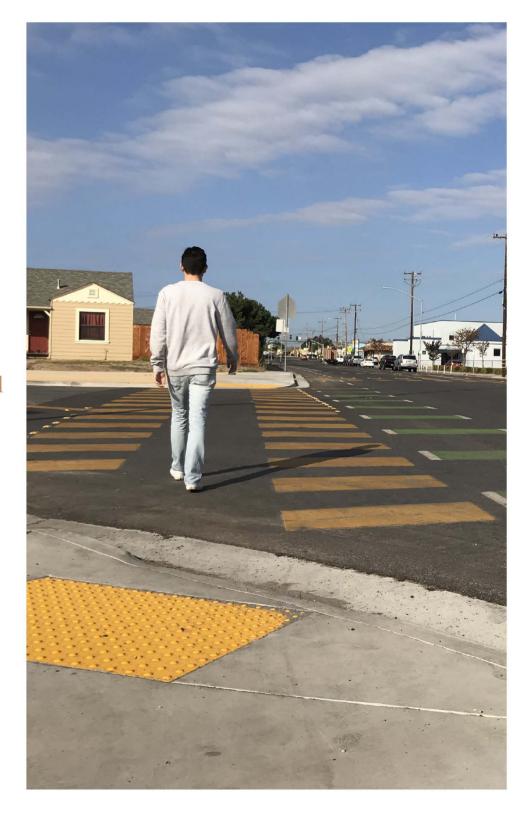
IMPLEMENTATION PLAN

Vision Zero implementation will involve a committed Vision Zero Task Force, comprised of City departments, the local community, and partner organizations. The project team has identified a set of key actions to serve as a roadmap towards Vision Zero. Each action is assigned a timeframe and a metric to measure progress. Short-term actions could be implemented within 2 years; medium-term actions could be completed within 2 to 5 years; long-term actions could be implemented within 5 to 10 years; and ongoing actions will be operational changes which will continue to develop over time.

Meeting the City's Vision Zero goal requires immediate action, yet it allows for feasible implementation with incremental improvements over the years. The actions in this plan should be evaluated and refined on an on-going basis, and their successful implementation depends upon funding availability.

The Implementable Actions are organized into four action areas:

- Vision Zero Program
 Focuses on bringing Vision Zero to the table
- Street Design and Operation Focuses on designing and implementing based on Vision Zero analyses
- Behavioral Change Focuses on targeting and educating public on street changes
- Vulnerable Road Users Focuses on designing and implementing for bicycle and pedestrian



VISION ZERO ACTIONS

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
1 Vision Zero Program		
1.1 Integrate Vision Zero principles into City, community group, and stake holder meetings	City Council, Neighborhood Associations, Public Works Department, Neighborhood Services (LCS)	Ongoing
1.2 Identify permanent dedicated funding sources for Vision Zero implementation and coordination	City Council, Public Works Department	Medium-Long
1.3 Incorporate Vision Zero principles into future City plans, specifically the General Plan Update	Community Development Department, Public Works Department	Short
1.4 Update and publish the Vision Zero Action Plan every five years to measure progress against the goals of the Vision Zero	Public Works Department	Ongoing
1.5 Provide online, interactive collision data map and website	GIS Division, Public Works Department, City Manager's Office	Short-Medium
1.6 Develop a workshop on how to best communicate traffic collisions and roadway safety concepts	City Manager's Office, Public Works Department, Police Department	Short-Medium

VISION ZERO ACTIONS

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
2. Street Design and Operation		
2.1 Develop designs and secure grant funding for high priority High Collision Corridors and High Collision Intersections	Public Works Department	Medium-Long
2.2 Develop a priority list on specific segments from the High Injury Network	Public Works Department	Short-Medium
2.3 Install low-cost safety improvements that includes new road markings, signs, and minor signal modifications with planned maintenance projects	Public Works Department	Short-Medium
2.4 Update signal timing and phasing to accommodate for all modes of transportation	Public Works Department, Traffic Division	Short
2.5 Update City street design standards to reflect complete street principles	Public Works Department	Short
2.6 Establish internal process for Vision Zero countermeasures to be evaluated and implemented, where feasible, on projects on the HIN	Public Works Department	Medium-Long

VISION ZERO ACTIONS

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
2.7 Require that new development incorporate Vision Zero principles for any new road construction	Community Development Department, Public Works Department	Short
2.8 Require that any redevelopment contribute to street safety improvements required to meet the demand generated by the project	Community Development Department, Public Works Department	Short-Medium
2.9 Whenever possible, in new or re-development projects, reduce the number of driveways and access points on arterial streets	Community Development Department, Public Works Department	Ongoing
3. Behavioral Change		
3.1 Launch high-visibility education campaigns against speeding, distracted driving, impaired driving, and other high-risk behaviors. Campaign will focus on HIN corridors	Salinas Police Department, Transportation Agency of Monterey County, County of Monterey	Short-Medium
3.2 Increase the use of vehicle speed feedback signs to discourage speeding	Public Works Department, Police Department	Short
3.3 Explore opportunities to expand free or subsized transit fares during holidays and for special events	Monterey-Salinas Transit	Short-Medium

VISION ZERO ACTIONS

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
3.4 Develop public promotional campaign to encourage late-night transit, taxi, rideshare, and other services to provide alternatives to impaired driving	Salinas Police Department, County of Monterey	Long
3.5 Deter impaired driving by targeting education and outreach at or near alcohol-serving establishments	City Manager's Office, Salinas Police Department, County of Monterey	Medium-Long
3.6 Integrate Vision Zero policies into Police Academy curriculum and in-service Police Officer Training	Salinas Police Department	Long
3.7 Create targeted enforcement campaigns where collision trends indicate traffic enforcement is needed	Salinas Police Department	Medium-Long
3.8 Utilize automated enforcement technology where feasible	Salinas Police Department	Long
3.9 Provide adequate staffing and dedicated funding for the traffic enforcement unit to patrol and enforce traffic regulations on City streets	Salinas Police Department, City Manager's Office	Ongoing

VISION ZERO ACTIONS

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
4. Vulnerable Road Users		
4.1 Install, upgrade or remove pedestrian crossing treatments on the HIN	Public Works Department	Short-Medium
4.2 Upgrade Pedestrian Push buttons to most recent standards of all traffic signals	Public Works Department	Ongoing
4.3 Develop targeted education for drivers to increase safety for pedestrian 60+	City Manager's Office, Recreation and Community Services	Short-Medium
4.4 Upgrade to high-visibility crosswalks near schools	Public Works Department	Short-Medium
4.5 Develop and implement projects that improve bicycle and pedestrian safety related to turning vehicles at intersections	Public Works Department	Long
4.6 Continue building and improving the bikeway and pedestrian network consistent with the Bicycle Master Plan and Pedestrian Master Plan	Public Works Department	Medium

ACKNOWLEDGEMENTS

ELECTED OFFICIALS

Kimbley Craig, Mayor Council Members

Carla Viviana Gonzalez (District 1)

Tony Barrera (District 2)

Steve McShane (District 3)

Orlando Osornio (District 4)

Christie Cromeenes (District 5)

Anthony Rocha (District 6)

CITY OF SALINAS DEPARTMENTS

Public Works Department Community Development Deaprtment Fire Department Police Department

VISION ZERO TASK FORCE

Monterey County Health Department Salinas Police Department Monterey County Blue Zones Project

Transportation Agency for Monterey County – Technical Advisory Committee Transportation Agency for Monterey County – Bicycle and Pedestrian Committee Alisal Union School District Salinas City Elementary School District Salinas Union High School District

Santa Rita Union School District









A. SUMMARY OF PUBLIC ENGAGEMENT



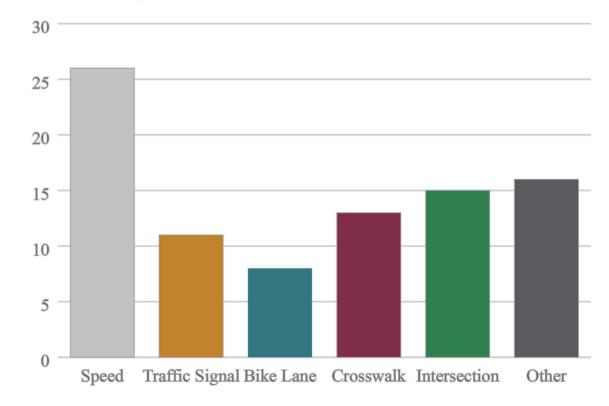
The City of Salinas posted a survey for the Vision Zero Plan to provide the public the ability to comment on emphasis locations and the issue found within those locations. The survey was posted online and open for public feedback from Late-Sept to end of year 2020.

This section discusses the online survey and the results based on what the City received.

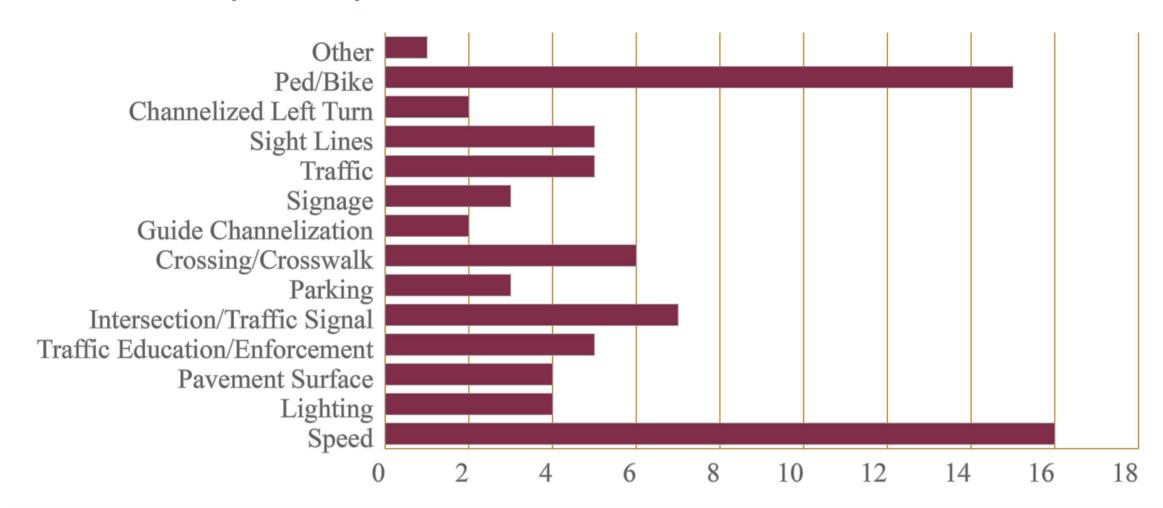
1. Place a point to the location or area of concern



2. Choose concern from list. Select as many as apply to your concern



3. Please describe your safety concern



Based on the descriptions of the safety concerns from the online survey the following categories were identified.

-Speeding

-Crossing/Crosswalk

-Intersections/TS

-Channelized Left Turn

-Traffic

-Parking -Ped & Bike

-Lighting

-Guide Channelization

-Signage

-Traffic Education/Enforcement

-Sight Lines

The four top concerns received on the online survey from the categories above are: Speed (16,38%), Ped/Bike (15,36%), Intersection/Traffic Signal (7,17%), Crossing/Crosswalk (6,14%).

3. Please describe your safety concern contd. Following are the descriptions of safety concerns of the public

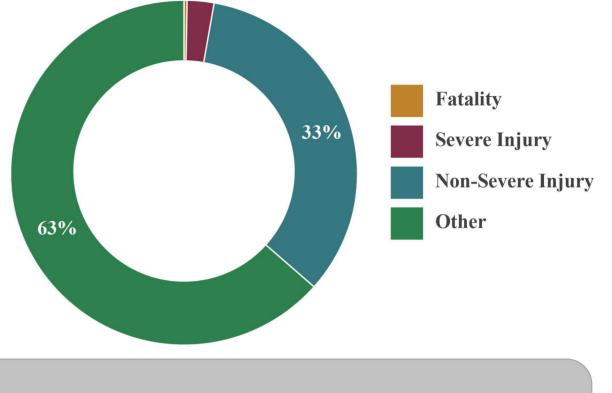
Topics	Description of Safety Concern	Approx. Location
speed	People are driving too fast.	W Alisal St - Capitol St to Lincoln Ave
peed,bike_lane,crosswalk	The sped on my street is bad the cars pass fast and we live close to school and have a daycare too, also we went for a bike ride with my family and doesen't have bike line	Elwood St - Linwood Dr to Tampico Ave
raffic_signal,bike_lane,intersection,ot ler	En mi vecindario no respetan el límite de velocidad q es de 25 y los automovilistas pasan como a 65 o 70 como si fueran en el freeway y a pasado accidentes en la RIDER AVE. Esa es mi preocupación y las calles q estan muy deterioradas.	Rider Ave
crosswalk	There are two pedestrian crossing on Market St. between Carr and Pearl. These two ped crossing usually used by elementary students. It will be my suggestion to install a pedestrian flashing light with solar power.	Market St @ Carr Ave, Market St @ Pearl St
peed,other	Many drivers speed 40-45 miles an hour even though it is a residential area and hospital zone Also, the street desperately needs restriping to clearly mark lanes,. The speed limit needs to be displayed every few blocks-is it 35 mph or 25 mph? As a pedestrian and bicyclist, this street really scares me due to these issues, even when just trying to cross at a marked crosswalk.	Romie Ln
pike_lane,crosswalk	Falta de luces para la gente que cruza y mal condición del pavimento	E Alisal St near Sanborn Rd
peed,bike_lane	Many areas in Salinas are unsafe for bicyclists and pedestrians. Non-motorized pathways, trails and roads, properly illuminated and safe, need to be designed to limit accidents and promote healthy living and exercise.	Laurel Dr - Constitution Blvd to Sherwood Dr
peed,traffic_signal,crosswalk,other	Major, crashes, tires have exploded while these people burn rubber, speed and peel out routinely and I've seen numerous cars never stopping. And or almost running over kids at the crosswalk. It is an accider waiting to occur. Please do something. Speeding cars, not making complete stops. Lots of cars use this busy for neighborhood with foot traffic. People peeling out and doing donuts. Large 18 wheelers making illegal u turns and hitting stop signs, getting stuck at least 3 to 5 times per day.	
speed,crosswalk	Cars parked on the street block visibility of people crossing the street. Also, people cross without using the crosswalk.	E Market St - N Madeira Ave to Carr Ave
crosswalk,other	People cross from the shopping areas there without using the crosswalk at the intersection. People will stand on the island between lanes while traffic passes sometimes close enough to where they can be hit by a vehicle. People cross between cars without using the crosswalk	S Sanborn Rd - E Alisal St to McGowan Dr
peed,traffic_signal,intersection	velocidad	E Laurel Dr - Consittution Blvd to Sherwood Dr
peed,traffic_signal,crosswalk,other	My mom got hit and killed by a car. There is a cross walk, but a enhanced crosswalk would be better in this intersection. Beacon lights at the cross walk	E Alisal St @ Skyway Blvd/Quilla St
peed,traffic_signal,bike_lane,crossw llk,intersection	Why is there no stop sign/traffic signal at this intersection?	W Alisal St @ Capitol St
other	No road lines to direct traffics. Very faded. Street lines. They're faded- many times people will be driving in the middle because they can't see that it's two lanes.	W Laurel Dr - Tyler St to N Main St
other	North Sanborn Rd is quite dense around that area and has many lanes that makes it unsafe to cross and there should be more cross walks along that street or a roundabout for pedestrians to cross as well. Walkability	N Sanborn Rd @ Garner Ave
other	Folks too often Fail to stop at this four-way STOP sign. They slow,, and then zoom through it. I was on a ride-along with a Salinas police officer. We sat near the intersection of Inca Way and Cherokee in a marked-police car. Within ten minutes we saw (and stopped) two vehicles that ran the STOP sign Guess what both drivers are police officers.!!! One from Soledad and the other from Watsonville departments.f Inca Way at Cherokee Drive.	a Cherokee Dr @ Inca Way
speed,other	People drive too fast through Boronda at all times. Traffic	Boronda Rd - El Dorado Rd to Nativiad Rd
peed	People drive too fast on Boronda Road	Boronda Rd - Independence Blvd to Constitution Blvd
speed,intersection,other	Merging lane is inexisting. Creates a lot of confusion for drivers on right lane.	San Juan Grade Rd near Northridge Way
peed,intersection	Poor lighting along San Juan Grade Rd. This intersection would benefit from a left turn pocket.	San Juan Grade Rd - Northridge Way to Russell Rd

Topics	Description of Safety Concern	Approx. Location
speed,traffic_signal,crosswalk,intersetion,other	c These location can benefit from a traffic study and reconfiguration of stripping and pavement markings. Also, could benefit from a road rehabilitation, as the AC is in bad shape. Overall, I will give the intersection a level of service E. Much needed improvements to bring these intersection to a level of service C or above. By making such improvements the collision incidents will potentially decrease. These intersection should be considered a top priority for CIP. AC work and grading.	Boronda Rd @ N Main St
bike_lane	The Davis bike lanes are constantly full of debry from the fields. Making it difficult to ride a Road bike that requires relatively clean roads to keep from losing traction and possibly falling on to the fast moving traffic on Davis. The city should either require the farms owners to sweep the excess dirt they created from driving and parking on the dirt or charge an extra fee to each farm for street sweeper services rendered by the city.	Davis Rd - Blanco Rd to Central Ave
speed,other	These location has multiple problems; high traffic for oneway lane on both directions, poor visibility at night, no turning lane for Van Buren Ave. or apartment complex on San Juan grade, poor AC, and speeding area. Lighting	San Juan Grade Rd - Northridge Way to Russell Rd
speed,crosswalk	With the new library opening, there are residents walking to the library that need to cross the busy 4 lane street. Many of these residents are young adults or families with young children.	N Main St @ Navajo Dr
intersection	There's an elementary school just feet away from this intersection and a crosswalk where drivers just don't respect. People seemed rushed to get onto the highway and often times this intersection is back up especially during traffic hours in the morning and evening. Installing a traffic light or a crosswalk light would help the issue.	John St @ Wood St
speed	Kids in the neighborhood almost get run over playing due to cars speeding.	Eisenhower St
speed	Cars pass to fast.	Natividad Dr - Boronda Rd to Rogge Rd
speed,intersection	I see so many people overspeeding along Coleridge Drive. Also, they don't make any effort to use a turn signal and make a turn without slowing down. Also, there are many cars in the Los Olivos/Riker Street neighborhood that are obvious not home owners. They take the liberty of parking their cars in front of someone else's home without expressed consent form the homeowners. These issues need to be addressed as there are children and and people with special needs living in this neighborhood.	Coleridge Drive - Los Olivos Dr to Riker St
speed	People drive way too fast here.	San Juan Grade Rd - Van Buren Ave to Russell Rd
speed,intersection	Previous 4 Way Stop recently changed to 2 Way Stop. Observed scenes of collisions (after collisions occurred) on 2 different days. A friend told us of coming upon an accident scene on a different date. Another individual we know often drives in the area and has seen multiple near misses of pedestrians as cars drive through West Alisal even when pedestrian has right of way; and has also witnessed near collisions as drivers are apparently confused by 4 Way Stop changed to 2 Way. The 4 Way Stop was much safer and we see no reason why it has been changed to 2 Way.	W Alisal St @ Capitol St
speed,other	Cars drive fast through here, people park their cars overnight next to the fields and cross the street to the apartments and mobile home park, its hard to see them when they cross at night. Russell Rd. needs more street lighting	Russell Rd - N Main St to Van Buren Ave
traffic_signal	They moved the traffic light about 20-30 ft up but they failed to move the sign "no turn on red" along with it. So the sign is 30 ft behind where the light is and people are confused whether they have to wait for the light to turn green before they can turn right onto 101S highway. Please either move the sign up or take it away if it doesn't apply anymore so that people will stop honking at me when I don't turn right when the road is clear.	S Sanborn Rd @ Elvee Dr
intersection	I'm on Abbot, Chevron on my left and cemetery on my right, waiting to turn left onto Sanborn and the car on my left almost hits me as we turn because the car didn't realize that my lane turns left also. There needs to be a sign with those arrows that shows the direction each lane can turn up on the traffic light. I don't blame that car because there is no other indication my lane turns left also except for the arrows on the ground which get covered by cars.	Abbott St @ Sanborn Rd/Blanco Rd
bike_lane	Getting from North Salinas to South Salinas is challenging. Main street does not have space and the sidewalk often has pedestrians. Sherwood and East Market's a little better but still requires crossing multiple lanes of traffic with drives not used to cars.	Market St - Front St to Sherwood Dr
traffic_signal,crosswalk,intersection	reinstall 4 way stop sign. Many people cross Alisal St to get to and from County offices there	W Alisal St @ Capitol St
traffic_signal	The intersection of Alisal and Capitol Streets needs a traffic signal. The 4-way stop was removed and there are a lot of new accidents. It's really dangerous with several deaths occurring there. Please put in a traffic light!	W Alisal St @ Capitol St
traffic_signal,intersection	making a left turn onto Sherwood Dr. from Calle Cebu is dangerous and confusingBIG intersection, no left turn signal and cars come dangerously close from Rossi St. as you wait to turn left.	Sherwood Dr @ Rossi St/Calle Cebu
speed,crosswalk,intersection	Many vehicles speed through the area of University Avenue making it hard for pedestrians to cross the street and for the children who are walking to school. Thank you	University Ave - Central Ave to Ambrose Dr
other	Before Covid, the traffic halted due to Pedestrians crossing to Alvarez, vehicular traffic halts to a stand. This causes students to get off in the middle of the street and dart into traffic which can cause an accident. Pedestrian Crossing Bridge	Independence Blvd - Nantucket Blvd to Boronda Rd
speed,traffic_signal,bike_lane,crossw lk,intersection,other	If there are soooo many issues in 93905, why was WEST Alisal turned into single lane traffic but it does not continue into EAST Alisal? What message are we sending to the Hispanic community? Minimal traffic/bike/pedestrian collisions are only addressable if you live in a higher educated, a higher income, more desirable zip code? You have major issues going on with traffic in the 93905 and socioeconomic differences says the poor people are more expendable or less important according to the changes you have already made. Quite an insult to the POC in your community. You need people to answer a survey (which will be filled out primarily by people of means) for you to have an excuse on "well we didn't make the changes we can see proved by your own statistics above, because the survey said it was more important to do work in 93901! Pathetic.	E Alisal St
speed,intersection	Unsafe lane change, unsafe speed, lack of signage at the Constitution & Laurel Intersection.	E Laurel Dr - Constitution Blvd to Natividad Rd
other	In the residential areas in east salinas there are way to many cars parked in the street to the point that you can't see the sidewalks or if your pulling out into another street you can't see unless you pull out into traffic which isn't safe for anymore. I've noticed south salinas isn't allowed to park on street without a permit, why can't east salinas have the protocol in place as well? To many cars parked on the streets.	Garner Ave - Rider Ave to N Sanborn Rd

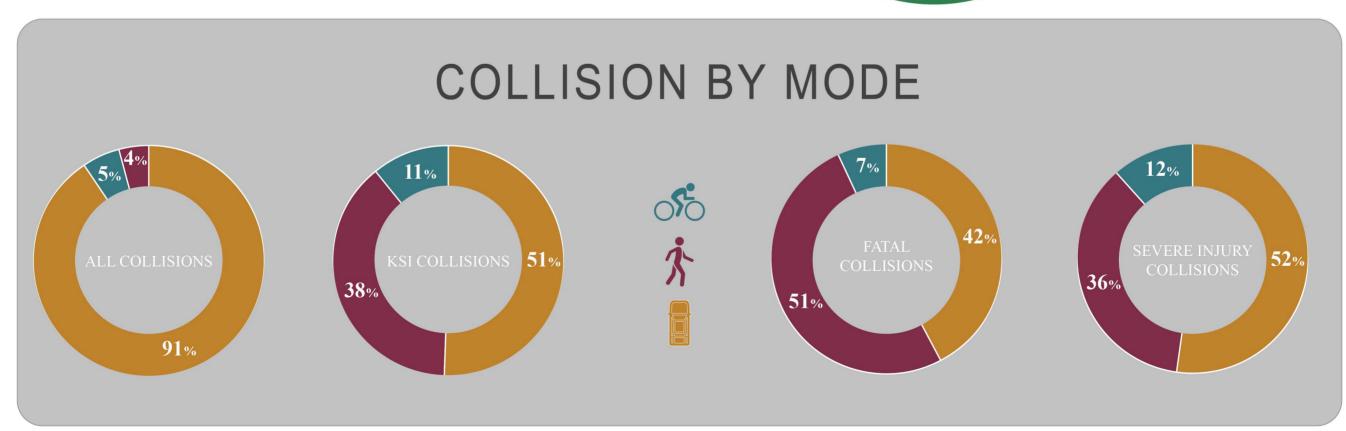
B. SUMMARY OF COLLISION TRENDS

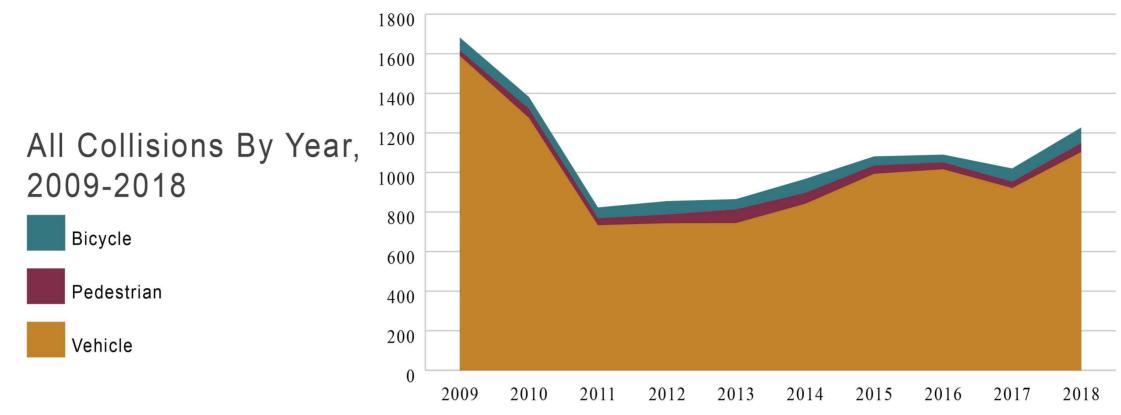


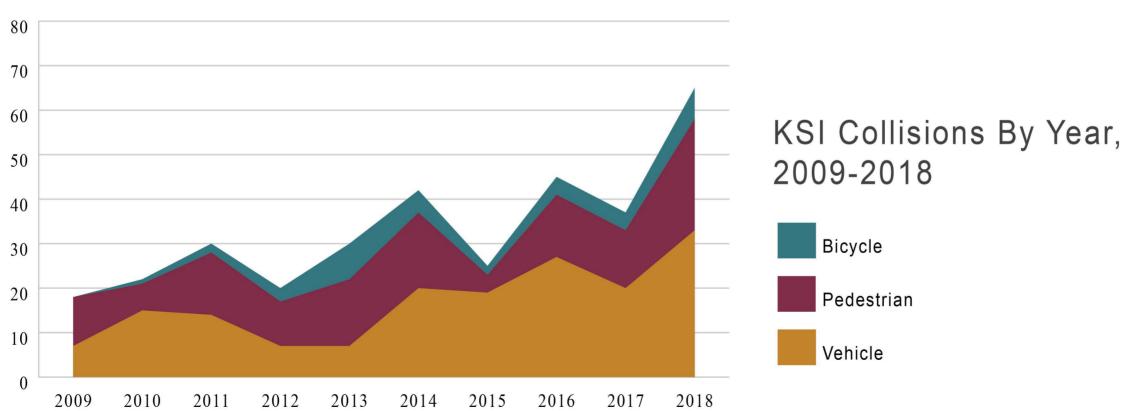
334 KSI Collisions Fatal(59) & Severe Injury(275) between 2009-2018, out of 10,992



1% 3%

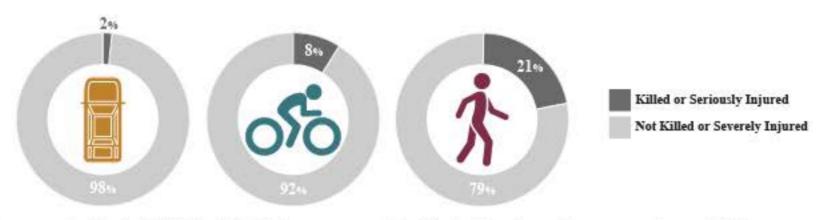






SHARE OF VICTIMS WHO WERE KILLED OR SEVERELY INJURED

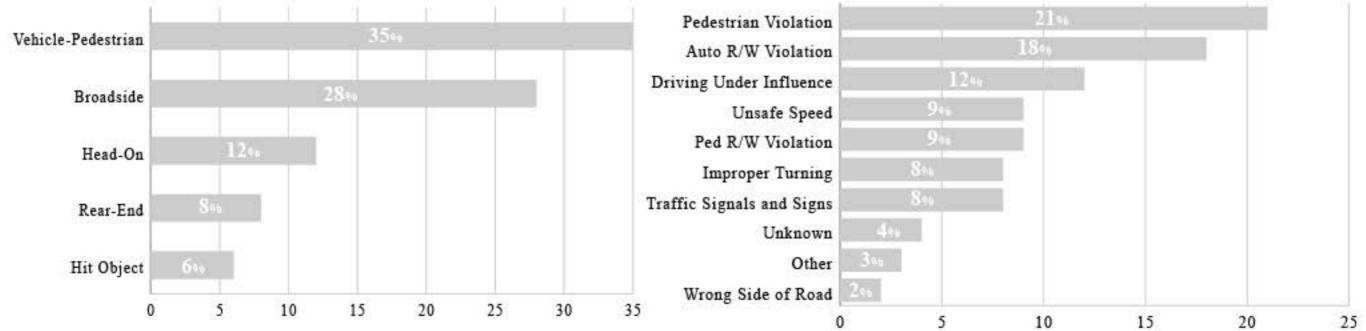




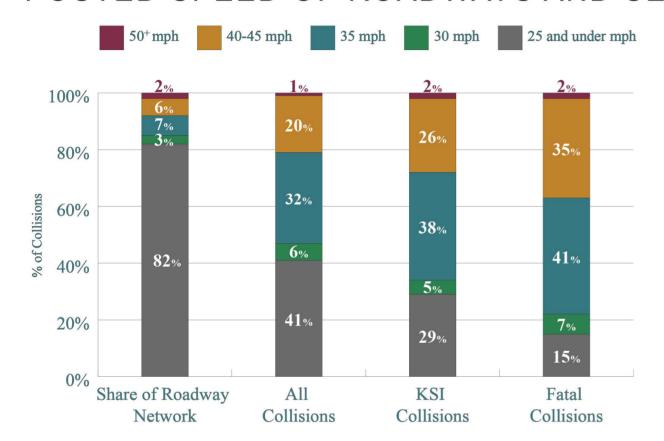
As reported half of KSI Ped Collisions occured by Ped at Fault and three-quarters of KSI Bicycle Collisions occured by bicyclist at Fault

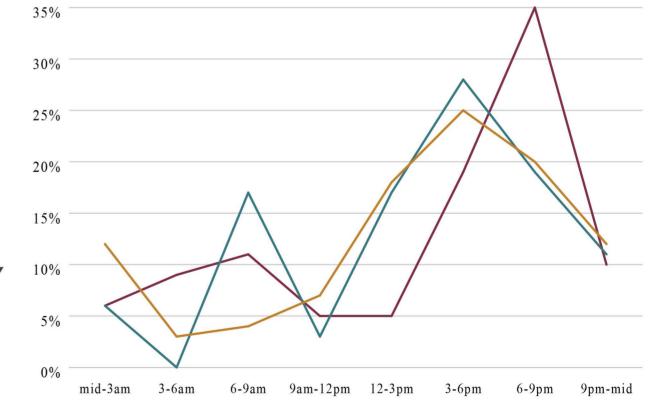
KSI COLLISION TYPES TOP TRENDS, 2009-2018

KSI PRIMARY COLLISION FACTORS TOP TRENDS, 2009-2018



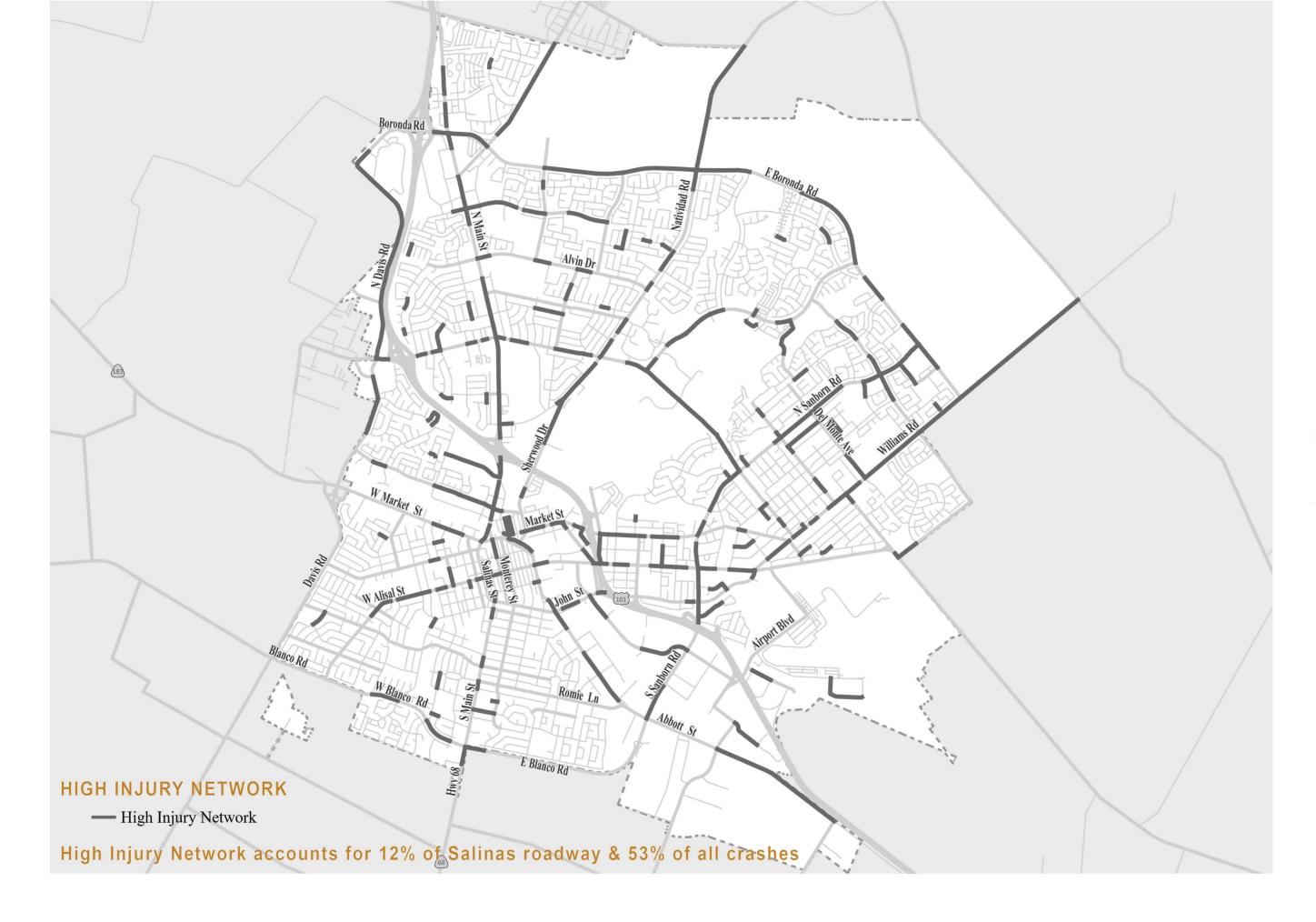
POSTED SPEED OF ROADWAYS AND SEVERITY OF COLLISIONS



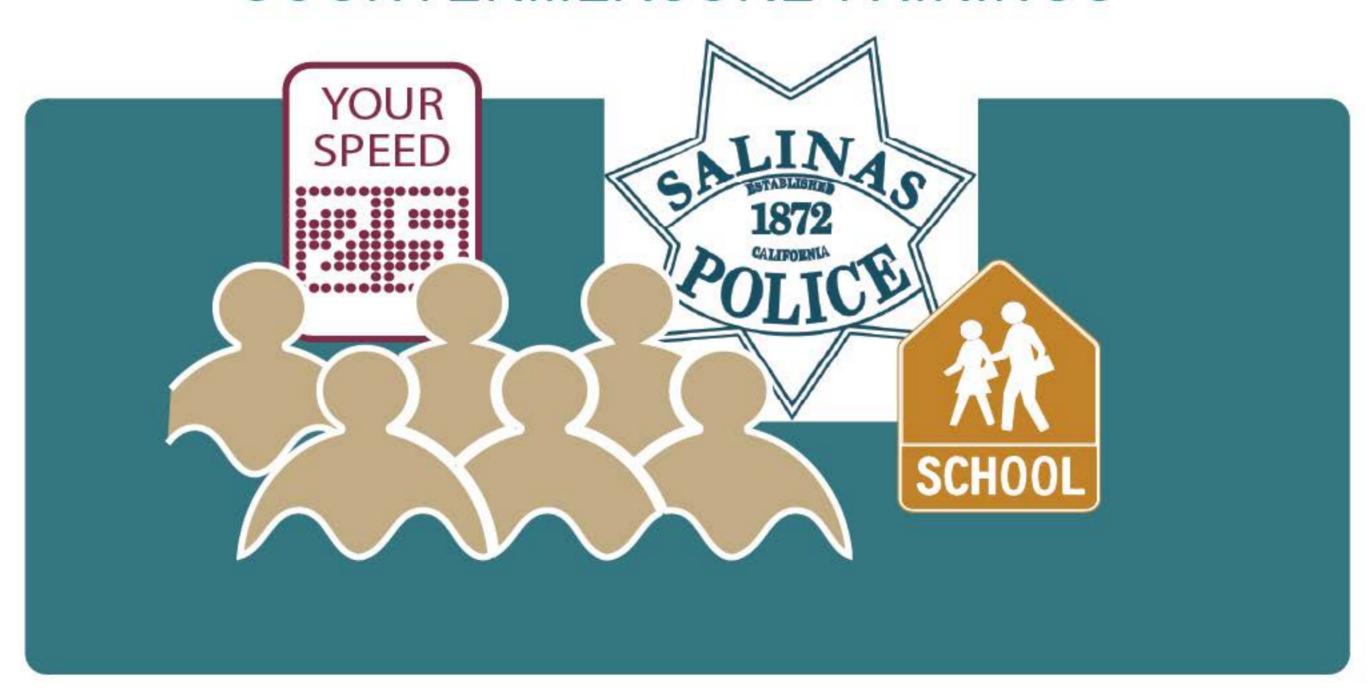


SHARE OF COLLISIONS BY TIME OF DAY

—KSI Vehicles **—**KSI Bike **—**KSI Pedestrian



C. COLLISION PROFILES AND COUNTERMEASURE PAIRINGS



Countermeasures Categories	Countermeasures	Collision Profiles									
		1	2	3	4	5	6	7	8	9 All Modes	10 Bicycle
		Pedestrian	Vehicle	All modes	Pedestrian	All Modes	Vehicle	All Modes	Vehicle		
			Pedestrian Action	Broadside Collisions	Alcohol Involved	Pedestrian Violation	Auto R/W Violation	Head-On Collisions	Unsafe Speed	Rear-End Collisions	
	New Traffic Signals							х			
	Traffic Signal Heads Visibility					Х	Х		X		
	Accessible Pedestrian Signal	х		1	X						
	Pedestrian Countdown Signal Head(City Standard)	х			х						
	Leading Pedestrian Interval	X									
	Pedestrian Exclusive Phase				Х			14			
Characteristics	Pedestrian Hybrid Beacon	X									
Signalization	Protected Left Turns	420	Х		ĬĬ	Х	Х	1		X	
	Signal Timing and Phasing Improvements		х			х		x	х	x	
	Coordinate Traffic Signals								X		
	Advanced Dilemma Zone Detection		x					x	х		
	Pedestrian Activated Crosswalk Warning Beacon	×									
-	Pedestrian Refuge and Median	х						£r,	t i		
	Road Diets					x		х		x	X
	Consolidate Driveways					Х				X	
Geometric	Separated Bikeways – Cycle Tracks							х			
	Bulb Outs and Curb Extensions	x			Х			X			
	Raised Median with Street Trees(left turn at major intersections only)	0,	х			x	х	x	x	x	
	Roundabouts		х				Х	х	X	x	
Signs, Markings, Operational	Controlled Intersections		х			Х		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		100	Х
	High Visibility Crosswalks	Х			X						
	Roadway and Intersection Lighting	х					х		х	х	x
	No Parking On-Street or near intersections		х			х	х			x	x
	Bike Lane							J.			X
	Buffered Bike Lane				ĵ						X
	No Right Turn	X						ř.	<u> </u>	X	
	Marked Crossing	X			Х			-2			
	Vehicle Speed Feedback Sign	W.			Ĭ Z		Х	X			
Speed Control	Traffic Calming	х			Х			Х			
speed Control	Reduced Speed School Zone(City Standard)				h			х			



D. EMPHASIS AREAS CUT OUT SHEETS



East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

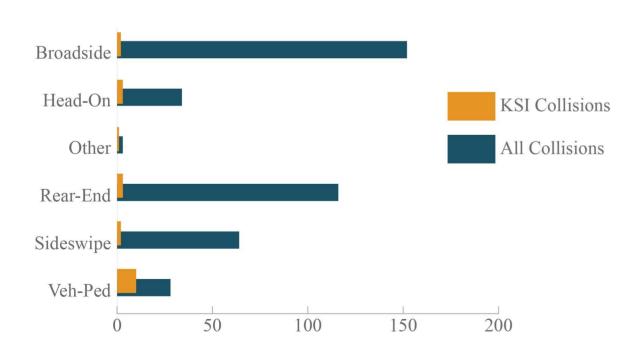
NOTABLE PRIMARY COLLISION FACTORS





IMPROPER TURNING 11%

DUI 10%



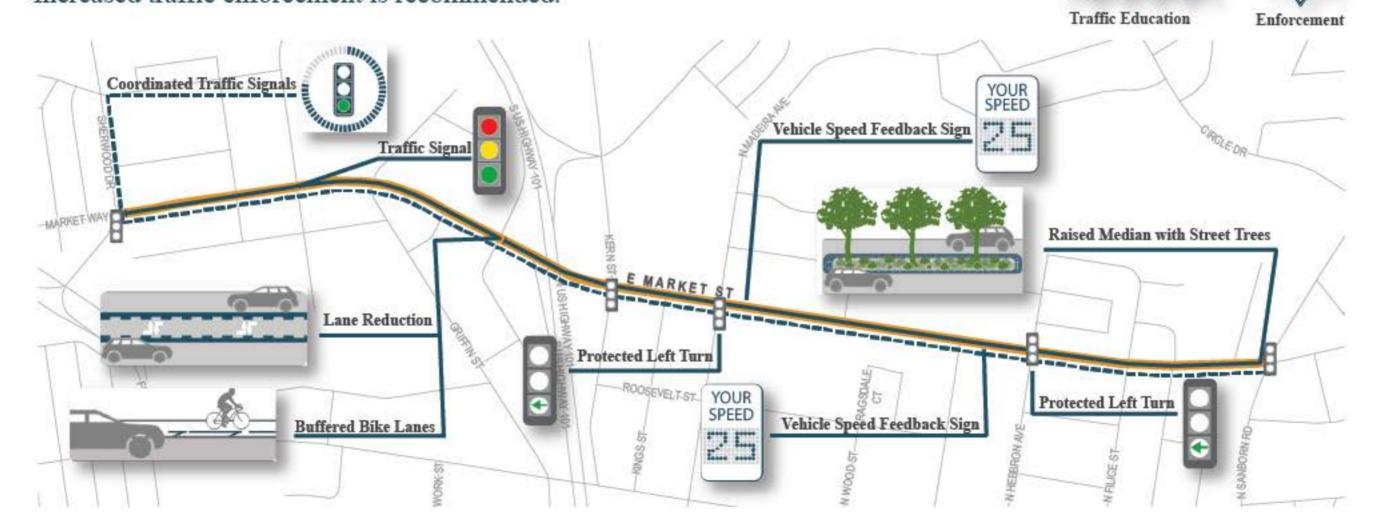


East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision

potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira Ave, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.



Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



VIOLATION

27%



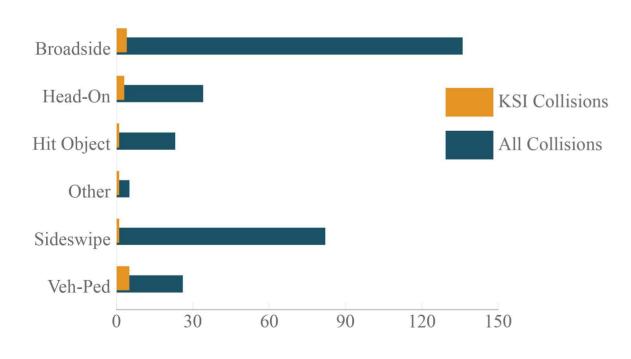


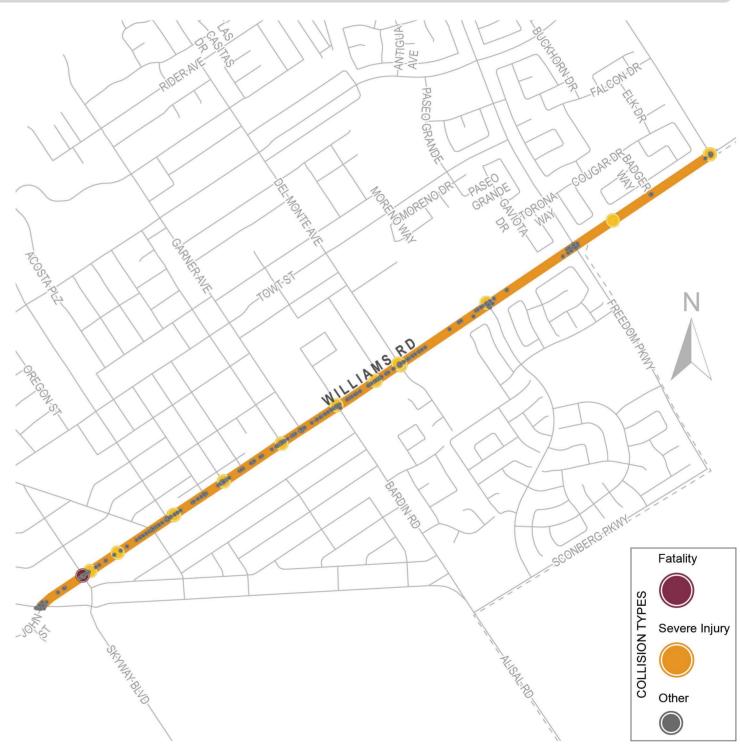
14%



UNSAFE **IMPROPER SPEED TURNING** 16%

DUI 11%

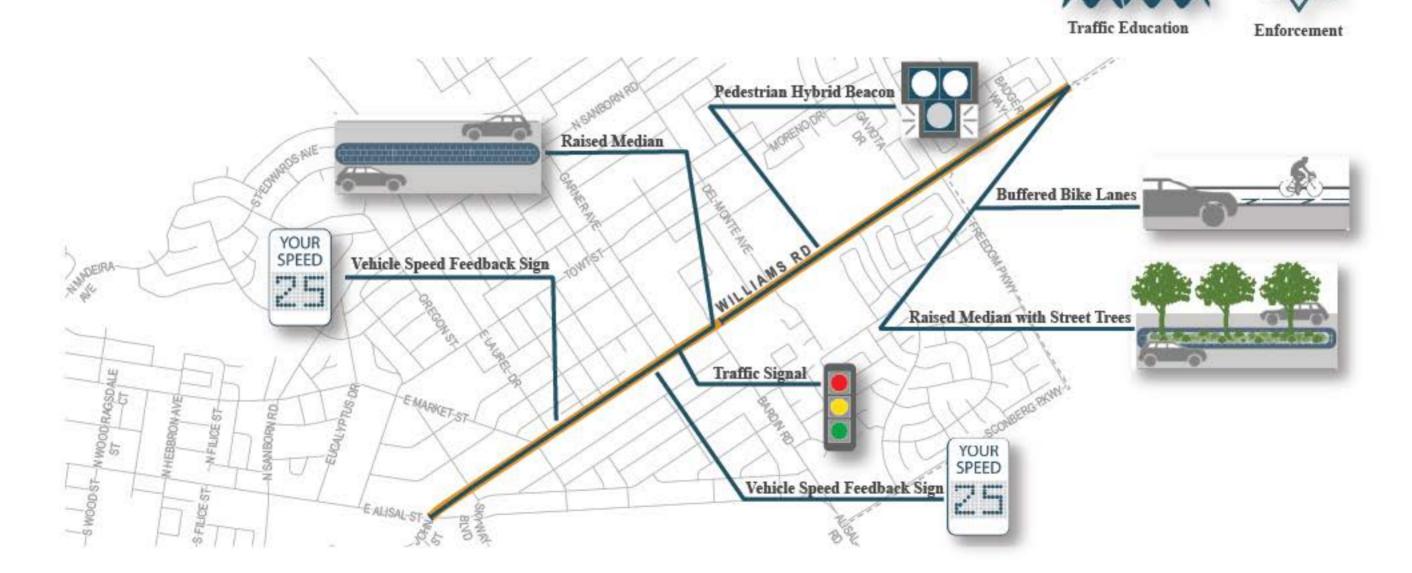




Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

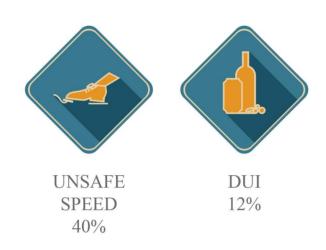
Williams Road between East Alisal Street to Bardin Road recommended countermeasures include a raised median and a new traffic signal at Williams Rd and Garner Ave. Williams Rd between Bardin Rd and Boronda Rd recommended countermeasures include a raised median and street trees, and adding buffered bike lanes. A pedestrian hybrid beacon is recommended to provide driver visibility of crosswalk location.

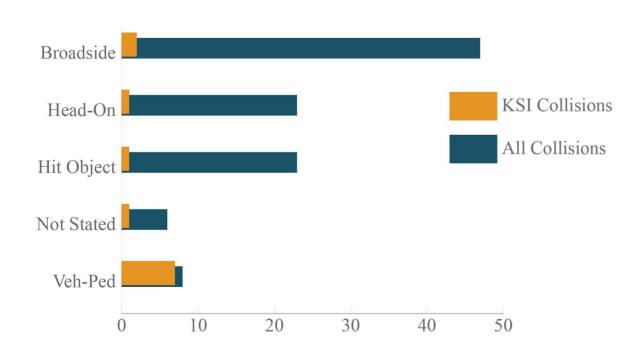
Increased traffic enforcement is recommended.

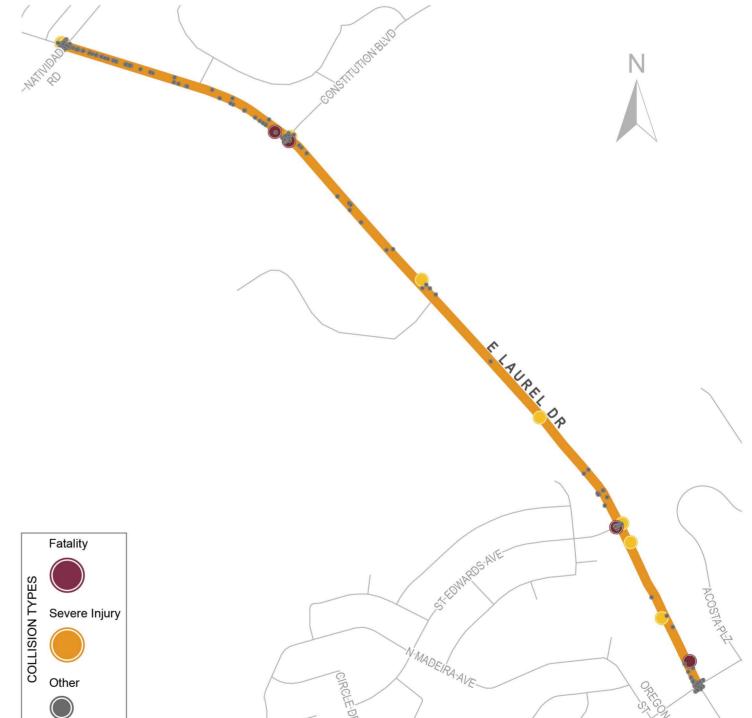


East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

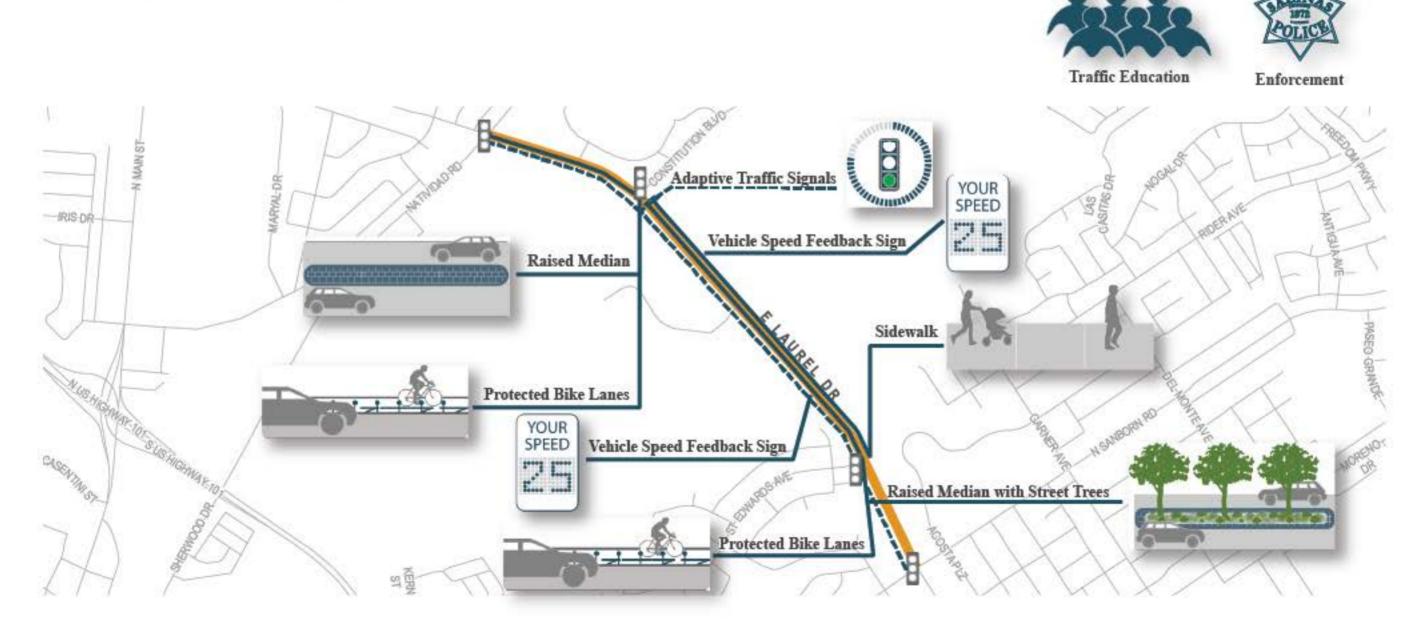






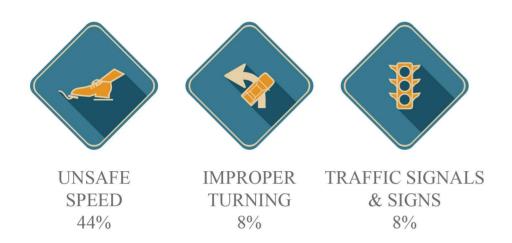
East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

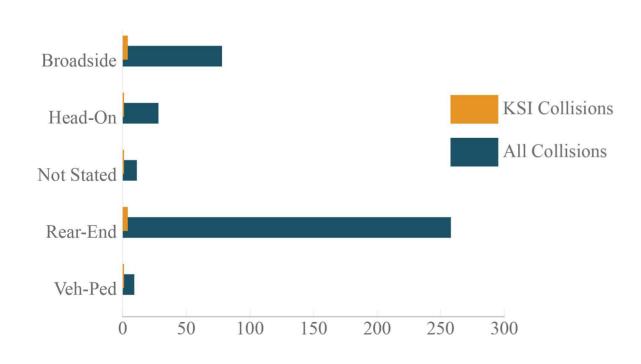
East Laurel Drive between Natividad Road and Constitution Boulevard recommended countermeasures include a raised median with street trees and protected bike lanes. An adaptive traffic signal system is recommended to reduce collision potential. To reduce speed throughout the corridor radar feedback signs are recommended to slow down vehicles, and increased traffic enforcement is recommended



East Boronda Road, from US 101 to Natividad Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

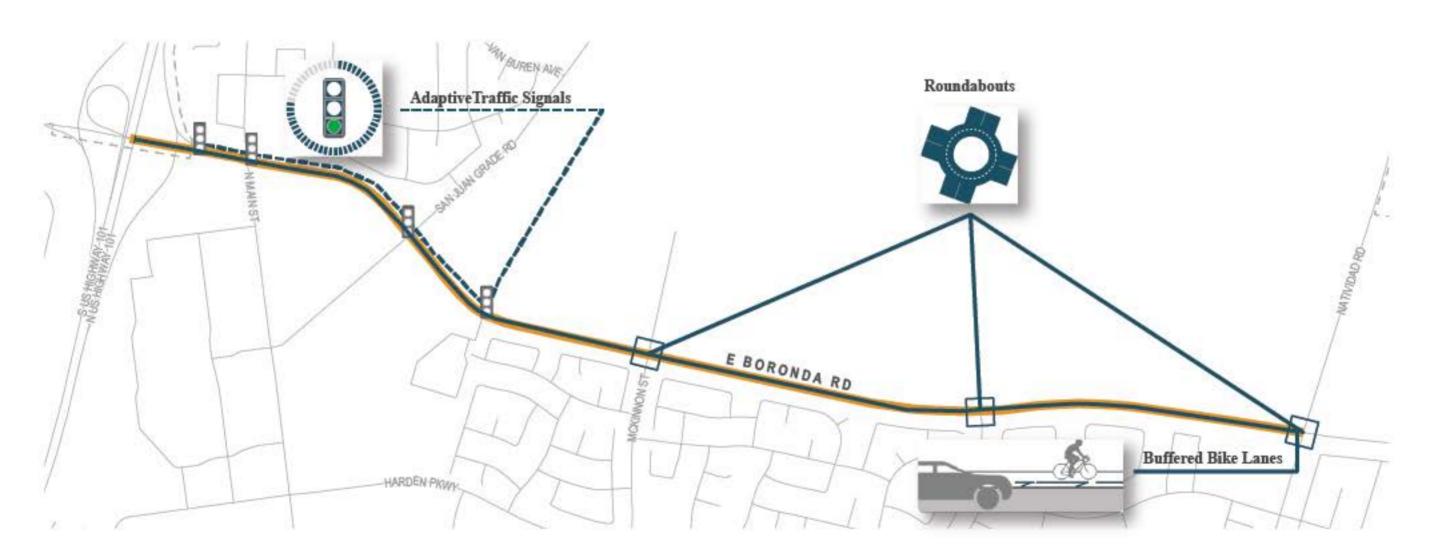






East Boronda Road, from US 101 to Natividad Road: 2009-2018

East Boronda Road between US Highway 101 and Natividad Road recommended countermeasures include roundabouts. The roundabouts are part of an ongoing project that consists of the construction of multiple roundabouts at McKinnon St, El Dorado Dr, and Natividad Rd. The project also includes the installation of buffered bike lanes. An adaptive traffic signal system is recommended to reduce stops and minimize rear-end potential collisions. Increased traffic enforcement is recommended.



East Alisal Street, from Front Street to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



UNSAFE **SPEED** 24%



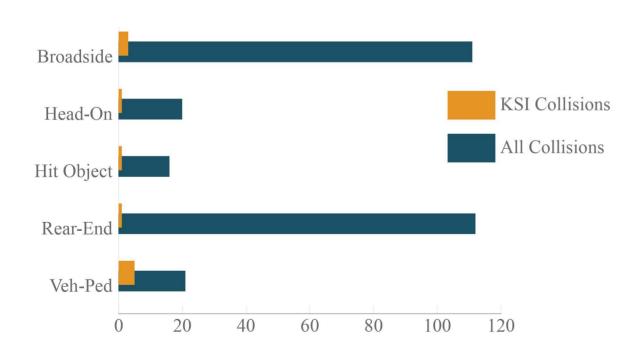
AUTO R/W **VIOLATION** 18%

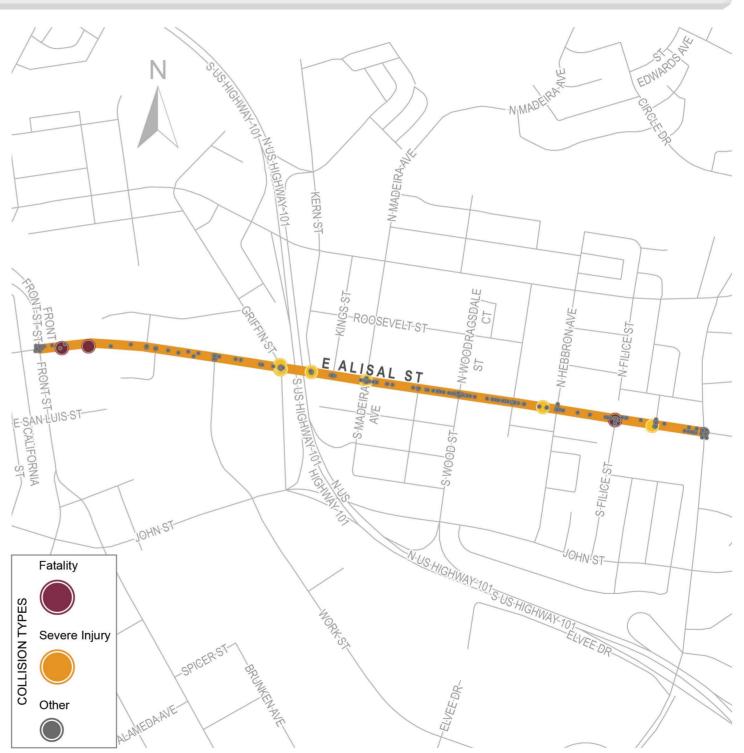


IMPROPER TURNING 11%



TRAFFIC SIGNAL & SIGNS 13%

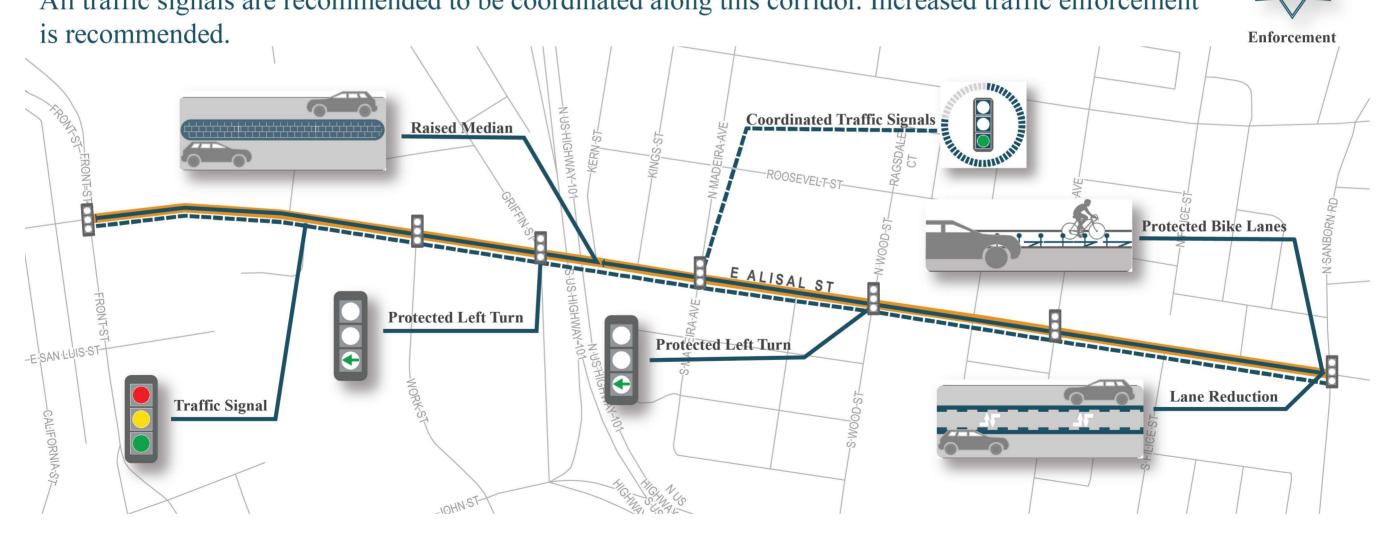




East Alisal Street, from Front Street to North Sanborn Road: 2009-2018

East Alisal Street between Front Street and Kern Street recommended countermeasures include a raised median with street lighting, protected left turns, and protected bike lanes.

East Alisal Street between Kern Street and North Sanborn Road recommended countermeasures include a lane reduction from 5 to 3 lanes and protected bike lanes. The recommended countermeasures for this segment will refine what has been proposed on the Alisal Vibrancy Plan. Included in the Alisal Vibrancy Plan are a designated bus travel lane to serve the transit system, protected bicycle lanes, and pedestrian crossing enhancements. All traffic signals are recommended to be coordinated along this corridor. Increased traffic enforcement



North Main Street, from Market Street to Casentini Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



UNSAFE SPEED 31%



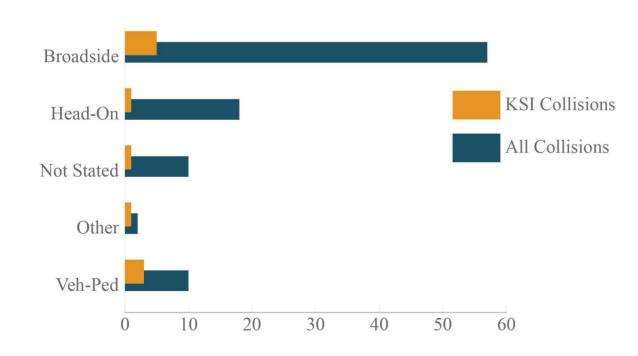
AUTO R/W **VIOLATION** 9%



TRAFFIC SIGNALS & SIGNS 14%



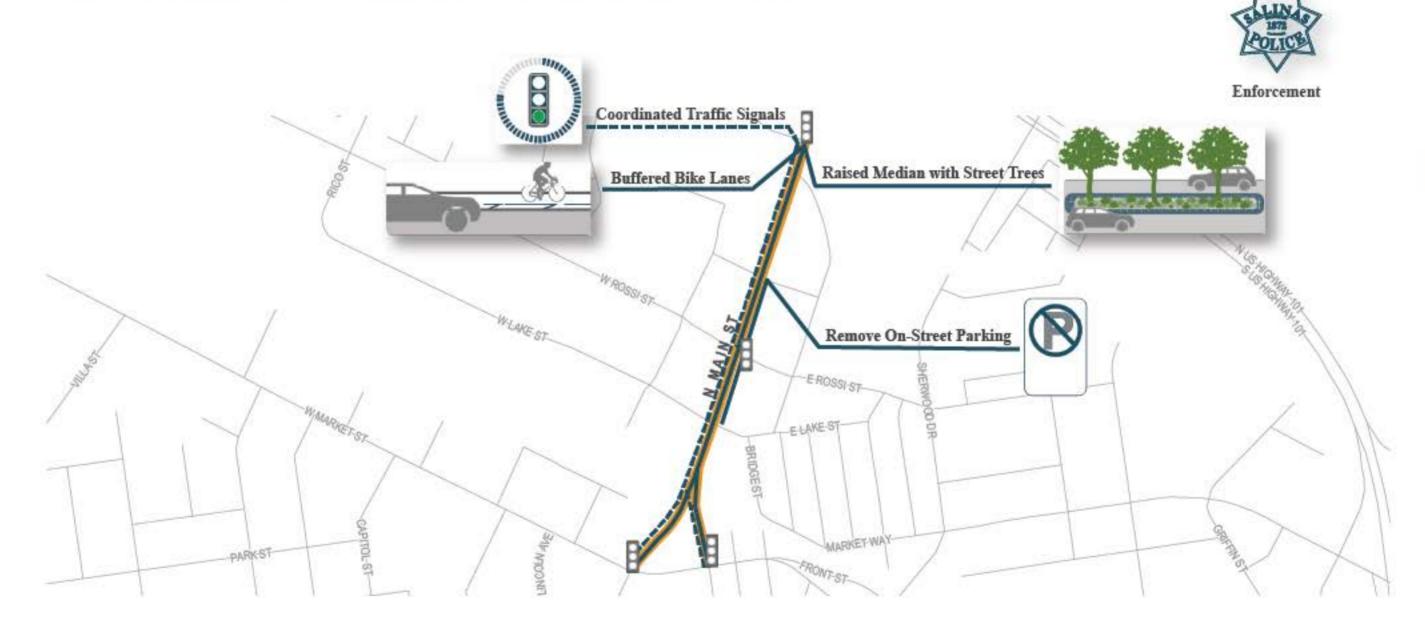
IMPROPER TURNING 11%





North Main Street, from Market Street to Casentini Street: 2009-2018

North Main Street(SR183) between Market Street and Casentini Street recommended countermeasures include the installation of buffered bike lanes and the removal of on-street parking. Additionally, a raised median and street trees is recommended to limit left turn movement at minor roads and driveways to reduce collision potential. Traffic signals are recommended to be coordinated throughout the entire corridor.



West Laurel Drive, from North Davis Road to North Main Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



SPEED

25%

UNSAFE

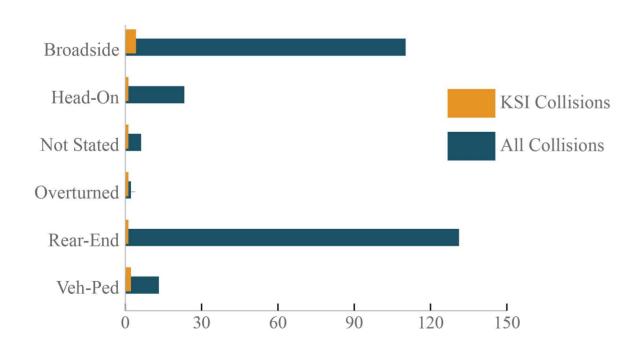




TRAFFIC SIGNALS & SIGNS 19%

AUTO R/W **VIOLATION** 12%

IMPROPER TURNING 10%





West Laurel Drive, from North Davis Road to North Main Street: 2009-2018

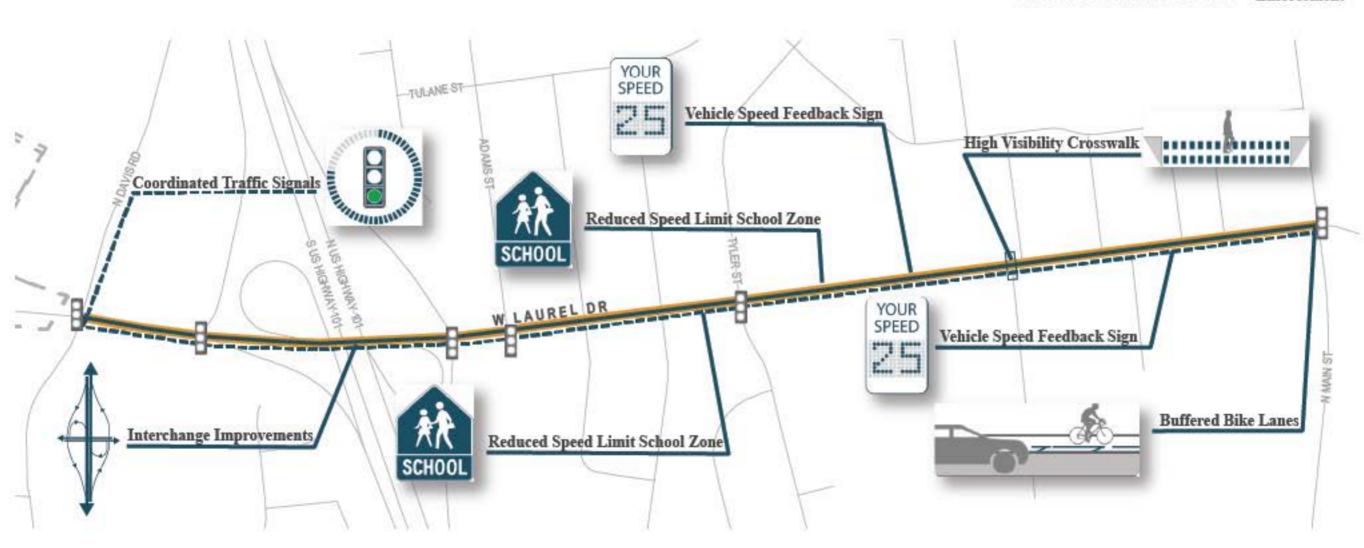
West Laurel Drive between North Davis Road and North Main Street recommended countermeasures include a raised median and street trees to limit left turn at minor roads and driveways, buffered bike lanes, reduced speed limit for

school zone, and vehicle speed feedback signs. All traffic signals are recommended to be coordinated. Increased traffic enforcement is recommended.





Raised Median with Street Trees



North Sanborn Road, from Del Monte Avenue to East Boronda Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS





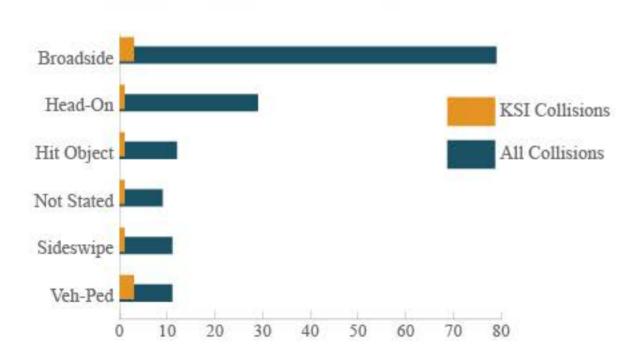


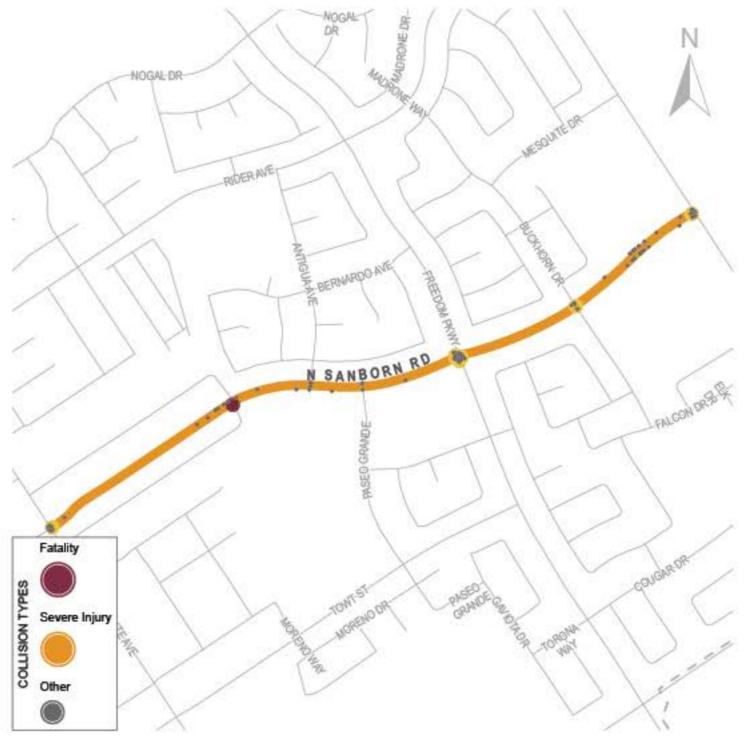


AUTO R/W TRAFFIC SIGNALS VIOLATION & SIGNS 46% 14%

UNSAFE SPEED 11%

IMPROPER TURNING 8%

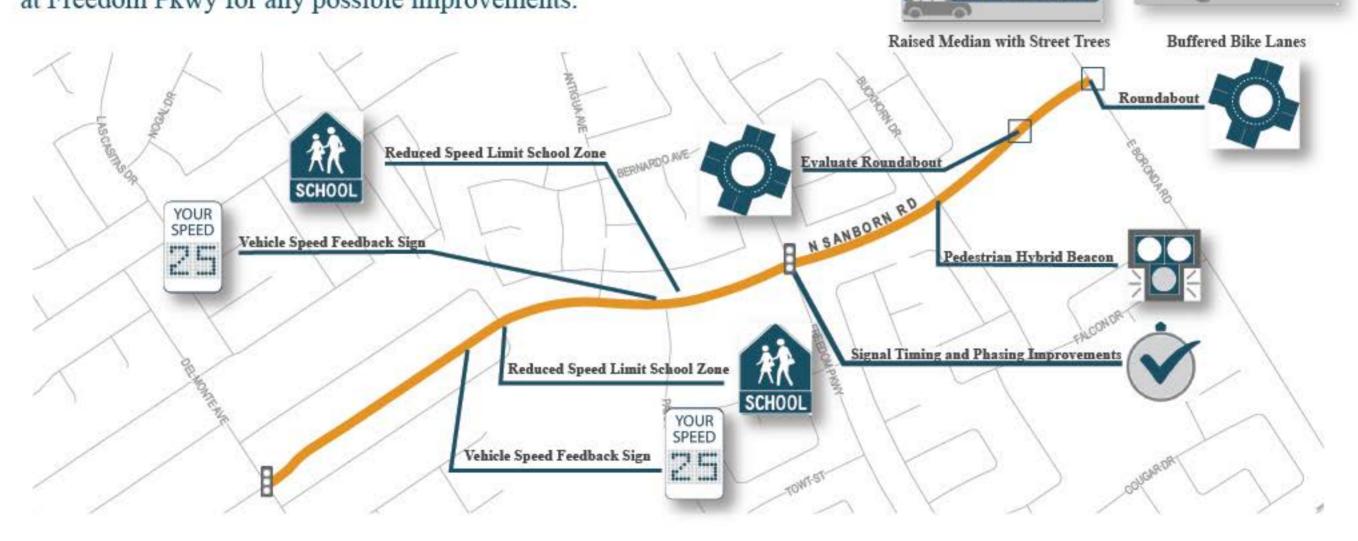




North Sanborn Road, from Del Monte Ave to East Boronda Road: 2009-2018

North Sanborn Road between Del Monte Avenue and East Boronda Road recommended countermeasures include a raised median and street trees. A road diet is recommended to be evaluated which could reduce the travel lanes from 4 to 2 lanes and installation of buffered bike lanes. Recommended is one roundabout at Boronda Rd and the consideration of another roundabout at the shopping center entrance. Additionally, a reduced speed limit school zone,

vehicle speed feedback sign, and interconnect of traffic signals for improved signal timing and phasing. Intersection control evaluation is recommended at Freedom Pkwy for any possible improvements.



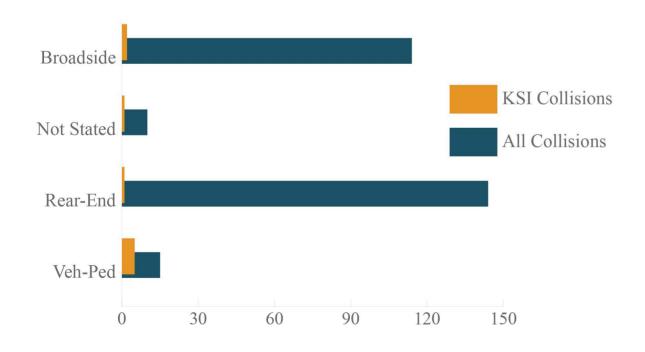
TECHNICAL APPENDIX

COLLISION CORRIDORS

East Laurel Drive, from North Main Street to Natividad Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS







COLLISION CORRIDORS RECOMMENDATIONS

East Laurel Drive, from North Main Street to Natividad Road: 2009-2018

East Laurel Drive between North Main Street and Natividad Road recommended countermeasures include a raised median and street trees to limit left turn on minor roads and driveways. Traffic signals are recommended to be coordinated, protected left turn phase at Maryal Dr, and protected pedestrian phase at Linwood Dr. The removal of

on-street parking is recommended towards the east part of the corridor and the installation of a pedestrian activated crosswalk warning beacon at Tapadero St.







Enforcement

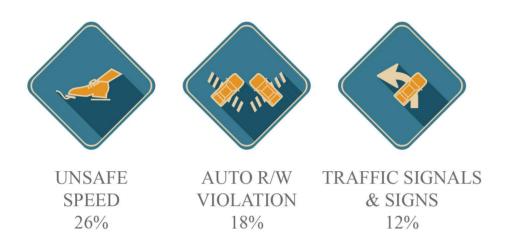
Raised Median with Street Trees Remove On-Street Parking

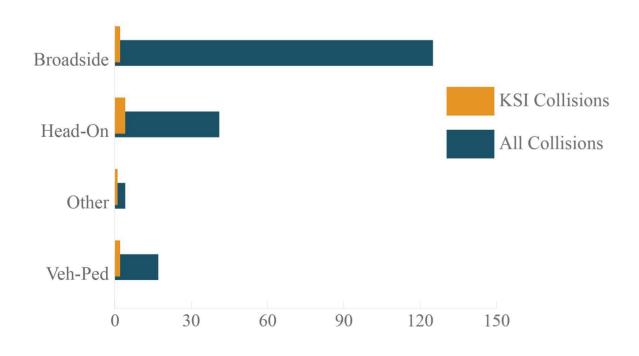


COLLISION CORRIDORS

Sanborn Road, from US Highway 101 to East Laurel Drive: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS







COLLISION CORRIDORS RECOMMENDATIONS

Sanborn Road, from US Highway 101 to East Laurel Drive: 2009-2018

Sanborn Road between Fairview Avenue and East Laurel Drive recommended countermeasures include a raised median with street trees and buffered bike lanes. Traffic signals are recommended to have protected left turn phases at

Circle Dr, Oregon St/Madeira Ave, and all traffic signals should be coordinated. The on-street parking is recommended to be removed. Increased traffic enforcement is recommended.







Raised Median with Street Trees

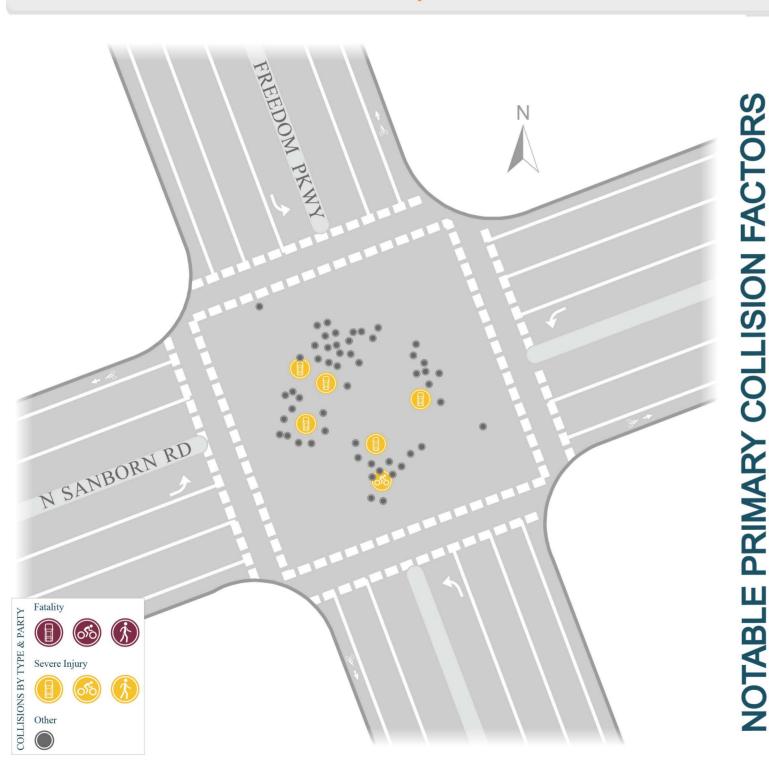
Remove On-Street Parking

Enforcement



North Sanborn Road at Freedom Parkway: 2009-2018

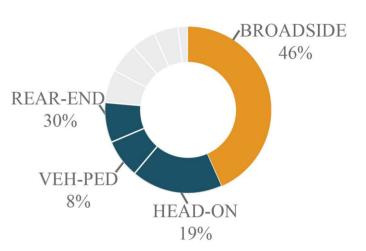




AUTO R/W VIOLATION 44%









North Sanborn Road at Freedom Parkway: 2009-2018



North Sanborn Road at Freedom Parkway recommended countermeasures include signal timing and phasing improvements that provide protected left turn phase, leading pedestrian interval, coordinated signals and traffic control. An intersection control evaluation is recommended. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS



TRAFFIC SIGNALS & SIGNS Signal Timing and Phasing

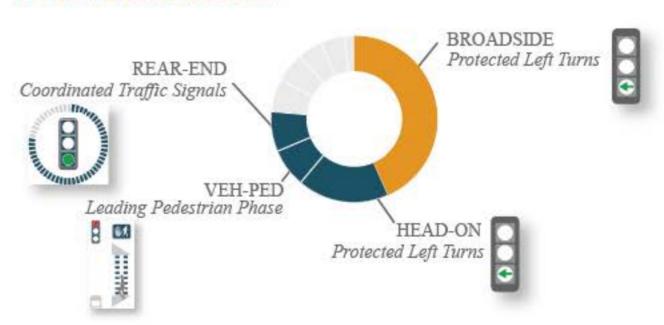




CoordinateTraffic Signals

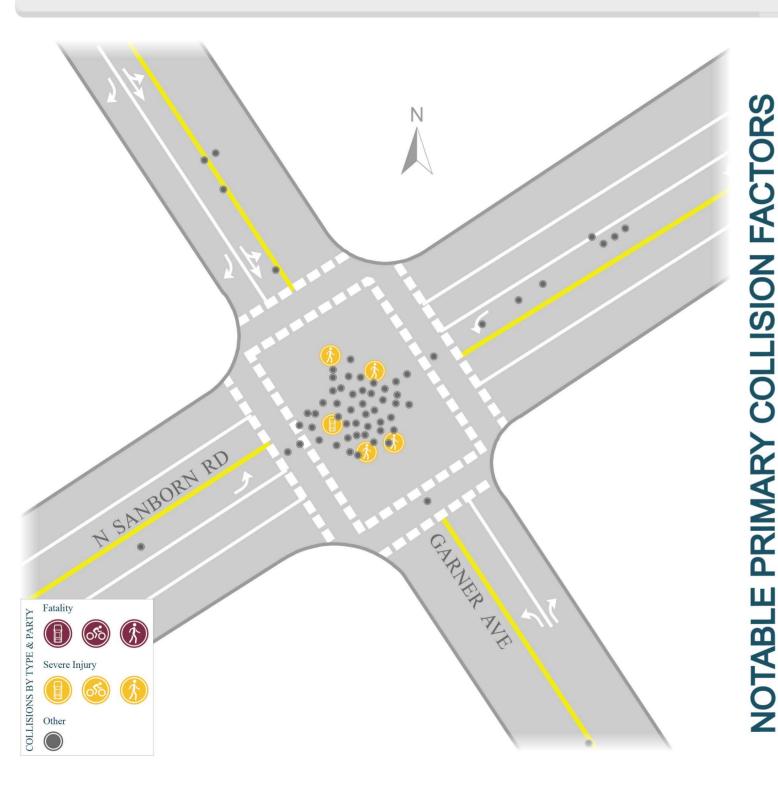


NOTABLE COLLISION TYPES



North Sanborn Road at Garner Avenue: 2009-2018

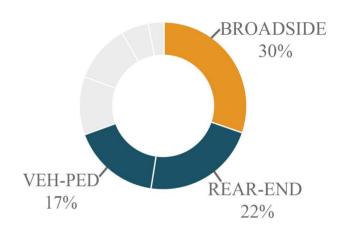




TRAFFIC SIGNALS & SIGNS 20%

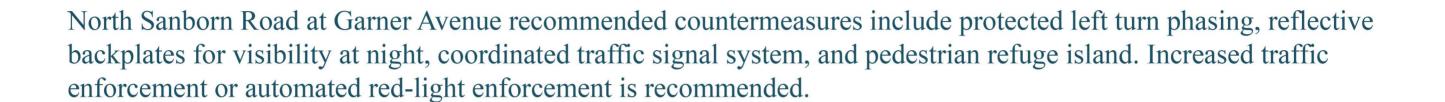








North Sanborn Road at Garner Avenue: 2009-2018



NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

TRAFFIC SIGNALS & SIGNS
Retroreflective Backplate



Coordinate Traffic Signals

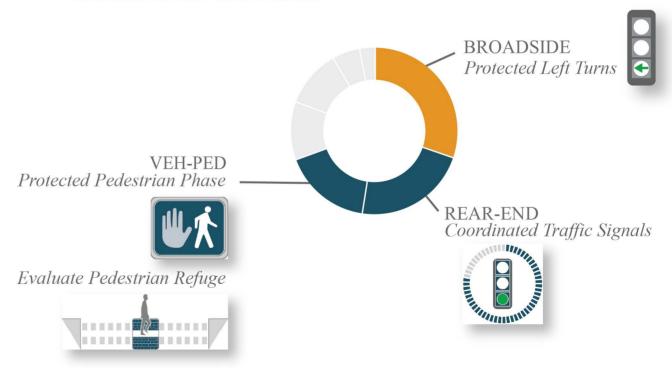




UNSAFE SPEED

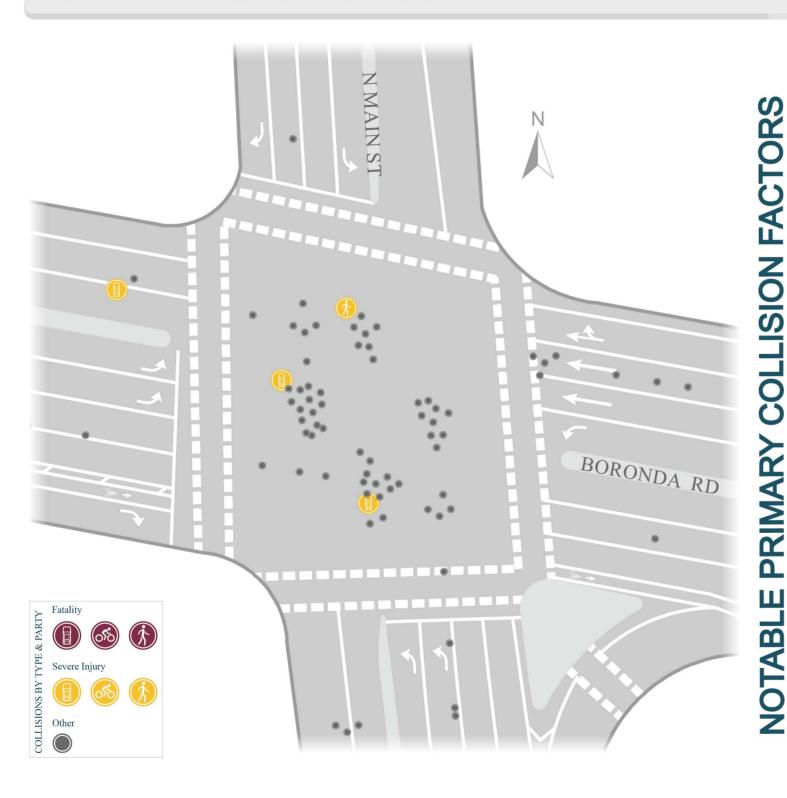


NOTABLE COLLISION TYPES



Boronda Road at North Main Street: 2009-2018



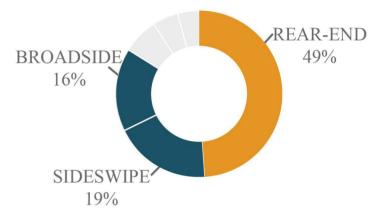


UNSAFE SPEED 37%



VIOLATION 9%







Boronda Road at North Main Street: 2009-2018

Boronda Road at North Main Street recommended countermeasures include guide signs and channelization to improve access onto and off US 101. Signal timing, phasing and coordination with other traffic signals is recommended. Increased traffic enforcement or automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS



AUTO R/W VIOLATION

Signal Timing and Phasing

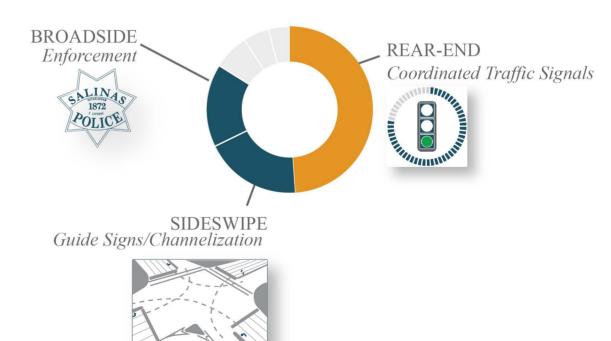


FOLLOWING TOO CLOSELY Enforcement



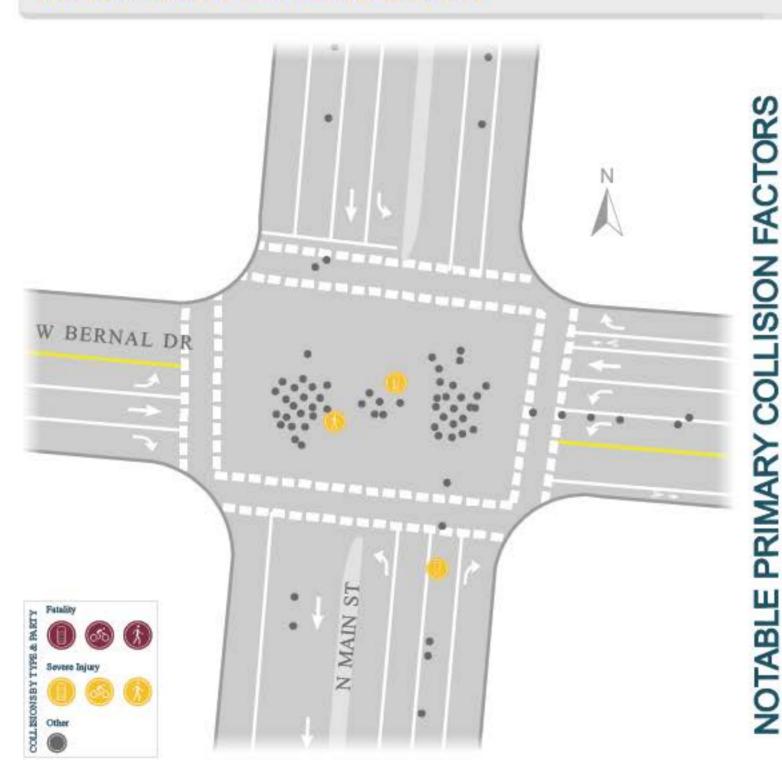


NOTABLE COLLISION TYPES



North Main Street at Bernal Drive: 2009-2018

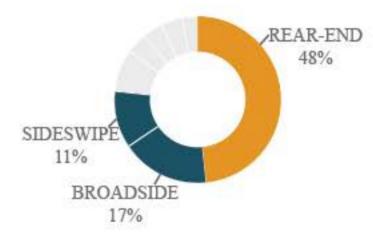




UNSAFE SPEED 35%









North Main Street at Bernal Drive: 2009-2018



North Main Street at Bernal Drive recommended countermeasures include guide signs and channelization to improve access onto and off US101. Signal timing, phasing, and coordination with other traffic signals for a better traffic flow is also recommended. Retroreflective backplate on traffic signal heads for more visibility at night and the installation of advance warning signs to warn motorists of upcoming traffic signal. Recommended are also the increased of traffic enforcement or automated red light enforcement and an intersection control evaluation.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED Enforcement

TRAFFIC SIGNALS & SIGNS

Coordinate Traffic Signals



Signal Timing and Phasing



Retroreflective Backplate



IMPROPER TURNING Guide Signs/Channelization



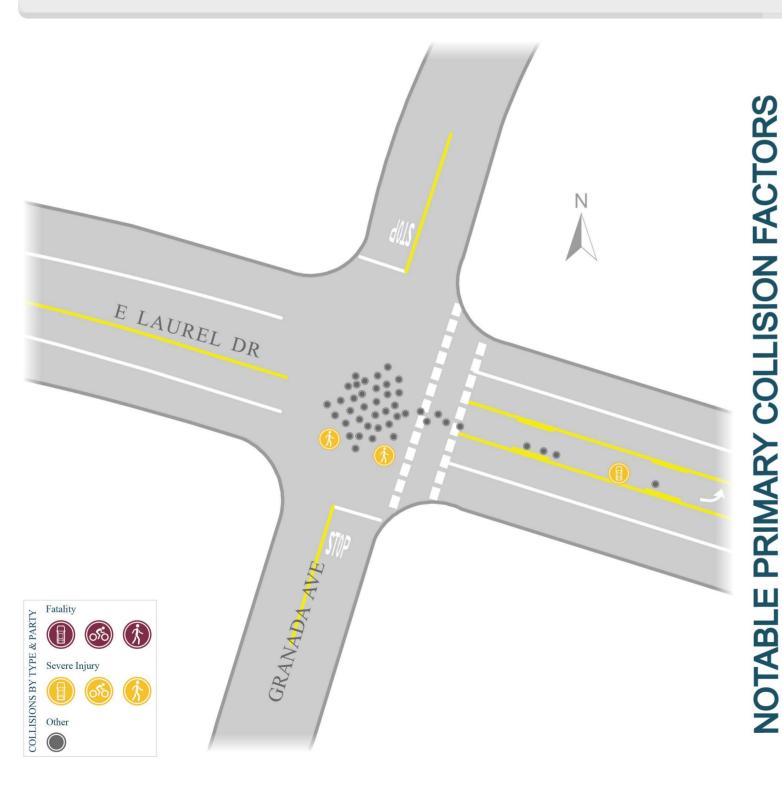
NOTABLE COLLISION TYPES



D29

INTERSECTION COLLISIONS

East Laurel Drive at Granada Avenue: 2009-2018

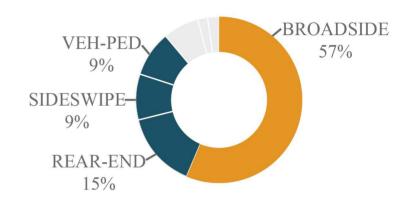


AUTO R/W **VIOLATION** 48%











East Laurel Drive at Granada Avenue: 2009-2018

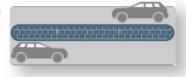
East Laurel Drive at Granada Avenue is recommended for an intersection control evaluation. This intersection is part of a corridor improvement in this action plan which recommends a raised median with channelized left turn pockets at this intersection and reduction of on-street parking. Other considerations include the installation of a pedestrian refuge island alongside with the recommended pedestrian signal interconnected with Natividad Rd and Laurel Dr. Increased traffic enforcement and traffic education is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS





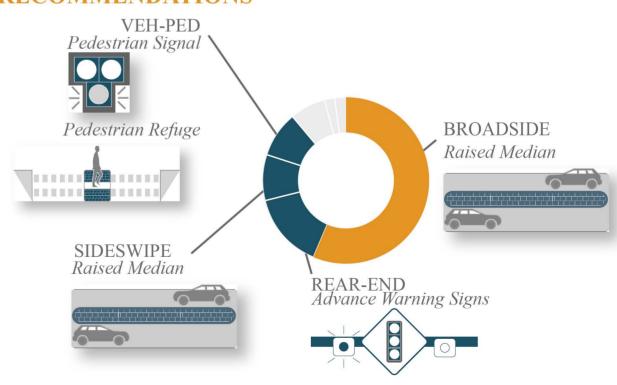






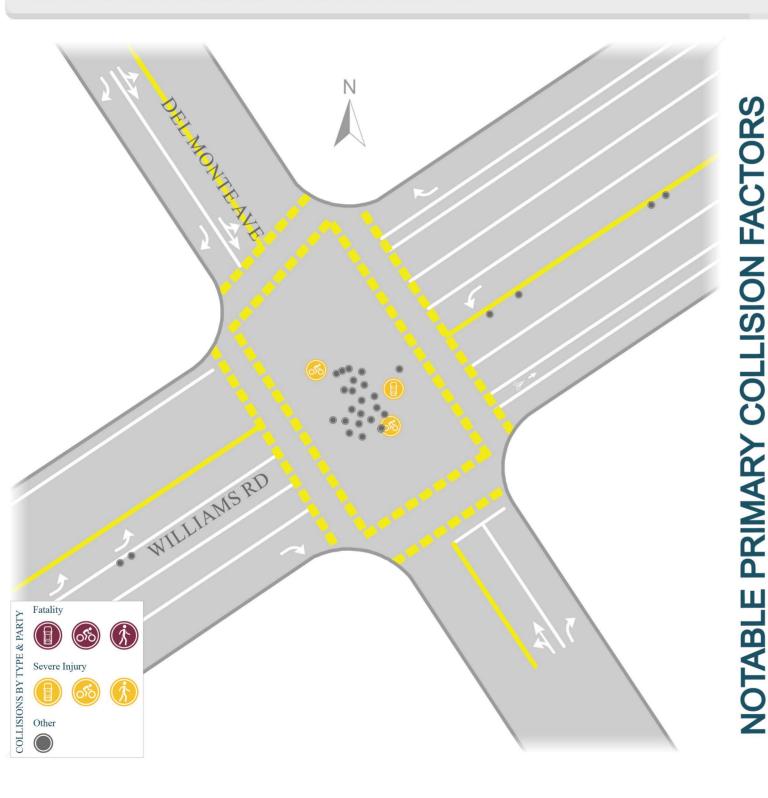


NOTABLE COLLISION TYPES



Williams Road at Del Monte Avenue: 2009-2018

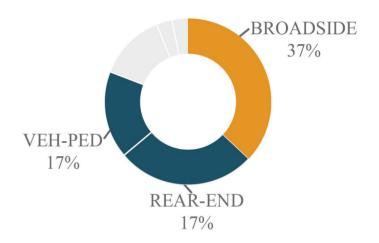




TRAFFIC SIGNALS & SIGNS 23%









Williams Road at Del Monte Avenue: 2009-2018



Williams Road at Del Monte Avenue recommended countermeasures include coordination with other traffic signals along Williams Rd and signal timing and phasing improvements for an improved traffic flow. Protected left turn phasing is recommended to provide safety for motorists making left turns and pedestrians. Additional recommended countermeasures are a pedestrian refuge island median and pedestrian signal. This intersection is part of a corridor improvement on this action plan which recommends a raised median on Williams Rd. Increased traffic enforcement or automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

TRAFFIC SIGNALS & SIGNS Coordinate Traffic Signals



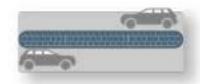
Signal Timing and Phasing



IMPROPER TURNING
Protected Left Turns



Raised Median



PEDESTRIAN VIOLATION

Traffic Education

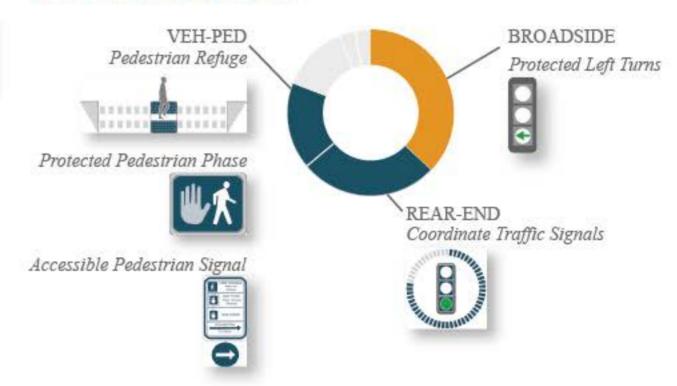
and Outreach



Enforcement

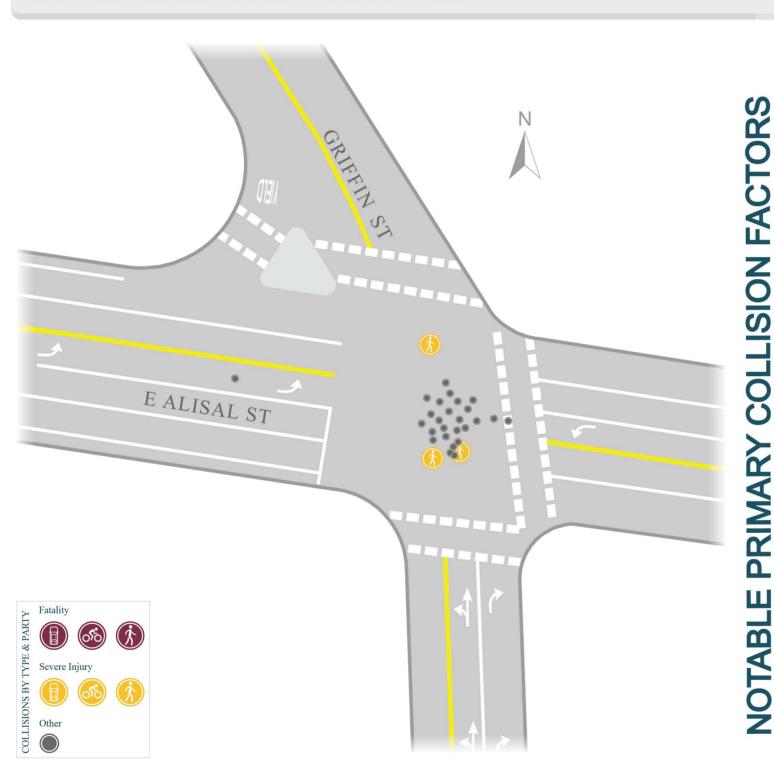


NOTABLE COLLISION TYPES



East Alisal Street at Griffin Street: 2009-2018

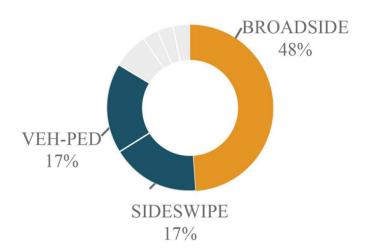


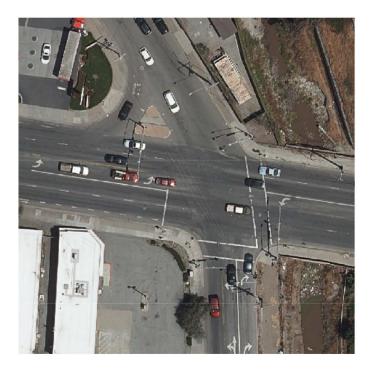












East Alisal Street at Griffin Street: 2009-2018



East Alisal Street at Griffin Street recommended countermeasures include protected left turn phasing and coordination for an improved traffic flow. Retroreflective backplate are recommended on traffic signal heads for more visibility at night. It is also recommended to remove the slip lane and add sidewalk where none exist. Furthermore, a pedestrian refuge island and median is recommended to provide a two-stage crossing. The traffic signal is recommended to include accessible pedestrian signals. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS



TRAFFIC SIGNALS &SIGNS

Retroreflective

Backplate



PEDESTRIAN R/W VIOLATION Accessible Pedestrian Signal

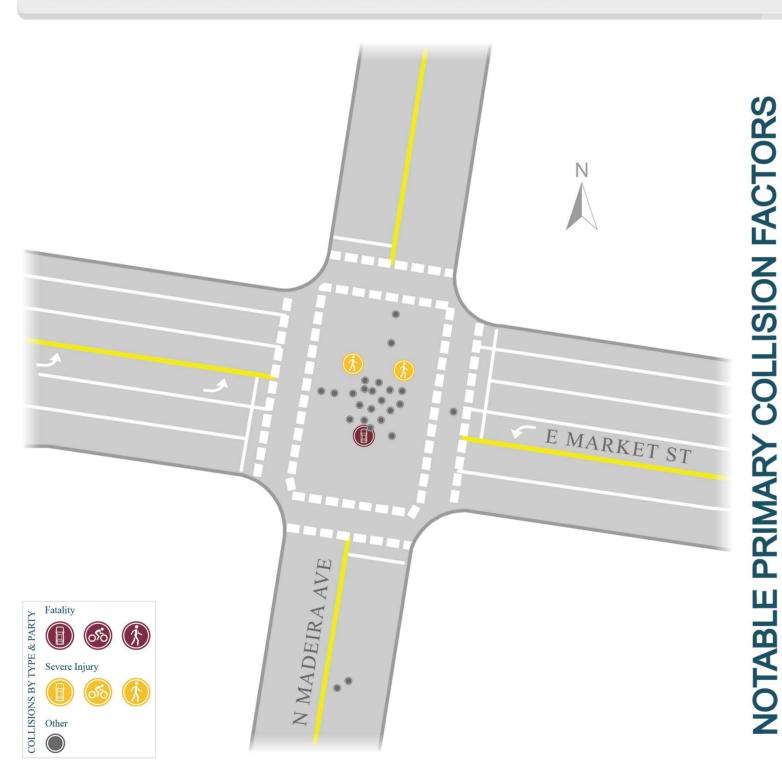


NOTABLE COLLISION TYPES

Protected Pedestrian Phase BROADSIDE Signal Timing and Phasing

East Market Street at North Madeira Avenue: 2009-2018

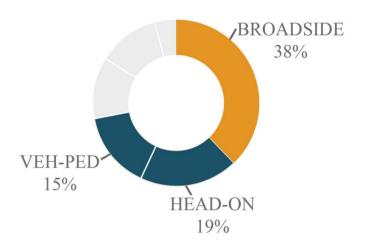




AUTO R/W VIOLATION 27%









East Market Street at North Madeira Avenue: 2009-2018



East Market Street at North Madeira Avenue recommended countermeasures include a raised median and lane reductions which is part of a corridor recommendation on this action plan. Protected left turn phasing traffic signals timing and signal coordination is also recommended. Increased traffic enforcement and automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

AUTO R/W VIOLATION Raised Median





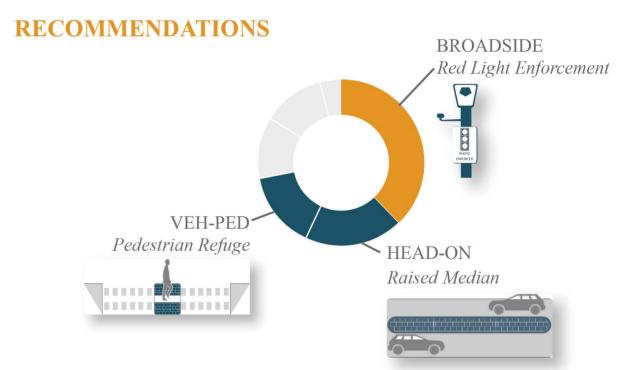






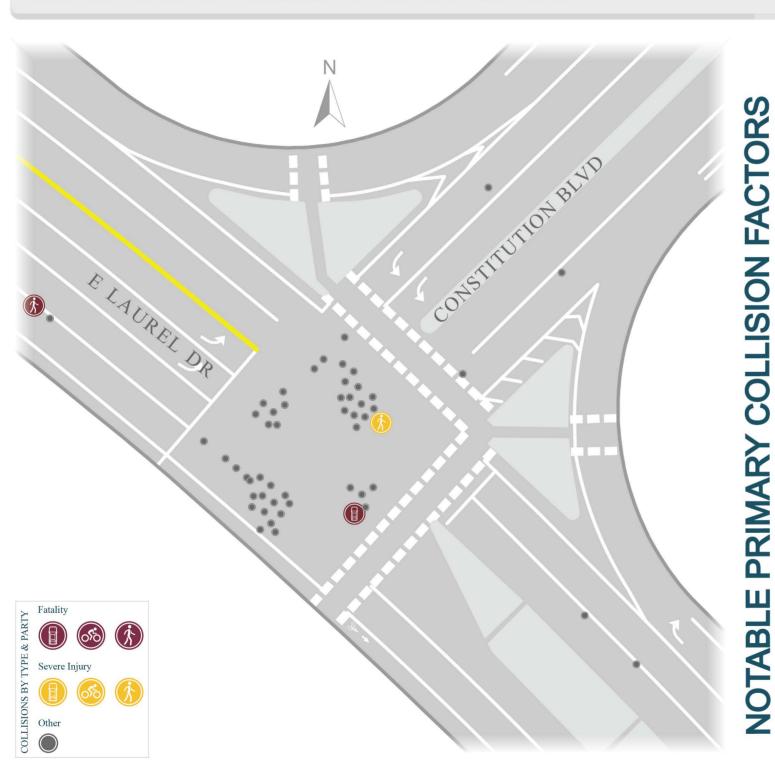
Signal Timing and Phasing





East Laurel Drive at Constitution Boulevard: 2009-2018

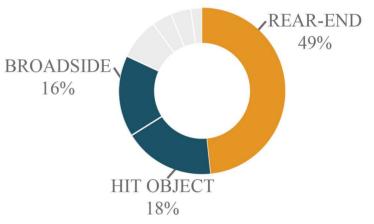


















East Laurel Drive at Constitution Boulevard: 2009-2018

East Laurel Drive at Constitution Boulevard recommended countermeasures include advance warning signs, increase intersection lighting, improved signal timing and coordination. Increased traffic enforcement or automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED

Enforcement

Solution

DUI

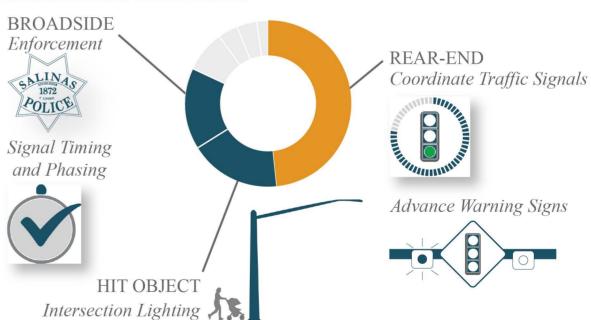
Traffic Education and Outreach



IMPROPER TURNING
Signal Timing and Phasing



NOTABLE COLLISION TYPES

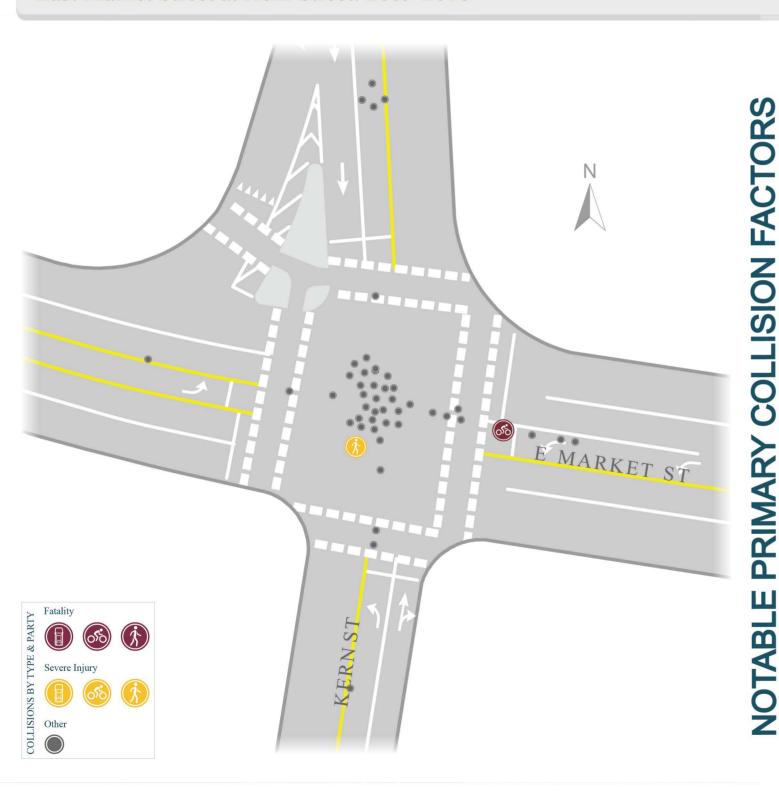


D39

INTERSECTION COLLISIONS

East Market Street at Kern Street: 2009-2018

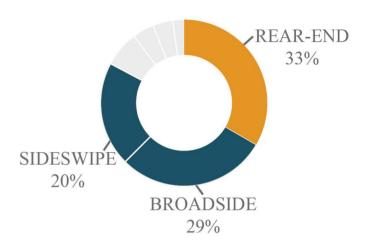














East Market Street at Kern Street: 2009-2018



East Market Street at Kern Street recommended countermeasures include a raised median with street trees and a lane reduction that is part of the corridor recommendations in this action plan. No turn on red is recommended on the Kern St slip lane. Additionally, signal timing and phasing improvements and coordination with other traffic signals is recommended. Guide signs and channelization is recommended to improve access onto US 101. Retroreflective backplate on the traffic signal heads are recommended to provide more visibility at night. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED Enforcement



Raised Median and Street Trees



AUTO R/W VIOLATION Signal Timing and Phasing



TRAFFIC SIGNALS & SIGNS Retroreflective Backplate



NOTABLE COLLISION TYPES



PEDESTRIAN INVOLVED COLLISIONS

North Sanborn Road at Garner Avenue: 2009-2018



PRIMARY COLLISION FACTORS





PEDESTRIAN INVOLVED COLLISIONS RECOMMENDATIONS

North Sanborn Road at Garner Avenue

North Sanborn Road at Garner Avenue recommended countermeasures include accessible pedestrian signal, protected pedestrian phase, reflective backplates for visibility at night, coordination of traffic signals and pedestrian refuge island. Increased traffic enforcement or automated red-light enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS

PEDESTRIAN R/W VIOLATION Accessible Pedestrian Signal



PEDESTRIAN VIOLATION Traffic Education and Outreach



TRAFFIC SIGNALS AND SIGNS Retroreflective Backplate







OTHER

RECOMMENDATIONS

Leading Pedestrian Phase



Evaluate Pedestrian Refuge



Protected Left Turns



Coordinate Traffic Signals

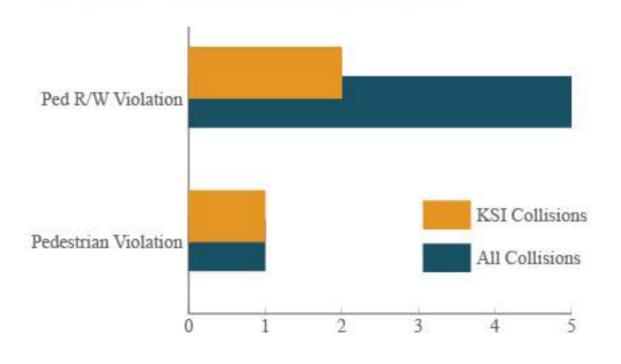


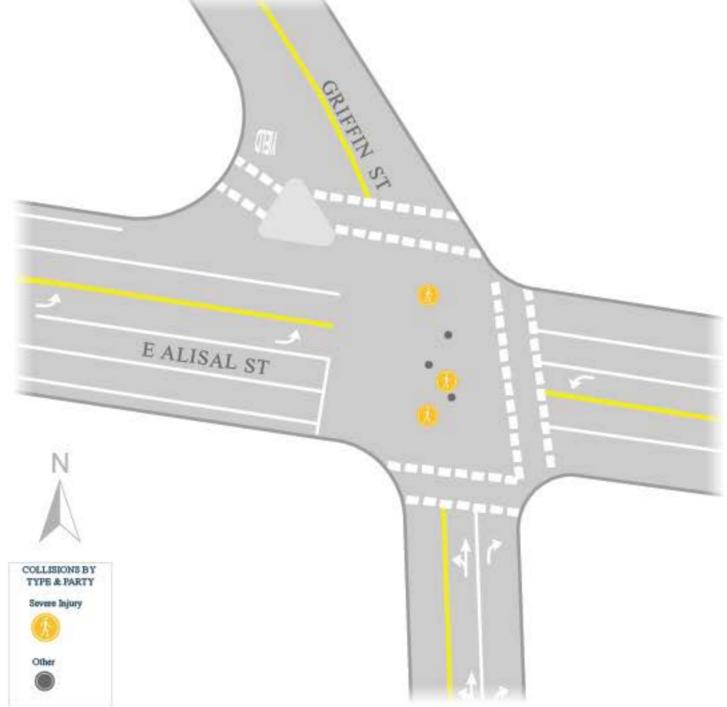
PEDESTRIAN INVOLVED COLLISIONS

East Alisal Street at Griffin Street: 2009-2018



PRIMARY COLLISION FACTORS





PEDESTRIAN INVOLVED COLLISIONS RECOMMENDATIONS

East Alisal Street at Griffin Street

East Alisal Street at Griffin Street recommended countermeasures include protected left turn phasing and coordination for an improved traffic flow. Retroreflective backplate are recommended on traffic signal heads for more visibility at night. It is also recommended to remove the slip lane and add sidewalk where none exist. Furthermore, a pedestrian refuge island and median is recommended to provide a two-stage crossing. The traffic signal is recommended to include accessible pedestrian signals. Increased traffic enforcement or automated red-light enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS

PEDESTRIAN R/W VIOLATION Accessible Pedestrian Signal

Traffic Education

and Outreach

PEDESTRIAN VIOLATION









OTHER

RECOMMENDATIONS

Pedestrian Refuge



 $Retroreflective\ Backplate$



Eliminate Slip Lane



Signal Timing and Phasing



Leading Pedestrian Phase

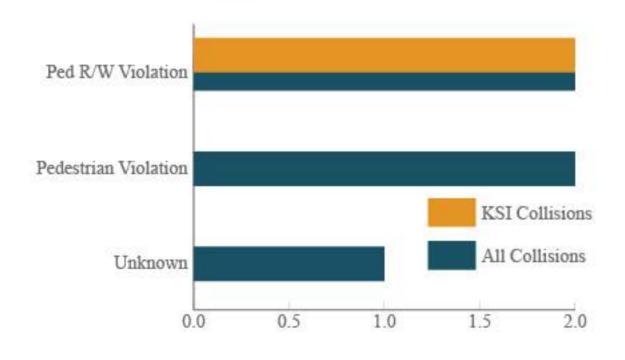


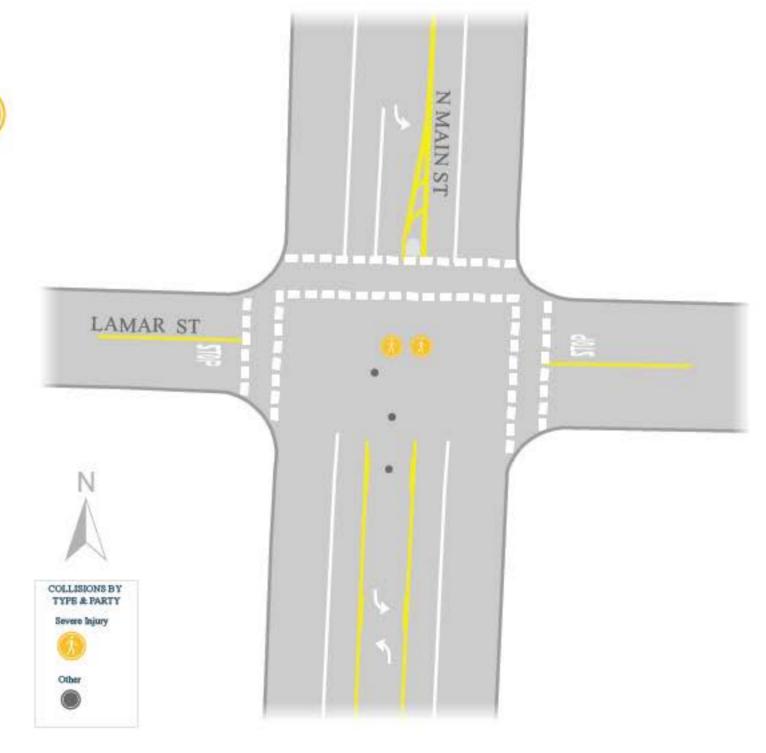
PEDESTRIAN INVOLVED COLLISIONS

North Main Street at Lamar Street: 2009-2018



PRIMARY COLLISION FACTORS





PEDESTRIAN INVOLVED COLLISIONS RECOMMENDATIONS

North Main Street at Lamar Street

North Main Street at Lamar Street recommended countermeasures include pedestrian refuge island and median to provide a two-stage crossing. It is recommended to evaluate a pedestrian hybrid beacon or traffic signal at the intersection to stop traffic. A new signal or hybrid beacon would require coordination. Traffic education and outreach as well as increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS



High Visibility Crosswalk



OTHER

RECOMMENDATIONS



Pedestrian Hybrid Beacon



UNKNOWN

Enforcement

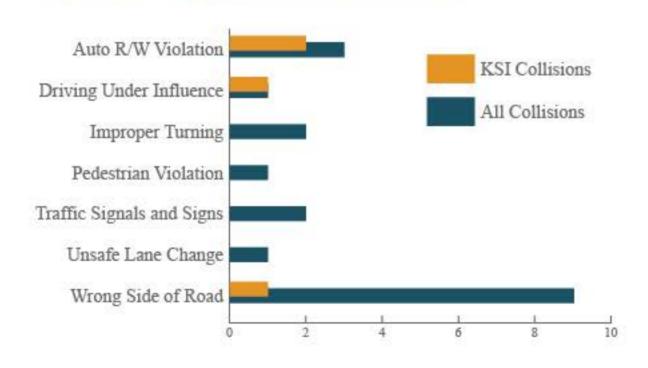


BICYCLE INVOLVED COLLISIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018



PRIMARY COLLISION FACTORS





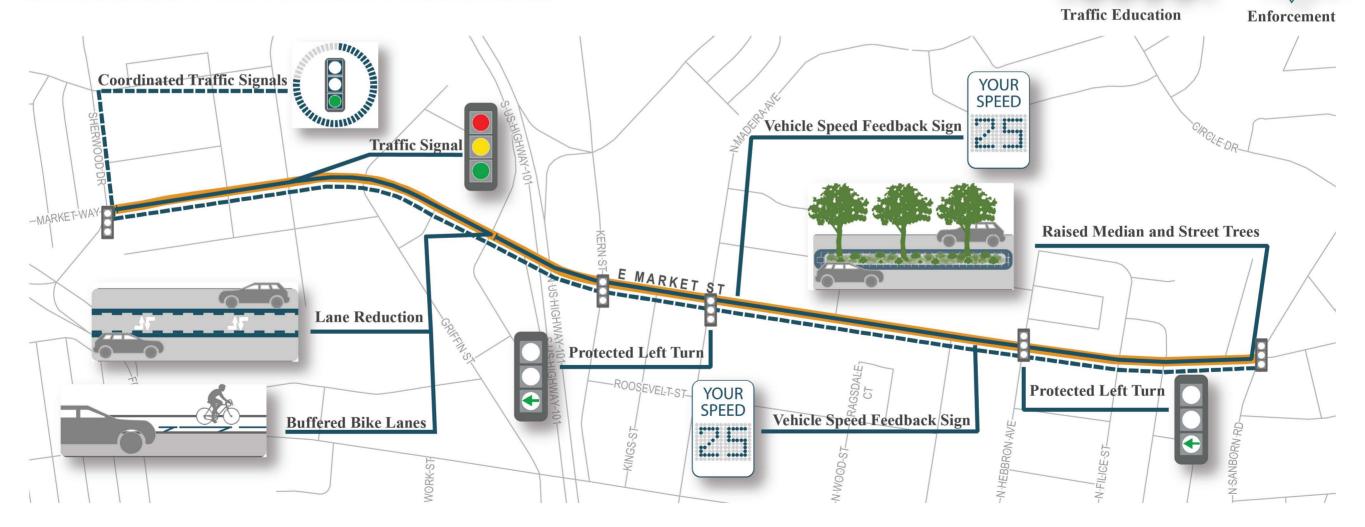
BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision

potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.



BICYCLE INVOLVED COLLISIONS

West Laurel Drive, from North Davis Road to North Main Street: 2009-2018



BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS

West Laurel Drive, from North Davis Road to North Main Street

West Laurel Drive between North Davis Road and North Main Street recommended countermeasures include a raised median and street trees to limit left turn at minor roads and driveways, buffered bike lanes, reduced speed limit for school zone, and vehicle speed feedback signs. All traffic signals are recommended to be coordinated. Increased traffic enforcement is recommended.



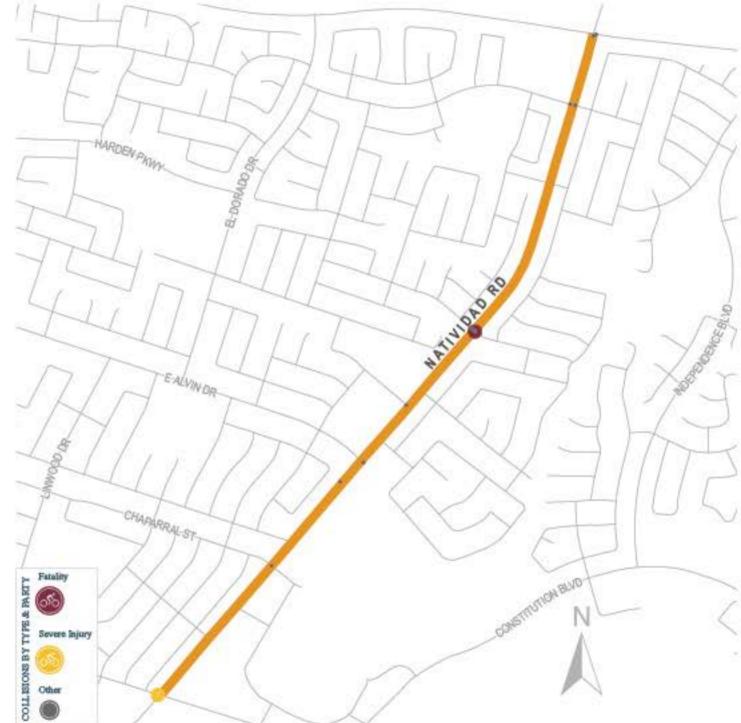
BICYCLE INVOLVED COLLISIONS

Natividad Road, from Boronda Road to East Laurel Drive: 2009- 2018



PRIMARY COLLISION FACTORS



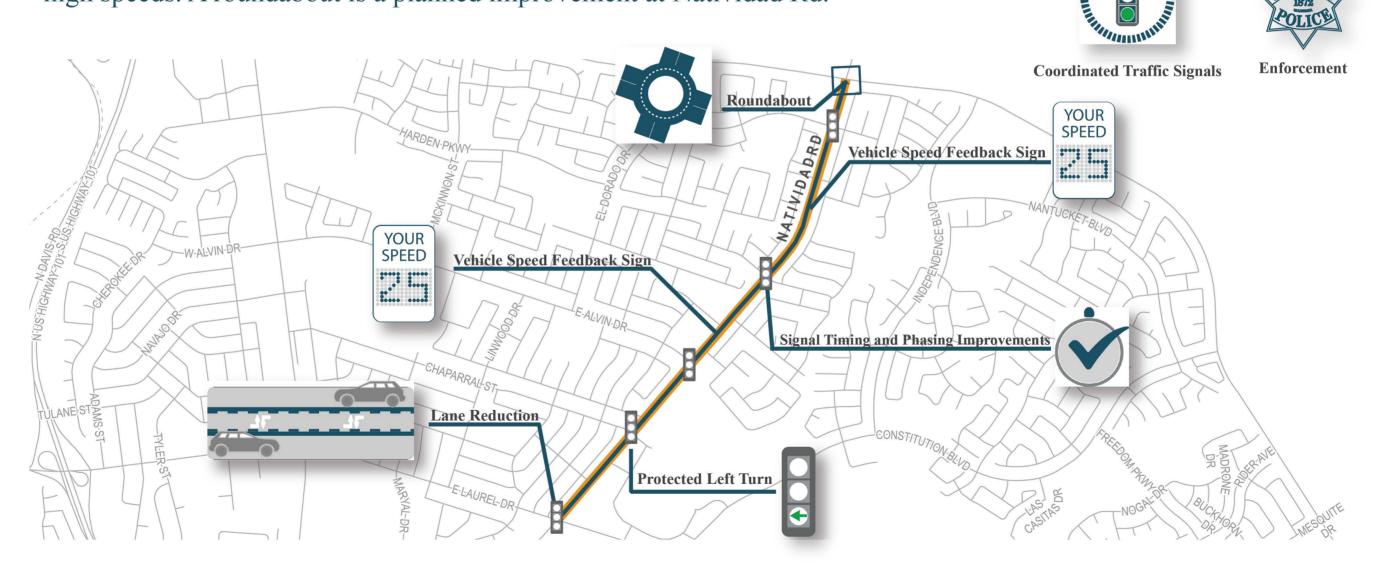


BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS

Natividad Road, from Boronda Road to East Laurel Drive

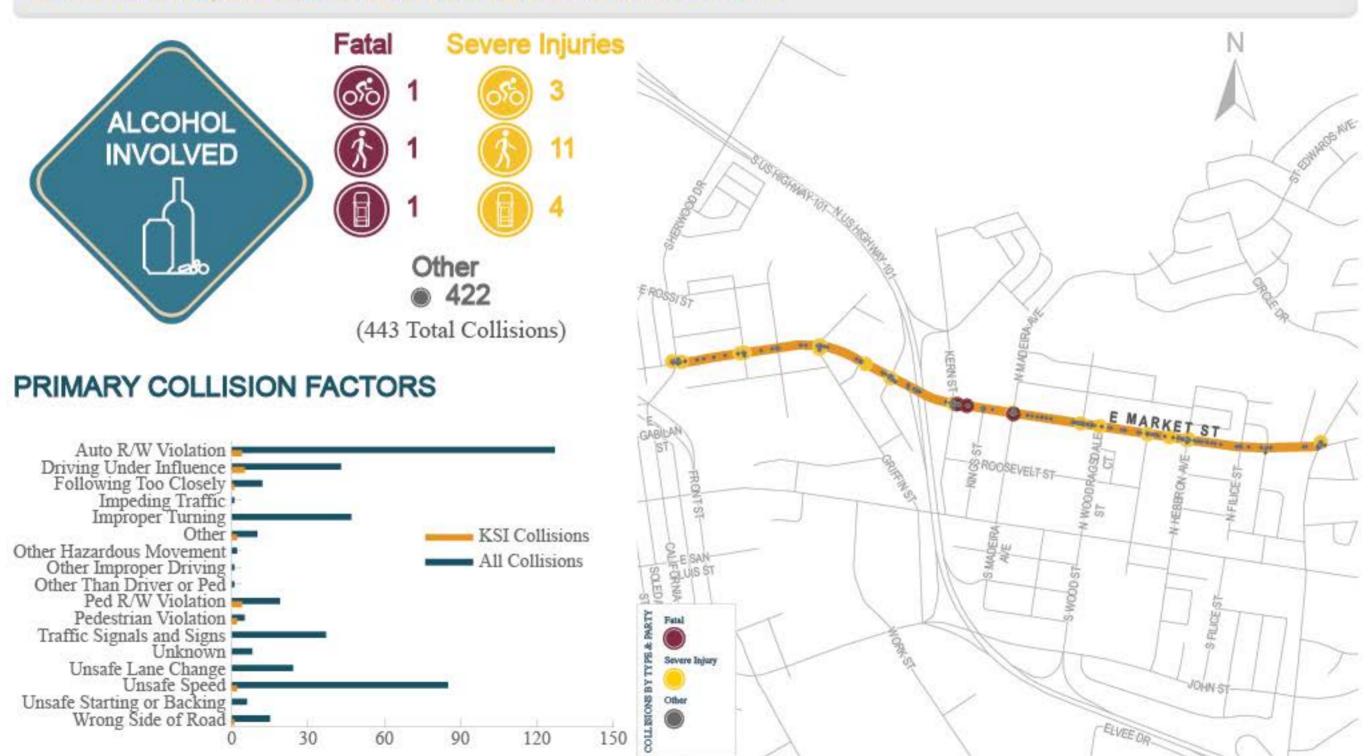
Natividad Road between East Laurel Drive and Boronda Road recommended countermeasures include consideration of a 6 to 4 lane reduction with protected bike lanes to provide connection to existing bike facilities. It is recommended to reduce the number of median crossing and limit access on minor roads. Signals are recommended to include bicycle detection and improved timing, coordination of traffic signals, and protected left turn phasing.

The corridor is recommended to include vehicle speed feedback sign to warn motorists of high speeds. A roundabout is a planned improvement at Natividad Rd.



ALCOHOL INVOLVED COLLISIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018



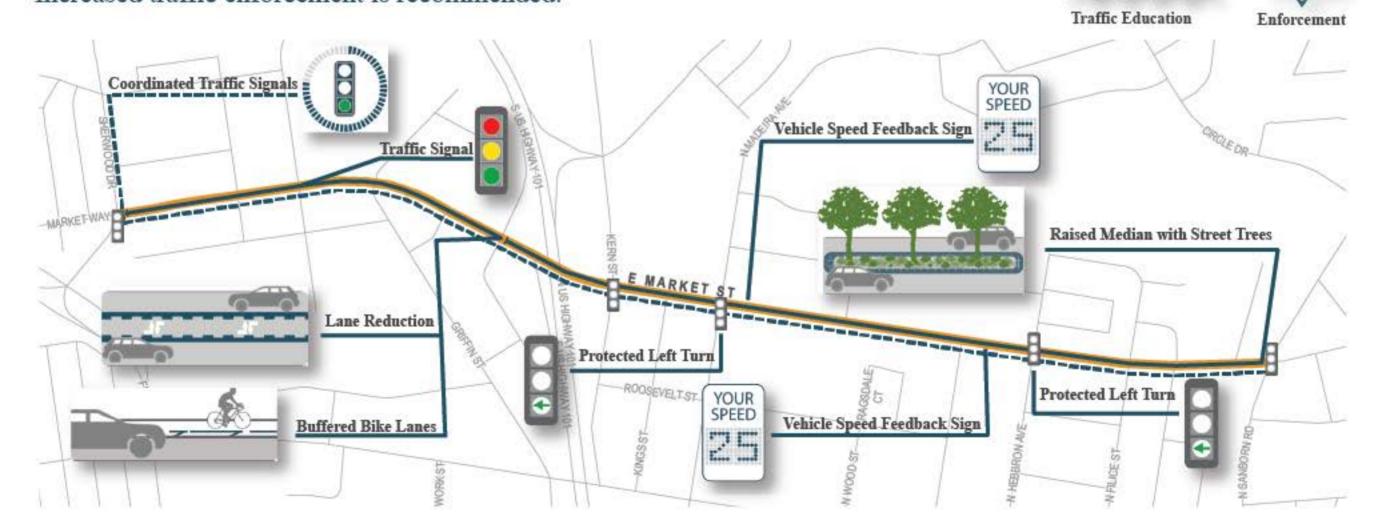
ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

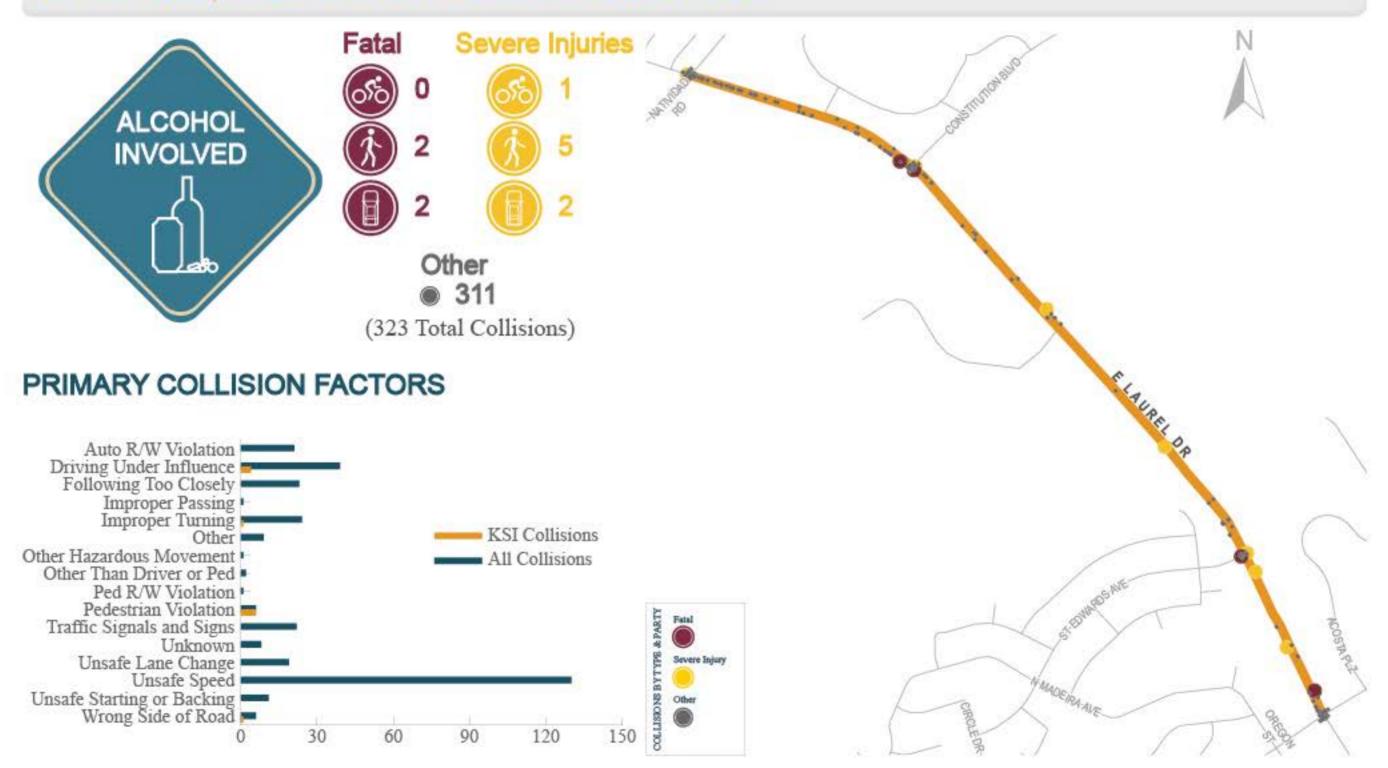
East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision

potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.



ALCOHOL INVOLVED COLLISIONS

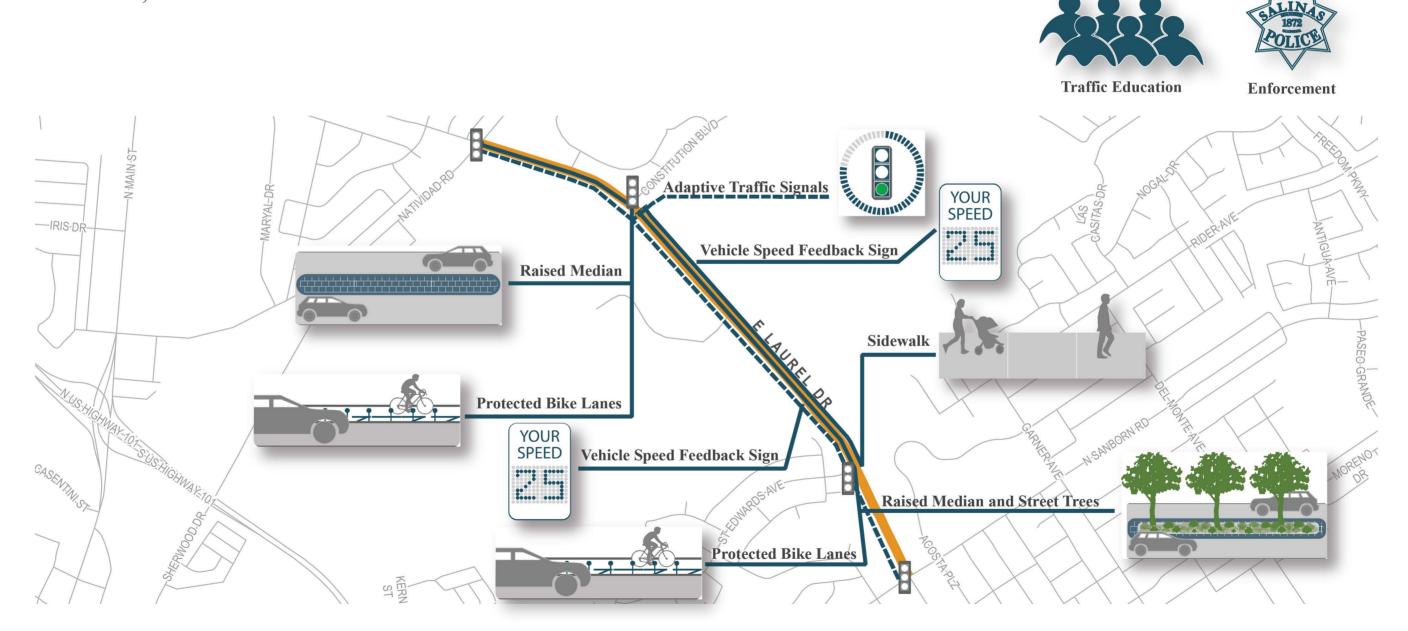
East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018



ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

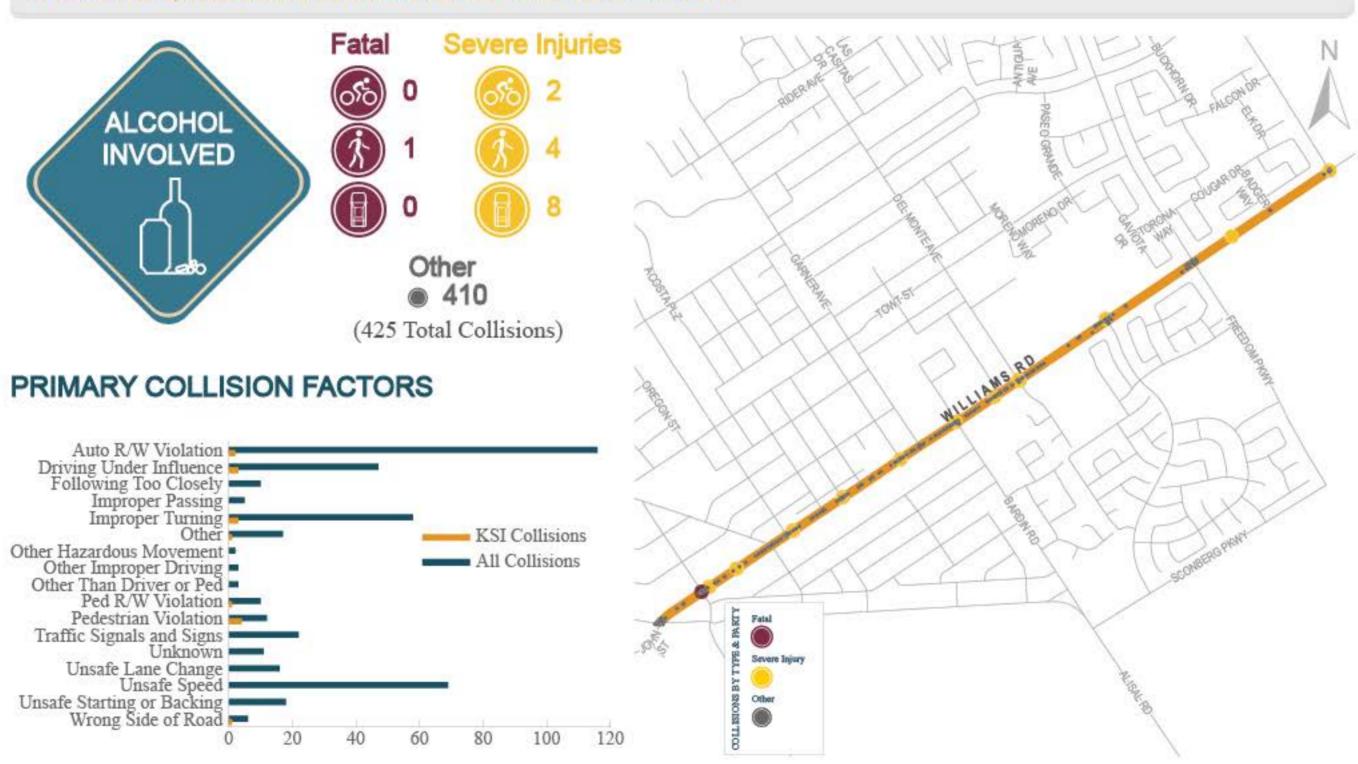
East Laurel Drive between Natividad Road and Constitution Boulevard recommended countermeasures include a raised median with street trees and protected bike lanes. An adaptive traffic signal system is recommended to reduce collision potential. To reduce speed throughout the corridor radar feedback signs are recommended to slow down vehicles, and increased traffic enforcement is recommended



D57

ALCOHOL INVOLVED COLLISIONS

Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

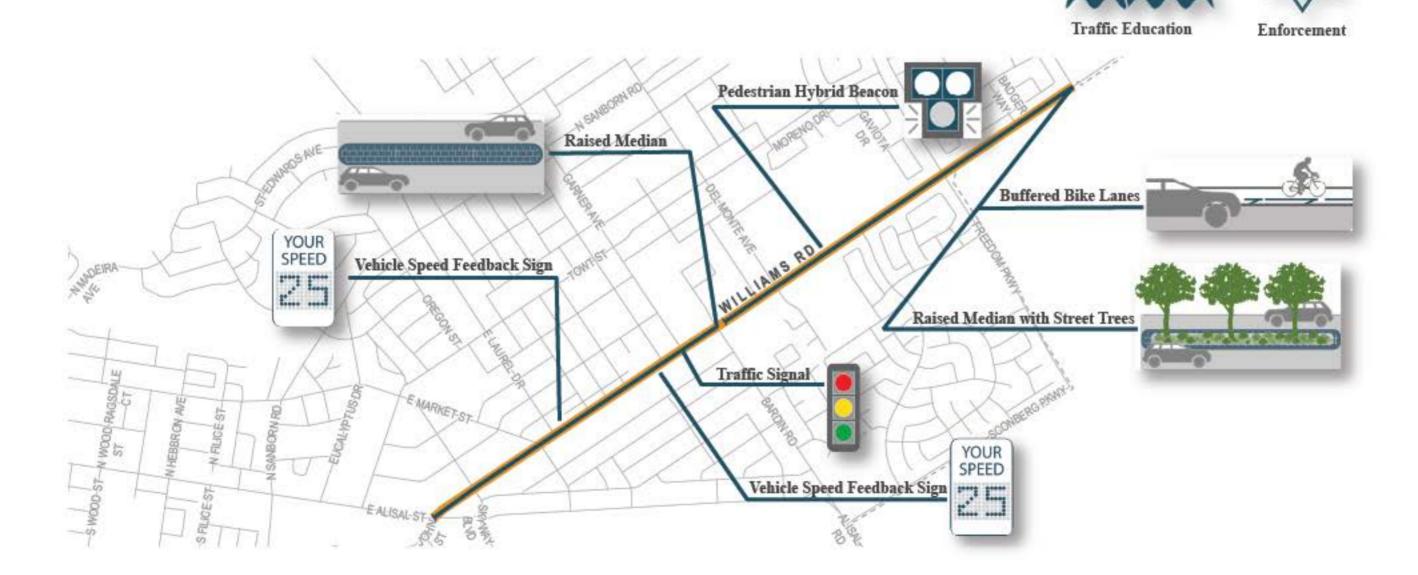


ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

Williams Road between East Alisal Street to Bardin Road recommended countermeasures include a raised median and a new traffic signal at Williams Rd and Garner Ave. Williams Road between Bardin Road and Boronda Road recommended countermeasures include a raised median and street trees, and adding buffered bike lanes. A pedestrian hybrid beacon is recommended to provide driver visibility of crosswalk location.

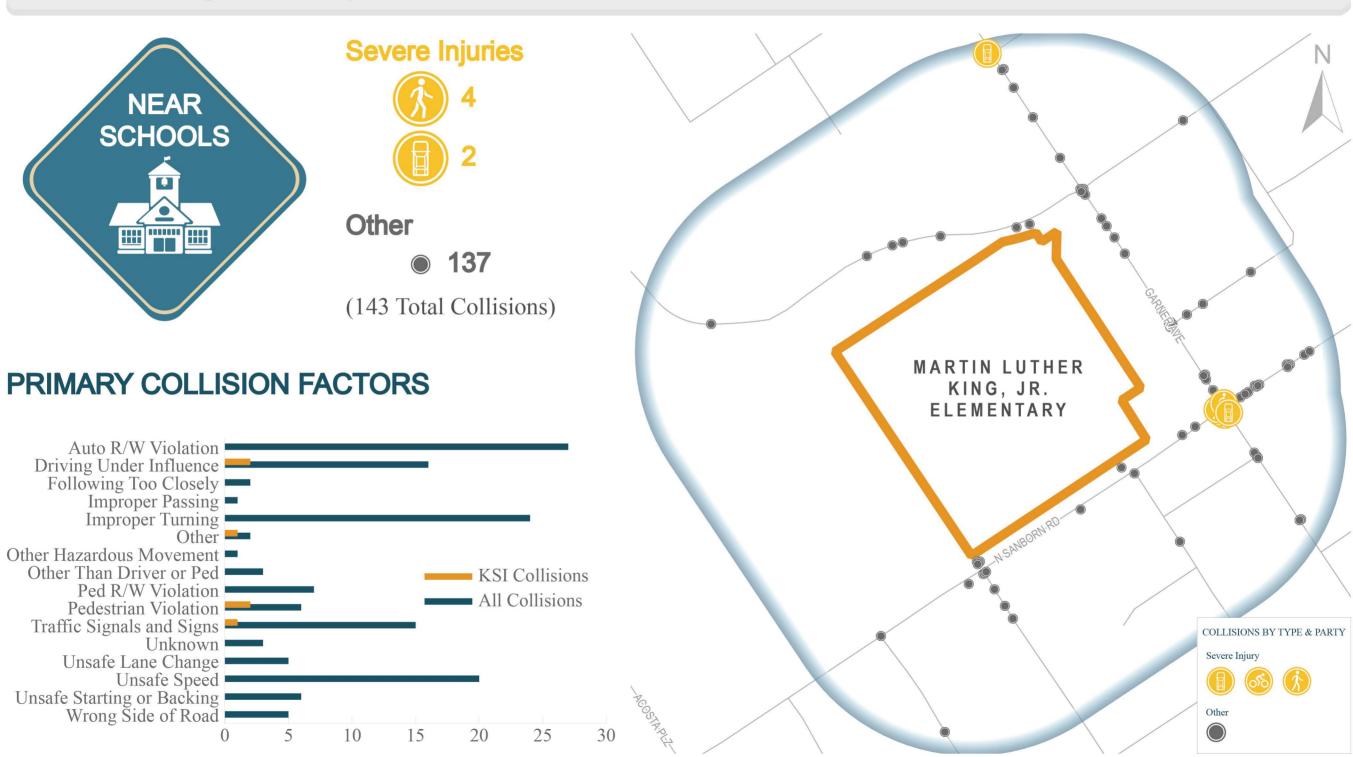
Increased traffic enforcement is recommended.



D59

NEAR SCHOOLS COLLISIONS

Martin Luther King Jr. Elementary School



NEAR SCHOOLS COLLISIONS RECOMMENDATIONS

Martin Luther King Jr. Elementary School

Recommended countermeasures near Martin Luther King Jr. Elementary School include traffic education and traffic safety outreach. Recommended infrastructure improvements include improved signal phasing, coordination and leading pedestrian interval. A pedestrian refuge island and median to provide a two-stage crossing. Curb extensions are recommended where feasible. Bike lanes and bike facilities are recommended on N Sanborn Rd. Increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS



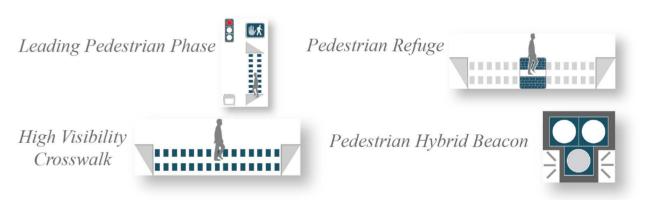






OTHER

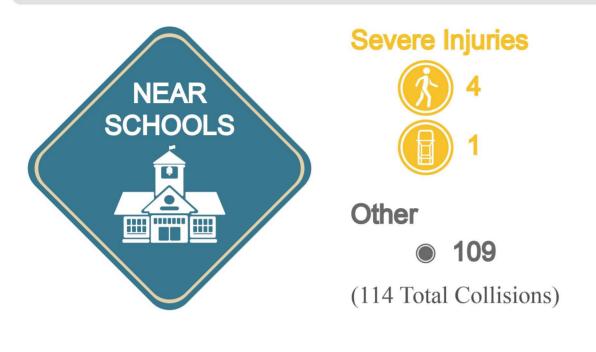
RECOMMENDATIONS



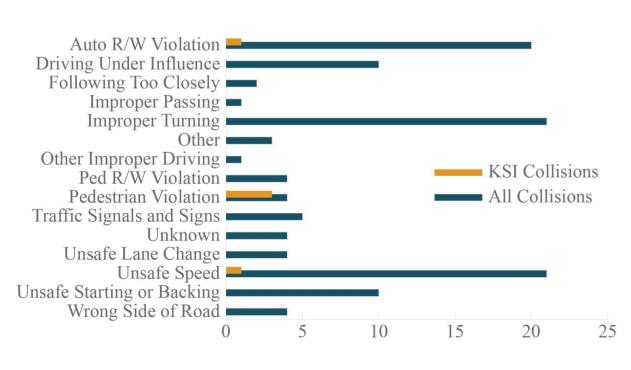


NEAR SCHOOLS COLLISIONS

Sacred Heart School



PRIMARY COLLISION FACTORS





NEAR SCHOOLS COLLISIONS RECOMMENDATIONS

Sacred Heart School

Recommended countermeasures near Sacred Heart School include traffic education and traffic safety outreach. It is also recommended to eliminate on-street parking and to install buffered bike lanes on W Market St. Additionally, it is recommended to restrict left turn access on W Market St with a raised median. The raised median should include a pedestrian refuge island to provide a two-stage crossing. Increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

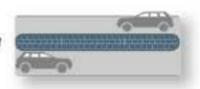
RECOMMENDATIONS







Raised Median



OTHER

RECOMMENDATIONS



Pedestrian Hybrid Beacon 🎈



Bulb Outs and Curb Extensions







Vehicle Speed Feedback Sign

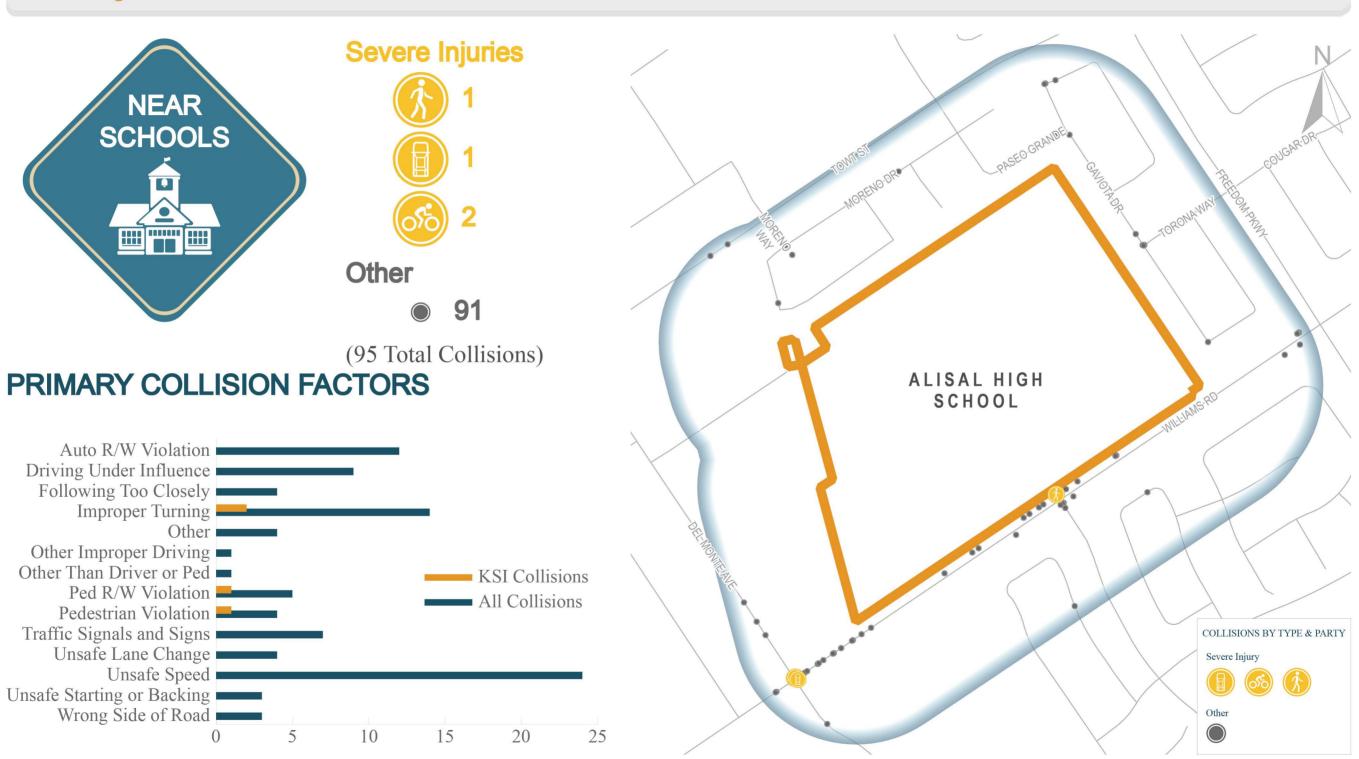


Reduced Speed School Zone



NEAR SCHOOLS COLLISIONS

Alisal High School



NEAR SCHOOLS COLLISIONS RECOMMENDATIONS

Alisal High School

Recommended countermeasures near Alisal High School include traffic education and traffic safety outreach. It is recommended to evaluate a lane reduction on Williams Road, street trees, and vehicle speed feedback signs are recommended to reduce speeds. Protected bike lanes are recommended on Williams Road. Increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS

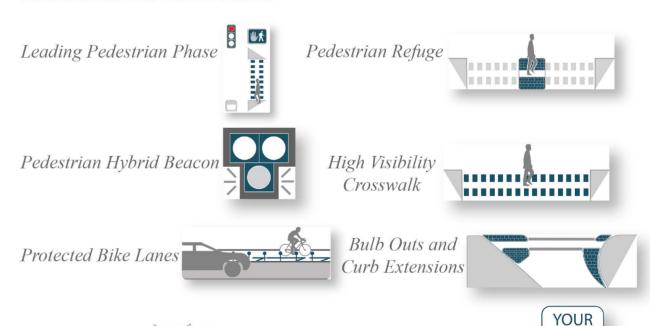






OTHER

RECOMMENDATIONS



Enforcement



Vehicle Speed Feedback Sign

SPEED



RESOLUTION NO. 22184 (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL ADOPTING THE SALINAS VISION ZERO ACTION PLAN.

WHEREAS, City Council passed a Resolution adopting a Vision Zero Policy, which set a clear goal of eliminating fatal and severe injuries collisions; and

WHEREAS, the Vision Zero Action Plan is a data driven approach, which utilizes historical collision data in order to identify collision patterns and trends; and

WHEREAS, high frequencies of collisions led to identifying emphasis areas where the City can prioritize a response and recommend actionable strategies with the goal of eliminating severe injury and fatal crashes; and

WHEREAS, the Vision Zero Action Plan is the City's play book to achieve this goal; and

WHEREAS, the City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act; and

WHEREAS, at its July 8, 2021 meeting, the Traffic and Transportation Commission voted unanimously (6-0) to recommend to Council that the City Council approve a Resolution adopting the Salinas Vision Zero Action Plan.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Salinas that the Salinas Vision Zero Action Plan is hereby adopted.

PASSED AND APPROVED this 14th day of September 2021 by the following vote:

AYES: Councilmembers: Barrera, Cromeenes, González, Osornio, Rocha, McShane, and Mayor Craig

NOES: None

ABSENT: None

ABSTAIN: None

APPROVED:

DocuSigned by:

Kimbley Craig, Mayor

ATTEST:

5BE31EC636A6432...

DocuSigned by:

Patricia M. Barajas, City Clerk

Crosswalk Policy Guidelines

Prepared for: City of Salinas

June 2014

SJ11_1252

FEHR PEERS

Table of Contents

1. Introduction	1
2. Background and Context	2
Policy Context	2
General Plan	2
Pedestrian Plan	3
Existing Marked Crosswalk Inventory	4
3. Crosswalk Fundamentals	7
Types of Crosswalks	7
Where Is Crossing the Street Legal?	8
Why do Cities Mark Crosswalks?	9
Steps to Identify Candidate Locations for Marked Crosswalks	9
When to Install Marked Crosswalks	10
4. Uncontrolled Crossing Enhancement Toolbox	13
crosswalk Safety Research	13
Mid-Block Crossings	13
Treatment Selection	15
Treatment Options	17
5. Controlled Crosswalk Treatment Toolbox	25
Preferred Crossing Treatments	25
Enhanced Crossing Treatments	28
6. Creative Crosswalk Guidelines	42
Guidelines for the implementation of creative crosswalks	44
7. Education, Enforcement, and Encouragement Programs	49
Education	49
Enforcement	49
Encouragement	50
Pedestrian Collision Analysis	56
Primary Collision Factor	60

Day of the Week	61
Weather Conditions	62
Age Statistics	63
Near Schools	63
Summary	63
Appendices	
Appendix A: Citywide Crosswalk Inventory	51
Appendix B: Pedestrian Level of Service Calculations	52
Appendix C: Pedestrian Collision Analysis	55
List of Figures	Appendices Appendices swalk Inventory
Figure 1: City of Salinas Map	6
Figure 2: Marked Crosswalk Placement Flowchart	11
Figure 3: Feasibility Analysis for Treatments at Uncontrolled Locations	12
Figure 4: Salinas Pedestrian-Vehicle Collisions, 2005-2010	57
Figure 5: Salinas Pedestrian-Vehicle Collisions Resulting in Injuries and/or Fatalities, 2005-2010	59
Figure 6: Pedestrian-Vehicle Collisions for School-Age Children Occurring within ¼-Mile of Schools	65

List of Tables

Table 1: Recommendations for Installing Marked Crosswalks and Other Needed Pedestrian Improve	ements
at Uncontrolled Locations	15
Table 2: Application of Enhanced Treatments for Uncontrolled Locations	17
Table 3: Uncontrolled Crossings: Geometric Treatments	18
Table 4: Uncontrolled Crossings: Striping and Signage	21
Table 5: Uncontrolled Crossings: Beacon, Lighting, and Signal Treatments	23
Table 6: Controlled Intersections: Geometric Treatments	29
Table 7: Controlled Intersections: Striping and Signage	34
Table 8: Controlled Intersections: Signal Hardware and Operational Measures	36
Table 9: Pedestrian LOS Calculations	53
Table 10: Top Pedestrian-Vehicle Collision Locations, Salinas, 2005-2010	56
Table 11: Top Pedestrian-Vehicle Collisions Locations, Injury or Fatality, 2005-2010	58
Table 12: Primary Collision Factors (PCFs) for Pedestrian-Vehicle Collisions in Salinas, 2005-2010	60
Table 13: Age Ranges for Pedestrian-Vehicle Collisions in Salinas, 2005-2010	63

1. INTRODUCTION

The City of Salinas initiated development of these Crosswalk Policy Guidelines to prescribe a formal and transparent process for marked crosswalk implementation. The City regularly receives requests to install marked crosswalks from residents, businesses, and institutions. However, designing a safe roadway crossing for pedestrians is a complex process; the installation of crosswalk striping alone does not necessarily constitute a safe pedestrian crossing.

The Crosswalk Policy Guidelines are aimed at improving pedestrian safety and enhancing pedestrian mobility. A comprehensive pedestrian safety strategy contains a three-pronged approach of engineering, enforcement, and education programs. This document focuses on engineering elements, such as pedestrian crossing treatments and intersection design.

This document describes the function of crosswalks and their legal context in the California Vehicle Code. It discusses the advantages and disadvantages of marked crosswalks and summarizes research in the United States focused on pedestrian safety and crosswalks. It provides a summary of best practices related to numerous pedestrian treatments, including geometric, signage and striping, and signal hardware or operational measure treatments.

The purpose of this document is to enable the City to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. It provides information to be used when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.

This report was produced in cooperation with the City of Salinas. The suggestions presented in this report are based on local knowledge, data analysis, and discussions with the City of Salinas. These suggestions, which reflect general knowledge of best practices in pedestrian design and safety, are intended to guide City staff in making decisions for future safety improvement projects in the City, and they may not incorporate all factors that may be relevant to the pedestrian safety issues in the City. Final implementation of these guidelines will at all times involve engineering judgment.



2. BACKGROUND AND CONTEXT

The City of Salinas has several planning-level documents that provide the primary policy context for this *Crosswalk Policy*. These documents provide policy support for pedestrian-friendly land uses, built environment characteristics, and design standards in Salinas. This chapter provides a summary of the City's relevant plans and polices that address pedestrian safety, including the *General Plan* and *Pedestrian Plan*.

POLICY CONTEXT

GENERAL PLAN

The City's current *General Plan* (September 2002) includes several elements that address the pedestrian environment and safety, including the housing element, conservation/open space element, community design element, and circulation element. The *General Plan* used new urbanism principles to guide the future transportation and land use development in the City. The following goals and policies provide support for pedestrian-friendly design within Salinas:

- Community Design Element, Goal 3: Create a community that promotes a pedestrian-friendly, livable environment.
 - Policy CD-3.1: Create and preserve the distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:
 - An approximately 5-minute walk from perimeter to center;
 - Housing densities should increase from perimeter to center (i.e., neighborhoods should be more densely populated at the center);
 - The neighborhood center should be the location of retail space, office space, and upper story residential above commercial and office space;
 - A civic or public space such as a plaza or park should be at the neighborhood center;
 - Small parks should be distributed throughout the neighborhood;
 - Schools should lie within the neighborhood and be easily accessible and within walking distance;
 - When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across a pedestrian-friendly boulevard; and



- Front yard setbacks should decrease from the neighborhood edge to neighborhood center.
- Policy CD-3.6: Provide and maintain a pedestrian-friendly atmosphere by encouraging "pedestrian zones" with increased landscaping, use of traffic-calming techniques on local streets, adequate separation of automobile traffic, and the inclusion of amenities such as lighted crosswalks and increased lighting along sidewalks.
- Policy CD-3.8: Promote the use of alternative modes of transportation, including bus, rail, bicycling, and walking.
- Circulation Element, Goal C-5: Provide safe routes to school, work, shopping, and recreation for pedestrians.
 - o Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.
 - Policy C-5.2: Encourage all new bus stops and changes in existing bus stops to take pedestrian access into consideration.
 - Policy C-5.3: Ensure that all pedestrian route improvements meet with ADA standards for accessibility.
 - o Policy C-5.4: Encourage parking lot designs that promote pedestrian access and safety.
 - Policy C-5.5: Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes.

Housing

- Policy H-1.10: Promote the development of neighborhoods, or sub-communities, designed to
 encourage pedestrian and mass transit by offering employment or services for the daily needs
 of residents, while reducing the need for autos.
- Conservation/Open Space
 - Policy COS-6.4: Support alternative modes of transportation, such as walking, biking, and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.
 - Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes, and other services to the integrated trails network.

PEDESTRIAN PLAN

The City of Salinas' *Pedestrian Plan* was adopted in May 2004 to support the principles and policies of the City's *General Plan*. The *Pedestrian Plan* includes goals and strategies to increase walking in the City in



support of health, transportation, quality of life/social, economic, and environmental benefits. The plan specifically outlines these goals:

- 1. Promote the development and design of pedestrian facilities that are convenient, safe, attractive, comfortable, interesting, and interconnected to provide continuity of travel
- 2. Reduce the number of pedestrian-related accidents in Salinas
- 3. Condition New Development to install appropriate streets, sidewalks, pedestrian access ramps, traffic calming measures, lighting, and related facilities to encourage walking
- 4. Develop a Traffic Calming Policy to address vehicular speeds in residential and commercial areas
- 5. Develop a Suggested Routes to School Program for all elementary schools in Salinas
- 6. Educate the general public to increase the number of overall walking trips within Salinas
- 7. Identify needs of walking districts or areas to increase walking trips

The *Pedestrian Plan* includes strong policy support, as well as a project list for infrastructure upgrades and ongoing programs to encourage walking in the City. Appendix A of the Plan also includes a Pedestrian Facilities Toolbox, with design guidance for some pedestrian facilities and treatments, such as sidewalks/walkways, curb ramps, crosswalks, transit stops, driveways, curb radii, and roadway lighting.

The Plan's guidance for marked crosswalks has a three-pronged approach as follows:

- Accessibility The crosswalk be located for convenient pedestrian access, preferably at controlled intersections (signals, all-way stops, etc.).
- Design The design, use, and installation of crosswalks shall conform to the Caltrans Traffic
 Manual and Federal Manual of Uniform Traffic Control Devices (MUTCD), most recent edition.1
- Safety Crosswalk markings must be placed to include a ramp so that a wheelchair does not have to leave the crosswalk to access the ramp.

EXISTING MARKED CROSSWALK INVENTORY

An up-to-date inventory of existing pedestrian facilities is an important and efficient approach to identify gaps and deficiencies in the existing pedestrian network. The City maintains this inventory in a computer aided drafting (CAD) database, and applies it to citywide Suggested Routes to Schools maps for distribution

¹ As of April 2013, the most recent editions include the California Manual of Uniform Traffic Control Devices (2012), based on the Federal Highways Administration (FHWA) Manual of Uniform Traffic Control Devices (2009).



to local schools in the City. This section summarizes the existing marked crosswalk inventory within Salinas, current as of April 2013. **Figure 1** presents a map of the City of Salinas.

Appendix A presents a Citywide map showing existing marked crosswalks in the City, with a note if they are located at a stop-sign or traffic signal, in a school zone, or have been upgraded with other enhancements. Twenty-eight (28) enhanced crosswalks are currently marked in Salinas, generally at uncontrolled locations near schools, such as El Gablan Elementary, on Linwood Drive at Sequoia Street as shown in the photo below. These crossings are enhanced with high visibility, continental style markings with alternating white and fluorescent yellow-green blocks, which is an application unique to Salinas, and "LOOK" stencils at each corner encouraging pedestrians to look both ways before crossing.

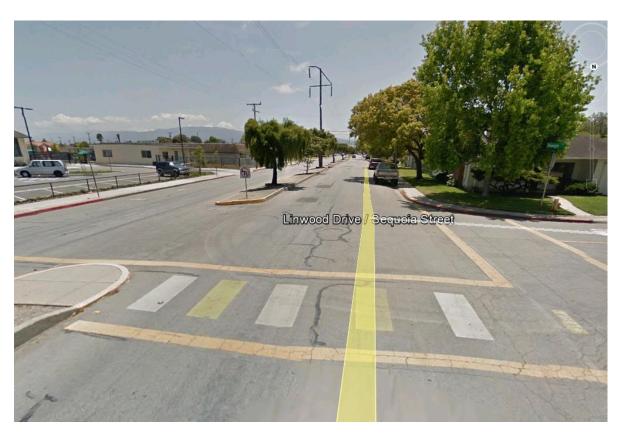




Figure 1: City of Salinas Map



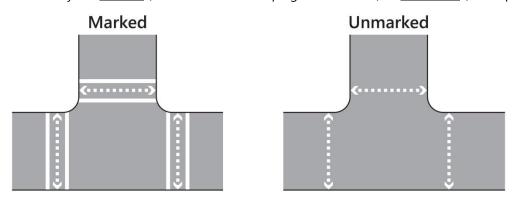
3. CROSSWALK FUNDAMENTALS

Pedestrian crossing and right-of-way laws vary state to state, and are often a source of driver or pedestrian uncertainty and confusion for when crossing is legal. This section outlines the types of crosswalks, where crossing the street is legal in California, and the steps the City should take in identifying locations for marked crosswalks.

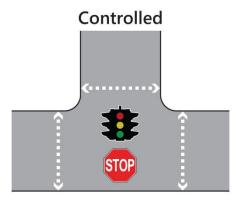
TYPES OF CROSSWALKS

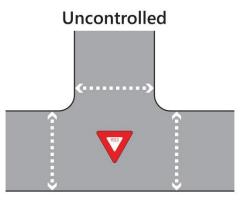
Crosswalks are primarily classified by three characteristics:

1) Whether they are <u>marked</u> (demarcated with striping on the street) or <u>unmarked</u> (no striping)



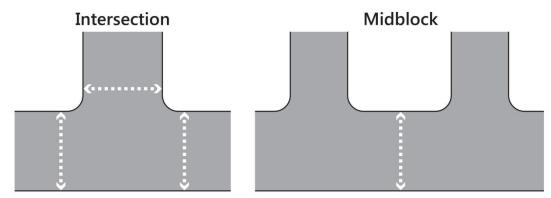
2) Whether they are <u>controlled</u> (by a traffic signal or stop-sign) or <u>uncontrolled</u> (with no intersection control)







3) Whether they are located at an <u>intersection</u> (where two streets meet) or <u>mid-block</u> (between intersections)



The following section outlines where crossing the street is legal in California. Based on pedestrian safety and crosswalk marking research, some types of crosswalks are safer than others (e.g., generally marked, controlled crosswalks at an intersection have lower risk of pedestrian collisions than a mid-block, uncontrolled crosswalk). A summary of relevant pedestrian safety research is provided in **Chapter 4**. **Chapters 4** and **5** in this document provide guidance on why, where, and how to treat crosswalks at uncontrolled and controlled locations, respectively, based on this research.

WHERE IS CROSSING THE STREET LEGAL?

In California, a legal crosswalk exists where a sidewalk meets a street, regardless of whether the crosswalk is marked (i.e., with or without striping to denote the crosswalk). Pedestrians may legally cross any street, except at unmarked locations between immediately adjacent signalized crossings, or where crossing is expressly prohibited. Marked crosswalks reinforce the location and legitimacy of a pedestrian crossing.

These legal statues are contained in the California Vehicle Code (CVC) as follows:

- Section 275 defines a legal crosswalk as:
 - That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street.
 - Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface (such as a marked midblock crossing).
- Section 21950 describes right-of-way at a crosswalk:



- The driver of a marked vehicle shall yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection.
- Section 21955 describes where pedestrians may *not* cross a street:
 - Between adjacent intersections controlled by traffic control signal devices or by police officers, pedestrians shall not cross the roadway at any place except in a crosswalk.

WHY DO CITIES MARK CROSSWALKS?

Sidewalks and crosswalks are essential links within a pedestrian network. Whether commuting, running an errand, exercising, or wandering, pedestrians will need safe and convenient crossing opportunities to reach their destinations. A marked crosswalk has three (3) primary functions:

- 1) To create reasonable expectations where pedestrians may cross a roadway
- 2) To improve predictability of pedestrian actions and movement
- 3) To channel pedestrians to designated crossing locations (often selected for their optimal sight distance)

Advantages of Marked Crosswalks

Marked crosswalks offer the following advantages:

- They help pedestrians find their way across complex intersections
- They can designate the shortest path
- They can direct pedestrians to locations of best sight distance
- They assure pedestrians of their legal right to cross a roadway at an intersection or mid-block crossing

This last bullet point is important. The *California Vehicle Code* gives the right-of-way to pedestrians at any marked or unmarked crosswalk (as noted above), although the law is not always obeyed by road users, including both drivers and pedestrians. Drivers often fail to yield the right-of-way without the visual cue of a marked crosswalk. Pedestrians also do not always know the right-of-way law, and will either wait for a gap in traffic, or assert their right-of-way by stepping in to the roadway. Strategies for this challenge are discussed in the Education and Enforcement section of this document, **Chapter 6**.

STEPS TO IDENTIFY CANDIDATE LOCATIONS FOR MARKED CROSSWALKS

Identifying candidate locations for marked crosswalks involves two steps.



The first step is to locate the places people would like to cross the street. These locations are called *pedestrian desire lines*, which represent the most desirable, and typically most direct, places that people want to cross a street. Pedestrian desire lines are influenced by elements of the roadway network, such as transit stops, and nearby land uses (homes, schools, parks, trails, commercial centers, etc.). This information provides a basis for identifying pedestrian crossing improvement areas and prioritizing such improvements, thereby creating a convenient, connected, and continuous walking environment.

The second step in identifying candidate locations for marked crosswalks is <u>to identify where people can cross safely</u>. The primary consideration in this step is adequate stopping sight distance. Of all road users, pedestrians have the highest risk of injury in a collision because they are the least protected. The crosswalk safety treatment toolboxes in **Chapters 4** and **5** provide numerous options for enhancing pedestrian safety at uncontrolled and controlled crossings, respectively, with treatment selection based on the overall context of the crosswalk – including surrounding land uses, roadway characteristics, and user characteristics.

WHEN TO INSTALL MARKED CROSSWALKS

Once candidate locations are identified, an engineering evaluation should be conducted to determine if a marked crosswalk should be installed at an uncontrolled or mid-block location, and if so, what visibility enhancements should be included in the design. Crossings should be marked where all of the following occur:

- Sufficient demand exists to justify the installation of a crosswalk
- Sufficient sight distance as measured by stopping sight distance calculations exists and/or sight distance will be improved prior to crosswalk marking
- Safety considerations do not preclude a crosswalk

Figures 2 and **3** describe the overall procedures from the moment City staff receives a request for a new marked crosswalk (or considers removing an existing marked crosswalk) to the installation of the treatment. As described, the first steps to determine the appropriate location and treatment for the crosswalk include a staff field visit.



Figure 2: Marked Crosswalk Placement Flowchart

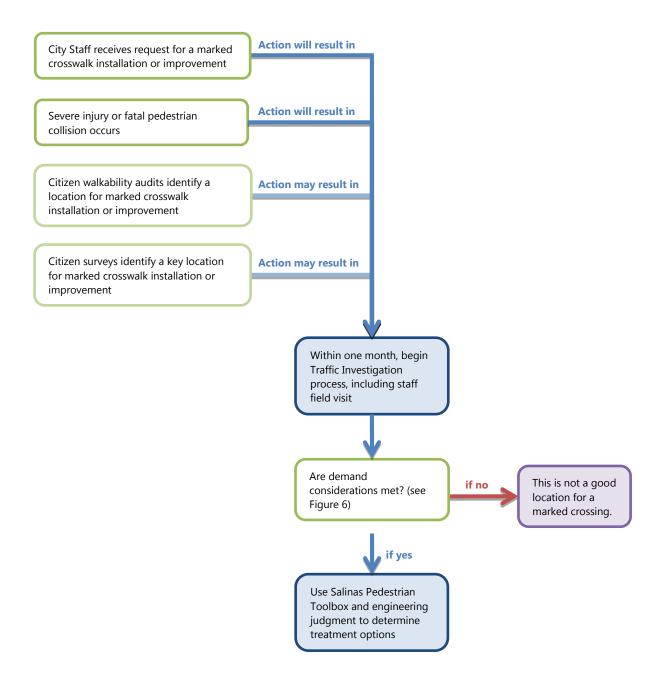
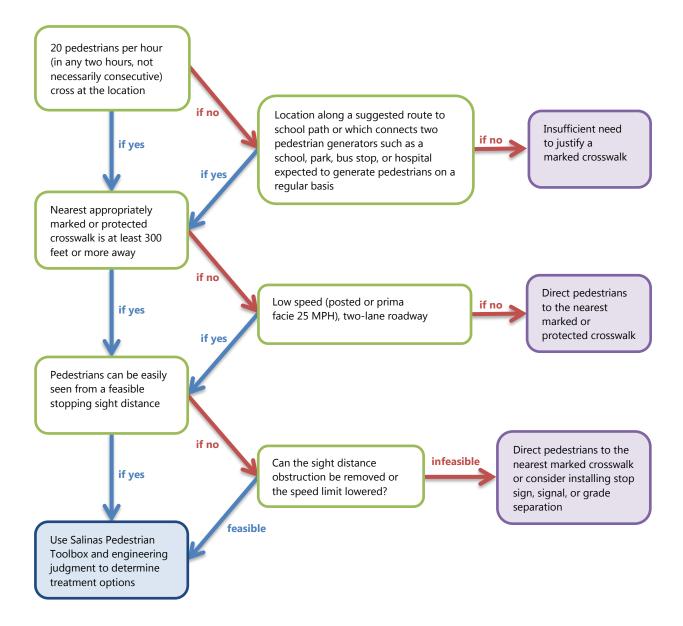




Figure 6: Feasibility Analysis for Treatments at Uncontrolled Locations



Note: Where no engineering action is recommended in Chart 2, consider applicable education and enforcement efforts.



4. UNCONTROLLED CROSSING ENHANCEMENT TOOLBOX

This section presents best practices for the installation of marked crosswalks at uncontrolled intersections and mid-block locations. Uncontrolled crossings require additional consideration during planning and design since traffic signals and stop signs are not provided to require motorists to stop – they must recognize the pedestrian and yield accordingly. Thus, providing appropriate enhancements to improve the visibility and safety of pedestrians crossing the street at an uncontrolled location is critical.

CROSSWALK SAFETY RESEARCH

Several studies of pedestrian safety at uncontrolled crossings have been completed, from which conflicting research had emerged in the past. Studies conducted in San Diego in the 1970s showed that pedestrian collision risk at marked, uncontrolled crosswalks was greater than at unmarked crossings. This led many cities to remove marked crosswalks, as they were suspected of providing a false sense of security that drivers would yield to pedestrians in the crosswalk. However, a more recent study² by the Federal Highway Administration (FHWA) comprehensively reviewed crossing safety at 1,000 marked and 1,000 matching unmarked crosswalks in 30 U.S. cities, controlling for site context factors. The study concluded that site factors related to pedestrian-involved collisions included pedestrian average daily traffic (ADT), vehicle ADT, number of lanes, median type, and the region of the U.S. At uncontrolled locations on two-lane roads and multi-lane roads with ADT below 12,000 vehicles, FHWA found that the presence of a marked crosswalk alone, compared with an unmarked crosswalk, made no statistically significant difference in the pedestrian crash rate. However, on multi-lane roads with an ADT of greater than 12,000 vehicles (without a raised median) and 15,000 vehicles (with a raised median) the presence of a marked

Mid-Block Crossings

Crosswalks can be marked at intersections and mid-block points. Mid-block crossings play an important role for pedestrian access; without mid-block crossing locations, pedestrians may face the undesirable choice to detour to a controlled crossing location, detour to an intersection where crossing is legal even if not controlled, or cross illegally (if the midblock crossing is between two signalized intersections). Where signals are spaced far apart (generally more than 600-800 feet), pedestrians may have to detour several minutes to a controlled crossing location. Pedestrians are more likely to wait for a gap in traffic and cross at an unmarked location, rather than travel a distance out of their way to find a marked crosswalk. Mid-block crossings also offer an important safety consideration: fewer potential conflict points between pedestrians and motorists.

² Zeeger, C., J. Stewart, and H. Huang. *Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations*. Publication FHWA-RD-01-142, FHWA, U.S. Department of Transportation, 2001.

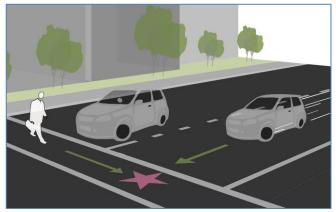


crosswalk without other improvements was associated with a statistically significant higher rate of pedestrian collisions compared to sites with an unmarked crosswalk.

The results of the study should not encourage city officials to simply remove (or fail to install) marked crosswalks. Rather, the report suggested adding crosswalk enhancements to the marked crosswalks to balance mobility needs with safety needs. These improvements include providing raised medians on multilane roads, installing traffic and pedestrian signals where warranted, adding curb extensions, providing adequate lighting, and designing intersections with tighter turn radii.

In the FHWA study, about 70 percent of the pedestrian crashes occurred at marked crosswalks on multilane roads. Of the pedestrian crashes at marked crosswalks, 17.6 percent were classified as multiple-threat

collisions. Multiple-threat collisions occur as one car slows down to allow pedestrians to cross, but a second car approaching from behind in the adjacent lane may not see the pedestrian, as illustrated in the image to the right. The slowing vehicle blocks the sight line of both the pedestrian and the second motorist, leading to the pedestrian-vehicle collision. Multi-lane roadways are therefore not well-served by unmarked or marked crosswalks alone. At these sites, the study concluded, engineers should consider countermeasures that provide additional safety to



Multiple threat conflicts on multi-lane roadways occur where a vehicle yielding to a pedestrian inhibits sight lines to another oncoming vehicle.

pedestrians and alert motorists to upcoming crosswalks. These countermeasures include advanced yield lines with corresponding signs informing motorists where to yield. Other more substantial measures may also be considered, such as signalization, illumination, or raised medians. The summary in **Table 1** below shows when marking a crosswalk only should not be considered.



Table 1. Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.*

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT ≤ 9,000			Vehicle ADT >9000 to 12,000 Speed I		Vehicle ADT >12,000 - 15,000 Limit**			Vehicle ADT > 15,000			
	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h
2 Lanes	С	С	P	С	C	P	C	С	N	C	P	N
3 Lanes	С	С	P	C	P	P	P	P	N	P	N	N
Multi-Lane (4 or More Lanes) With Raised Median***	С	С	P	С	P	N	P	P	N	N	N	N
Multi-Lane (4 or More Lanes) Without Raised Median	С	P	N	P	Р	N	N	N	N	N	N	N

^{*} These guidelines include intersection and midblock locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. A two-way center turn lane is not considered a median. Crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install crosswalks.

- C = Candidate sites for marked crosswalks. Marked crosswalks must be installed carefully and selectively. Before installing new marked crosswalks, an engineering study is needed to determine whether the location is suitable for a marked crosswalk. For an engineering study, a site review may be sufficient at some locations, while a more in-depth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, etc. may be needed at other sites. It is recommended that a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) exist at a location before placing a high priority on the installation of a marked crosswalk alone.
- P = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements. These locations should be closely monitored and enhanced with other pedestrian crossing improvements, if necessary, before adding a marked crosswalk.
- N = Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased due to providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals with pedestrian signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians.
- *** The raised median or crossing island must be at least 4 ft (1.2 m) wide and 6 ft (1.8 m) long to adequately serve as a refuge area for pedestrians in accordance with MUTCD and American Association of State Highway and Transportation Officials (AASHTO) guidelines.

With these studies as a backdrop, the remainder of this chapter outlines a decision making process to identify appropriate treatments and presents a variety of treatment options to mitigate safety, visibility, or operational concerns at specific locations.

TREATMENT SELECTION

At uncontrolled locations, a marked crosswalk with striping only may not provide adequate visibility to the pedestrian crossing, especially at high volume, high speed, or multi-lane crossings. Enhancements should



^{**} Where the speed limit exceeds 40 mi/h (64.4 km/h) marked crosswalks alone should not be used at unsignalized locations.

be considered for installation to supplement crosswalk striping. Appropriate treatments should be identified based on:

- Site characteristics: presence of pedestrian desire lines, available sight distance and visibility, lighting
- Geometric configuration of the roadway: number of vehicle travel lanes and presence of curb extensions or median refuge islands
- Travel data: 85th percentile speeds, posted speed limits, and average daily traffic (ADT) volumes.

Marked crosswalks alone <u>should not</u> be installed on multi-lane streets (two or more lanes per direction; three or more lanes total) under the following conditions³:

- Speeds of greater than 40 miles per hour
- Average daily traffic volumes (ADT) greater than 12,000 without a raised median or pedestrian refuge island
- Average daily traffic volumes (ADT) greater than 15,000 with a raised median or pedestrian refuge island

Locations with speeds and ADT volumes below these thresholds may also warrant enhancements. The Uncontrolled Treatment Toolbox outlines considerations for the use of enhancements in various contexts as summarized in **Table 2**. This Toolbox may be used to identify potential treatments at a candidate uncontrolled crosswalk location based on the results of **Figures 2** and **3** in Chapter 3.

A calculation of Pedestrian Level of Service forms the basis for the treatment identification. Pedestrian Level of Service is the average delay experienced by pedestrians as they are waiting to cross the street. Expected motorist compliance is another other key variable for treatment identification. Compliance is based on field observations and engineering judgment. It is meant to reflect typical motorist responses to pedestrians attempting to cross the street. If drivers are likely to stop for a pedestrian, the compliance is rated "high." If drivers rarely stop for pedestrians, compliance is "low." The compliance rate should be assumed to be low for all locations where the speed limit is greater than 30 MPH. **Table 2** summarizes the appropriate treatments based on level of enhancement needed (with the most significant enhancement required with the worst LOS and compliance rates).



³ California MUTCD, Section 3B. 18.

TABLE 2:
APPLICATION OF ENHANCED TREATMENTS FOR UNCONTROLLED LOCATIONS

	Expected Motorist Compliance			
	Low (or Speed >30 mph)	Moderate	High	
LOS A-D (average delay up to 30 seconds)	LEVEL 3 2 lane road: In-pavement flashers, overhead flashing beacons Multi-lane road: RRFB Plus LEVELS 1 and 2	LEVEL 2 Curb Extensions, Bus Bulb, Reduced Curb Radii, Staggered Pedestrian Refuge Plus LEVEL 1	LEVEL 1 High Visibility Crosswalk Markings, Advanced Yield Lines, Advance Signage	
LOS E-F (average delay greater than 30 seconds)	LEVEL 4 Pedestrian Hybrid Beacon, RRFB, or Direct Pedestrians to Nearest Safe Crossing Plus LEVELS 1 and 2	LEVEL 3 2 lane road: In-pavement flashers, overhead flashing beacons Multi-lane road: RRFB Plus LEVELS 1 and 2	LEVEL 2 Curb Extensions, Reduced Curb Radii, Staggered Pedestrian Refuge Plus LEVEL 1	

Notes: A pedestrian refuge island (median) is recommended for consideration in all scenarios with more than 2 lanes of traffic.

Level 1 represents a minor intervention, appropriate for situations with lower speeds and traffic volumes and high driver yielding rates. Higher levels represent more significant interventions, as may be needed on higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Treatments may be combined with higher level treatments added to lower level treatments (i.e., flashing beacons with curb extensions). Additional funding sources should be identified as needed for these enhancements. Failing to provide an enhanced crosswalk and/or removing a marked crosswalk should be an option of last resort.

Application of **Table 2** is operationalized by the **XWalk+ Tool** that accompanies this policy. The Tool is embedded in an Excel platform and was developed to guide the user through application of the methods and processes summarized in this document. It should not replace understanding of local context or application of engineering judgment, but may be used to supplement this document.

TREATMENT OPTIONS

The following tables described preferred pedestrian safety treatments for uncontrolled locations with different roadway characteristics:

• Table 3: Geometric Treatments



- Table 4: Striping and Signage
- Table 5: Signal Hardware and Operational Measures

Within each table, devices are categorized in three levels based on the level of safety concern they are meant to address: Level 1 (all cases), Level 2 (enhancements), and Level 3 (advanced enhancements). Categories of improvements are cumulative; for example, a Level 2 device should also include appropriate Level 1 devices.

TABLE 3: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-1. Fewer Travel Lanes ("Road Diet") Image Source: Fehr & Peers	Fewer travel lanes decrease roadway width and crosswalk length, reduce speeds, reduce left-turn and rear-end collisions, and often eliminate the multiple-threat collision. It takes an average pedestrian almost four seconds to cross each additional travel lane. Therefore, reducing the number of travel lanes minimizes the amount of time that pedestrians are in the crosswalk. More travel lanes than necessary can also increase vehicle travel speeds; research has shown that the severity of pedestrian collisions increases with vehicle travel speed. Where fewer travel lanes are not possible, travel lanes can be narrowed to as little as nine feet, especially left-and right-turn pockets.	Level 1	\$20/LF ⁴

⁴ Cost includes removal of existing pavement markings and repainting. Assumes existing curbs are to remain as is.



TABLE 3: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-2. Removal of Sight-Distance Obstructions Image Source: Fehr & Peers	If objects impede sight-distance, this may result in an unsafe condition where motorists and pedestrians are unable to see each other. Items such as parked cards, signage, landscaping, fencing, and street furniture should be placed in a location that will not obstruct sight distance.	Level 1	\$150/EA ⁵
6-3. Pedestrian Refuge Island	Raised islands are placed in the center of the roadway separating opposing lanes of traffic with cutouts or ramps for accessibility along the pedestrian path. Median refuge islands are recommended where right-of-way allows and conditions warrant. Studies show medians are one of the most important safety enhancements available for crosswalks. They simplify complicated multi-lane crossings by breaking the crossings/conflicts into	Level 1	\$130/LF ⁶

two stages.

Image Source: Fehr & Peers

⁶ Cost includes new curb and concrete barrier. Assumes a 6 foot median.



 $^{^{\}rm 5}$ Item removed is anticipated to be no larger than a sign and post.

TABLE 3: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-4. Curb Extensions Figure 1: Febr & Peers	Curb extensions extend the curb and sidewalks further into the roadway, shortening the length of the crosswalk. They act as a traffic calming device by narrowing the effective width of the roadway and slowing turning speeds. Because they extend into the roadway, often past parallel-parked vehicles, they improve visibility for pedestrians. The also provide space for street furniture, landscaping, bicycle parking, and signs and signal poles. Curb extensions can be constructed with reduced curb radii and to accommodate ADA improvements, such as directional curb ramps.	Level 1	\$140/LF ⁷
6-5. Split Pedestrian Crossover (SPXO) Image Source: Fehr & Peers	This measure is similar to traditional median refuge islands; the difference is that the crosswalks in the roadway are staggered such that a pedestrian crosses half of the street and then walks toward traffic to reach the second half of the crosswalk. This measure must be designed for accessibility by including rails and truncated domes to direct sight-impaired pedestrians along the path of travel.	Level 1 Note: see Table 11 for a Pedestrian Signal	\$130/LF ⁸
to a - it is an industrial many to the content of t	Raised crosswalks are speed tables (flat-topped speed humps) outfitted with crosswalk markings and signage, providing pedestrians with a level street crossing. By raising the level of the crossing, vehicles drive more slowly through the crosswalk and pedestrians are more visible to approaching motorists.	Level 2	\$4,000/EA



 $^{^{7}}$ Cost includes removal of existing curb, new curb, new sidewalk, and new bollards. Cost does not include curb ramps.

⁸ Same materials as 6-3

TABLE 3: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-7. Pedestrian Overpass/Underpass Image Source: Fehr & Peers	This measure consists of a pedestrian or pedestrian/bicycle overpass or underpass of a roadway. It provides complete separation from motor vehicle traffic, normally where no other pedestrian facility is available, and connects off-road trails and paths across major barriers. Overpasses and underpasses should be used as a measure of last resort because of their cost and barriers to their effective/efficient use, with topographical and desire line considerations influencing their design. Personal security concerns must also be addressed in the design of these facilities.	Level 3	\$150/SF

Source: Fehr & Peers, 2013.

TABLE 4: UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE

Treatment	Description	Level	Estimated Cost
7-1. High Visibility Markings Image Source: Fehr & Peers	All uncontrolled marked crosswalks should feature high-visibility markings. Various striping patterns are available. The City of Salinas has recently installed white and fluorescent yellow green continental style markings. Triple four striping, as shown in the photo to the left, is recommended for use in future installations.	Level 1	\$6/Ft



TABLE 4: UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE

Treatment	Description	Level	Estimated Cost
7-2. Advanced Yield Line Image Source: Fehr & Peers	Advanced yield lines, often referred to as "sharks teeth", should be striped at all marked, uncontrolled crosswalks on multi-lane roadways. They should be placed 20-30 feet in front of the crosswalk. Their intention is to identify where vehicles should stop when yielding to a pedestrian to maintain adequate sight lines.	Level 1	\$100/EA
7-3. Advanced Warning Signs Image Source: Fehr & Peers	High-visibility yellow or fluorescent- yellow-green (FYG) signs are posted at crossings to increase the visibility of a pedestrian crossing.	Level 1	\$1,000/EA
7-4. In-Street Pedestrian Crossing Sign STATE LAW TO	This measure involves posting regulatory pedestrian signage on lane edge lines and/or road centerlines. The in-street pedestrian crossing sign may be used to remind road users of laws regarding right-of-way at an uncontrolled pedestrian crossing. They can be installed on medians and may also be temporary signs, placed by school crossing guards during school hours.	Level 1	\$400/EA

Source: Fehr & Peers, 2013.



TABLE 5: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS

Treatment	Description	Level	Estimated Cost
8-1. Pedestrian-Scale Lighting White the second of the se	Pedestrian-scale lighting improves visibility along a pedestrian's path and across driveways. It also improves visibility at pedestrian/vehicle conflict points in crosswalks.	Level 1	\$10,000/EA ⁹

8-2. Flashing Beacon



Image Source: Fehr & Peers

Flashing amber lights are installed on overhead or post-mounted signs, in advance of the crosswalk or at the crosswalk's entrance. Full-time flashing beacons are not recommended; flashing beacons are most effective when they are activated by the crosswalk user (they should rest on dark). By resting on dark, they can also be solar powered.

Level 2 \$50,000/EA

⁹ Cost assumes light every 100 feet



TABLE 5: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS

UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS			
Treatment	Description	Level	Estimated Cost
8-3. Rectangular Rapid Flashing Beacon (RRFB)	The RRFB is an enhancement of the flashing beacon that replaced the traditional slow flashing incandescent lamps with rapid flashing LED lamps. The RRFB may be push-button activated or activated with passive detection. This treatment was approved for use in California via Interim Approval IA-11-83 in 2011. Any installations should be reported to Caltrans for documentation, but do not require pre-approval for	Level 2 40mph or le	\$25,000/EA
Image Source: Fehr & Peers	experimentation.		
8-4. Pedestrian Hybrid Beacon (PHB) Image Source: FHWA	The PHB is a pedestrian-activated beacon that is a combination of a beacon flasher and a traffic control signal. When actuated, the PHB displays a yellow (warning) indication followed by a solid red indication. During the pedestrian clearance interval, the driver sees a flashing red "wig-wag" pattern until the clearance interval has ended and the beacon goes dark. The device is included in the 2012 California MUTCD for use at midblock locations. 10	Level 3	\$50,000/EA
8-5. Pedestrian Signal	A pedestrian signal is a conventional		



Image Source: Fehr & Peers

traffic control device with warrants for use based on the MUTCD. The pedestrian warrants were revised with the 2009 Federal and 2012 California MUTCD.

Level 4 \$100,000/EA

Source: Fehr & Peers, 2013.

¹⁰ Use of the device at side-street stop control locations currently requires separate permission from the CTCDC (though this is under review).



5. CONTROLLED CROSSWALK TREATMENT TOOLBOX

Controlled crosswalks are located at stop-controlled or signalized intersections. Generally, these crossings do not need enhancements beyond standard crosswalk markings (two parallel lines), as the traffic signal or stop-sign controls allocation of right-of-way. However, in some cases, such as in the Downtown, at skewed intersections, or near schools, the City may consider providing enhanced crossings to create a sense of place or improved aesthetics, or to improve visibility. This chapter presents preferred and enhanced measures for pedestrian treatments at controlled locations to:

- Improve the visibility of pedestrians to motorists and vice-versa
- Communicate to motorists and pedestrians who has the right-of-way
- Accommodate vulnerable populations such as the disabled, children, and the elderly
- Reduce conflicts between pedestrians and vehicles
- Reduce vehicular speeds at locations with potential pedestrian conflicts

All treatments identified in this chapter are required or allowed by the standards and specifications in the *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

PREFERRED CROSSING TREATMENTS

Preferred crossing treatments are identified as the basic pedestrian crossing improvements to be provided at all stop-controlled and signalized intersections. New controlled intersections should be designed with these treatments included; existing controlled intersections that require retrofits may be prioritized and upgraded as City funds become available. These treatments are based on recommended best practices in pedestrian safety:¹¹

- Mark crosswalks on all legs of the intersection that serve a key desire line
- Provide advanced stop bars in advance of each crosswalk
- Minimize the number of vehicle traffic lanes pedestrians must cross
- Provide median refuge islands and thumbnails, as width and path of turn maneuvers allow
- Remove sight-distance obstructions
- Provide directional curb ramps for each crosswalk (e.g., two per corner) The Standard Drawings for the City of Sacramento include best practices for directional curb ramp design (see drawing T-

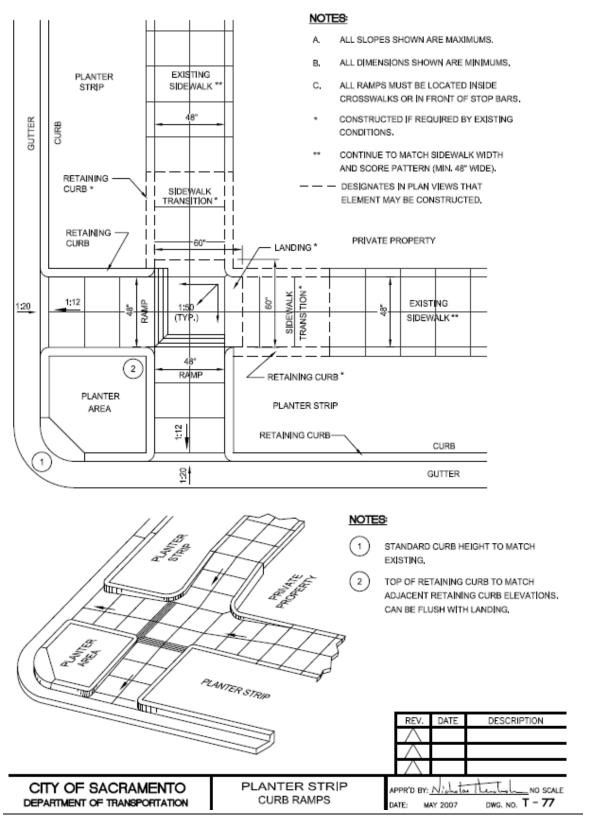
¹¹ See America Walks *Signalized Intersection Enhancements that Benefit Pedestrians* http://americawalks.org/wp-content/upload/America-Walks-Signalized-Intersection-Enhancement-Report-Updated-8.16.2012.pdf (2012).



77 in Transportation document at: http://portal.cityofsacramento.org/Utilities/Resources/Specsand-Drawings)

- Eliminate free right-turn slip lanes, where feasible, and mitigate for pedestrian safety where they remain
- Locate bus stops on the far-side of the intersection (or in front of mid-block crossings)
- Minimize cycle lengths
- Reduce prevalence or eliminate permitted signal phasing where pedestrian crossings exist
- Provide pedestrian signal heads for all crossings at signalized intersections
- Provide adequate pedestrian clearance intervals (crossing time) at signalized intersections





Source: Standard drawings for the City of Sacramento Department of Transportation, 2007 (http://portal.cityofsacramento.org/Utilities/Resources/Specs-and-Drawings)



ENHANCED CROSSING TREATMENTS

At high volume pedestrian crossing locations or other areas designated by the City as pedestrian zones, the City may provide additional crosswalk enhancements at controlled intersections. These treatments provide improve drivers' awareness of pedestrians by slowing traffic through geometric changes, providing signal timing or phasing modifications, or enhancing striping or signing to improve visibility.

The following tables describe the preferred and optional enhanced pedestrian safety treatments that may be used at the City's discretion for controlled locations:

- Table 6: Geometric Treatments
- Table 7: Striping and Signage
- Table 8: Signal Hardware and Operational Measures



TABLE 6: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-1. Fewer Travel Lanes ("Road Diet") Image Source: Fehr & Peers	Fewer travel lanes decrease roadway width and crosswalk length, reduce speeds, reduce left-turn and rear-end collisions, and often eliminate the multiple-threat collision. An average pedestrian takes almost four seconds to cross each additional travel lane. Therefore, reducing the number of travel lanes minimizes the amount of time that pedestrians are in the crosswalk. More travel lanes than necessary can also increase vehicle travel speeds; research has shown that the severity of pedestrian collisions increases with vehicle travel speed. Where fewer travel lanes are not possible, travel lanes can be narrowed to as little as nine feet, especially left-and right-turn pockets.	Preferred	\$20/LF ¹²

9-2. Pedestrian Refuge Island with "Thumbnail"



Image Source: Fehr & Peers

Median pedestrian islands provide a refuge for pedestrians to stand if they do not have sufficient time to cross a street. They can be enhanced with median pedestrian push buttons at signalized crossings. Median islands can be installed throughout a corridor or only at specific crosswalks.

Preferred \$130/LF¹³

¹³ Cost assumes 6 foot median and includes new curb and concrete barrier.



¹² Cost includes removal of existing pavement markings and repainting. Assumes existing curbs are to remain as is.

TABLE 6: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-3. Removal of Sight-Distance Obstructions Image Source: Fehr & Peers	If objects impede sight-distance, an unsafe condition may arise where motorists and pedestrians are unable to see each other. Items such as parked cards, signage, landscaping, fencing, and street furniture should be placed in a location that will not obstruct sight-distance.	Preferred	\$150/EA ¹⁴

9-4. Directional Curb Ramps with Truncated Domes



Image Source: Fehr & Peers

Curb ramps offer wheelchair access to/from the sidewalk and crosswalk. Truncated domes, or tactile strips, warn blind pedestrians that they are about to enter a crosswalk. The best practice for curb ramps is to install two per corner so that each ramp points directly into the crosswalk and to the curb ramp at the other side of the street. Corner bulbouts can be used to increase the amount of space available for directional curb ramps.

Preferred \$4,000/ea

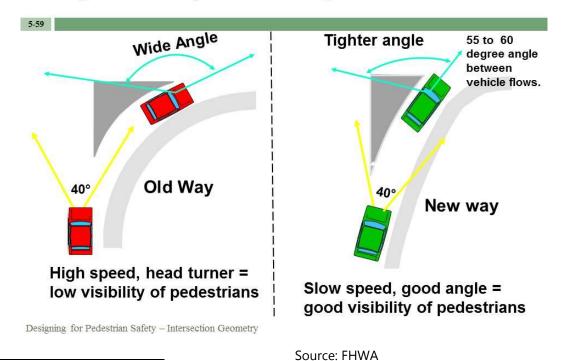


¹⁴ Item removed is anticipated to be no larger than a sign and post

TABLE 6: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-5. Right-Turn Lane Design Image Source: Fehr & Peers	Free right-turns allow vehicles to turn right at high speeds. Since the vehicles are not typically controlled by the traffic signal in this circumstance, crosswalks across the turn lanes are usually uncontrolled crosswalks. Controlled right-turn movements are preferable for pedestrians because they require a vehicle to stop on red before turning right. Where "pork-chop" islands that channelize right-turns are necessary to provide acceptable turning radii, raised crosswalks are a pedestrian enhancement. Other options include signalizing the crossing (especially if it is multi-lane) and designing the "pork-chop" for slower speeds and better visibility of pedestrians.	Preferred	\$25,000/EA ¹⁵

Right-Turn Slip Lane: Design for Pedestrians





¹⁵ Cost to remove assuming no electrical costs

TABLE 6: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-6. Far-Side Bus Stops Image Source: Fehr & Peers	Far-side bus stops allow pedestrians to cross behind the bus, improving pedestrian visibility. Far side bus stops also enhance transit operations by providing a guaranteed merging opportunity for buses. Exceptions for far-side bus stops include considerations for bus routing, sufficient sidewalk area, and conflicts with parking, land uses, or driveways.	Preferred	\$1,000/EA ¹⁶
9-7. Curb Extensions Finage Source: Fehr & Peers	Curb extensions extend the curb and sidewalks farther into the roadway, shortening the length of the crosswalk. They act as a traffic calming device by narrowing the effective width of the roadway and slowing turning speeds. Because they extend into the roadway, often past parallel-parked vehicles, they improve visibility for pedestrians. The also provide space for street furniture, landscaping, bicycle parking, and signs and signal poles. Curb extensions can be constructed to accommodate ADA improvements, such as directional curb ramps.	Enhanced	\$140/LF ¹⁷

¹⁷ Cost includes removal of existing curb, new bollards, curb, and sidewalk. Cost does not include curb ramps.



¹⁶ Cost assumes no sidewalk or paving work

TABLE 6: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-8. Reduced Turn Radius Pedestrian-orien Curb Radius Image Source: AARP	Vehicles travel faster through turns with a large radius. Reducing the radius of a corner is an effective way of reducing vehicle speeds. In suburban environments, turn radii generally do not need to exceed 30 feet. In urban environments turn radii can be 10 feet or less, especially where the meeting of one-way streets prohibits turning movements. Where on-street parking is permitted and/or bicycle lanes are present on one or both streets, consideration for further reductions of radii should occur acknowledging that the effective radius is increased with onstreet parking. Corner curb radii on multi-lane streets should acknowledge that trucks turning right can turn into two lanes.	Enhanced	\$175/LF ¹⁸

Source: Fehr & Peers, 2013

¹⁸ Cost includes removal of existing curb, new bollards, curb, and sidewalk. Cost does not include curb ramps.



TABLE 7: CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE

Treatment	Description	Level	Cost
10-1. Marked Crosswalks Image Source: Google Maps	Marking a crosswalk across all approaches of an intersection improves pedestrian accessibility. At a four-way intersection, a closed crosswalk forces pedestrians to cross via three crosswalks instead of one. Crosswalks on all approaches can often be accommodated without a significant impact to traffic signal operations.	Preferred	\$15/LF ¹⁹

10-2. Advanced Stop Bar



Image Source: Fehr & Peers

Advanced stop bars are placed five to seven feet in front of crosswalks. They keep vehicles from encroaching into the crosswalk when stopped at a red signal or stop sign.

Preferred \$7.50/LF



¹⁹ Cost includes both lines of crossing.

TABLE 7: CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE

Treatment	Description	Level	Cost
10-3. High Visibility Markings Image Source: Fehr & Peers	High-visibility crosswalks at controlled locations are appropriate in areas with high pedestrian volumes, at crosswalks with skewed geometries, or near sensitive land uses (such as schools).	Enhanced	\$6/Ft
10-4. Textured Pavement or Colored Crosswalks	Textured pavement can be used in crosswalks or in intersections as an aesthetic enhancement. Because of its texture, it may also calm traffic by slowing vehicles before they		



Image Source: Fehr & Peers

restured pavement can be used in crosswalks or in intersections as an aesthetic enhancement. Because of its texture, it may also calm traffic by slowing vehicles before they cross an intersection. It can also make crosswalks more visible. Textured pavement can be made of brick or, alternatively, both concrete and asphalt can be stamped to look like brick or stone. At controlled locations, standard crosswalk striping should be provided in addition to the textured pavement. A smooth, non-slip surface is preferable.

Enhanced \$15/SF

Source: Fehr & Peers, 2013



TABLE 8: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-1. Adequate Crossing Times Image Source: Fehr & Peers	The 2012 California MUTCD requires a walking speed of 3.5 feet per second be assumed to determine crossing times as a default minimum (4.0 feet per second was previously the guidance). A speed slower than 3.5 feet per second can be used where slower pedestrians routinely use the crosswalk, such as locations near schools, hospitals, or senior centers.	Preferred	N/A ²⁰

11-2. Pedestrian Countdown Signal



Image Source: Fehr & Peers

Pedestrian countdown signals give pedestrians "Walk" and "Don't Walk" signals with a second-by-second countdown for each phase. Research suggests that pedestrians are more likely to obey the "Don't Walk" signal when delivered using a countdown signal. The device has been shown to enhance safety for all road users. The 2012 California MUTCD requires that all new pedestrian signals be countdown signals.

Preferred \$500/EA



²⁰ No construction costs associated with measure. Only preparation and implementation costs

TABLE 8: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-3. Pedestrian Signals and Push Buttons Image Source: Fehr & Peers	Mounting push buttons for different crosswalks on one pole can be confusing for blind pedestrians. Push buttons should be separated by ten feet and placed within five feet of each curb ramp, one per crosswalk. At long crosswalks (≥60 feet) with a median refuge island, push buttons can be placed in the median for pedestrians who may not be able to cross the entire crosswalk in one cycle length. In areas with high pedestrian volumes, eliminating pedestrian push buttons and providing a pedestrian phase in every cycle, can enhance walkability (and signal compliance).	Preferred	\$1,000/EA ²¹

11-4. Short Cycle Lengths

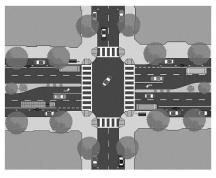


Image Source: Institute of Transportation
Engineers

Long cycle lengths at signalized intersections result in long pedestrian wait times to cross a street. By shortening an intersection's cycle length, pedestrians do not have to wait as long to cross after pushing the button to request a "Walk" signal.

Preferred N/A²²

²² No construction costs associated with measure. Only preparation and implementation costs



²¹ Cost includes pole

TABLE 8: **CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES**

Treatment	Description	Level	Cost
11-5. Protected Left-Turns Image Source: Fehr & Peers	Where permitted left-turns are allowed, denoted by a "Left Turn Yield on Green" sign, left-turning vehicles can conflict with pedestrians in the crosswalk. By making the left-turn protected, so that it is allowed only with a green arrow, the "Walk" signal at a crosswalk occurs at the same time that through- and right-turning vehicles in the same direction receive a green light. This reduces the risk of left-turning vehicle conflicts with the opposing crosswalk; since left-turns typically occur at a higher speed than right-turns, collisions of increased severity can be avoided by protecting left-turns.	Preferred	\$20,000- 50,000/EA ²³

11-6. Accessible Pedestrian Signals



Image Source: Fehr & Peers

Accessible pedestrian signals (APS) and detectors provide information, such as "Walk" indications and direction of crossing, in non-visual formats to improve accessibility for blind pedestrians. Audible options for accessible pedestrian signals include audible tones and speech messages. Vibrotactile push-buttons are effective options that alleviate the impacts of noise created by audible pedestrian signals. They are also accessible to deaf pedestrians. APS should always be provided when two push buttons are located on one pole and where persons with disabilities are expected frequently at a crossing. At other locations, APS is currently a best practice, but is expected to become a requirement when the proposed rulemaking of the Public Rights of Way Accessibility Guidelines (PROWAG) is finalized.

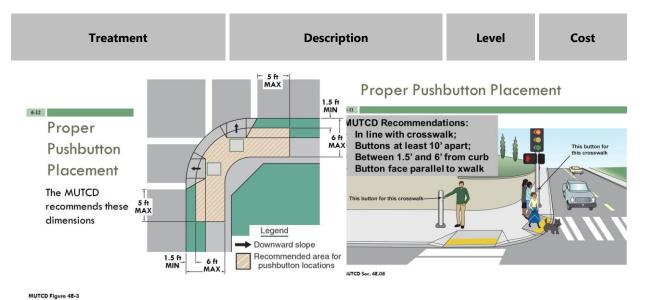
Enhanced

\$2,500/EA



²³ Assumes left turn lane is existing, so no roadway work is necessary. Only signal work.

TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES



Source: FHWA

11-7. Pedestrian Recall



Image Source: Fehr & Peers

Pedestrian recall gives pedestrians a "Walk" signal at every cycle. No pushbutton or detection is necessary since a "Walk" signal will always be given. Pedestrian recalls are useful in areas with high levels of pedestrian activity. They demonstrate that an intersection is meant to serve both vehicles and pedestrians. In general, pedestrian recall should be used if pedestrians actuate a "Walk" signal 75 percent of the time during three or more hours per day. Recall can be used 24-hours a day or during peak hours for pedestrians (in which case push buttons should continue to be provided).

Enhanced N/A²⁴

²⁴ No construction costs associated with measure. Only preparation and implementation costs



TABLE 8: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-8. No Right Turn on Red Image Source: FHWA	When attempting to turn right on red, motorists must look left to see if the road is clear; motorists often do not look right before turning and may not see pedestrians to their right. Restricting right turns on red can reduce conflicts between vehicles and pedestrians. "Blank out" turn restriction signs (see 11-9 below) are more effective than conventional "No Right Turn on Red" signs. "No Right Turn on Red" signs that specify time-of-day restrictions or "When Pedestrians are Present" are confusing to motorists and are often disregarded.	Enhanced	\$1,500/EA ²⁵
11-9. Blank-Out Turn Restriction LED Sign ARKING Image Source: Fehr & Peers	The ubiquity of conventional turn restriction signs, usually for no right turn on red, contributes to their disregard by motorists. Blank out turn restriction signs activate only when the specified movement is prohibited. The LED sign is also very visible.	Enhanced	\$2,000 ²⁶



²⁵ Cost includes 2 signs: one on mast arm and other on pole nearby

²⁶ Cost includes installation

TABLE 8: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-10. Animated Eyes Image Source: Fehr & Peers	Animated eyes pedestrian signals feature eyes that move from side to side when a "Walk" signal is given. The signals remind pedestrians to look for turning vehicles before proceeding into the crosswalk. Research has indicated that animated eyes pedestrian signals reduce conflicts between vehicles and pedestrians. Source: http://www.cerssafety.com/pedestriansignals.pdf	Enhanced	\$2,000 ²⁷
11-11. Leading Pedestrian Interval (LPI) Image Source: Fehr & Peers	A leading pedestrian interval (LPI) advances the "Walk" signal for a few seconds while through-vehicles continue to receive a red indication. By allowing pedestrians to get a head start into the crosswalk, it can reduce conflicts between pedestrians and turning vehicles. The 2012 California MUTCD recommends that LPIs be at least three seconds in duration. Right-turn on red restrictions may be needed with LPIs are installed in locations with lower pedestrian volumes.	Enhanced	No construction costs only preparation and implementation costs
11-12. Push Button for Extended Crossing Time PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME	Some pedestrians may need extra time to safely cross a street. Traffic signals can be retrofitted to provide pedestrians with increased crossing time by extending the duration of a pushbutton press.	Enhanced	\$1,000/EA ²⁸

Image Source: FHWA
Source: Fehr & Peers, 2013.

²⁷ Cost includes installation

²⁸ Cost includes pole



6. CREATIVE CROSSWALK GUIDELINES

Creative crosswalks are a means to promote vibrant place making which can improve active pedestrian lifestyles in downtown districts and neighborhoods. If designed properly, creative crosswalks can also increase the attention of motorists and improve safety where pedestrians cross the street. These guidelines are intended to guide City staff to determine if a creative crosswalk is appropriate at a particular location and to provide guidance in regards to artwork placement, color, composition, and material.

These guidelines were developed to address where and under what conditions creative crosswalk treatments could be installed. When a specific location is being considered for a creative crosswalk- due to public request, a new development, or staff recommendation- this chapter serves as a guide to consistently and transparently determine the appropriate application. This chapter contains a background of relevant state and federal regulations and feedback of the creative crosswalk best practices. The best practices were chosen to cover common guidance principals, sighting, project styles and applied design requirements which were used to develop this Creative Crosswalk policy.

Creative Crosswalks Definition

Creative crosswalks are decorative paving treatments which include: colored and/or textured concrete, asphalt or pavers, Street Print, Duratherm, or other similar treatments. Creative crosswalks are a means to facilitate vibrant place making and to promote improved pedestrian facilities in downtown districts and neighborhoods. If designed correctly, creative crosswalks can also increase the attention of motorists in order to improve traffic calming where pedestrians will be crossing the street. Many cities have begun installing creative crosswalks, but because there are no specific standards established, each city has been creating their own guidelines and process for installation.

Creative crosswalk treatments should not be considered a safety or traffic control measure and are not a substitute for, and should not detract from, transverse, triple four or continental crosswalk markings. Furthermore, creative crosswalk treatments are not a substitute for continental crosswalk or triple four markings.

Creative crosswalks consistency with The CA-MUTCD

One concern with creative crosswalks is whether they are compliant with the state and national traffic control standards as provided in the California Manual on Uniform Traffic Control Devices (CA-MUTCD). The CA-MUTCD states in Section 3.G.01, paragraph 6:



- Crosswalks should not be marked at intersections unless they are intended to channelize pedestrians.
- Crosswalk markings should be located so that the curb ramps are within the extension of the crosswalk markings.
- Crosswalk markings provide guidance for pedestrians who are crossing roadway segments by defining and delineating paths on approaches to and within signalized intersections and on approaches to other intersections where traffic stops.
- Crosswalk lines should not be used indiscriminately.
- Colored pavement located between crosswalk lines should not use colors or patterns that degrade the contrast of white crosswalk lines or that might be mistaken by road users as a traffic control application.

These guidelines suggest that crosswalks must have white lines and the space in between those lines should not be filled with a distracting color or pattern.

FHWA Interpretation Letter 3(09)-24(I) – Application of Colored Pavement Treatment in Crosswalks was written by the Federal Highway Administration in response to multiple requests from municipal traffic departments across the country requesting an official interpretation of the MUTCD regarding proposed colored crosswalk designs. The FHWA letter states:

The FHWA's position has always been, and continues to be that subdued-colored aesthetic treatments between the legally marked transverse crosswalk lines are permissible provided that they are devoid of retroreflective properties and that they do not diminish the effectiveness of the legally required white transverse pavement markings used to establish the crosswalk. Examples of acceptable treatments include brick lattice patterns, paving bricks, paving stones, setts, cobbles, or other resources designed to simulate such paving. Acceptable colors for these materials would be red, rust, brown, burgundy, clay, tan or similar earth tone equivalents. All elements of pattern and color for these treatments are to be uniform, consistent, repetitive, and expected so as not to be a source of distraction. No element of the aesthetic interior treatment is to be random or unsystematic. No element of the aesthetic interior treatment can implement pictographs, symbols, multiple color arrangements, etc., or can otherwise attempt to communicate with any roadway user.

Patterns or colors that degrade the contrast of the white transverse pavement markings establishing the crosswalk are to be avoided. Attempts to intensify this contrast by increasing or thickening the width of the transverse pavement markings have been observed in the field. These attempts to increase contrast are perceived to be efforts to circumvent the contrast prerequisite



so that an intentional noncompliant alternative of an aesthetic interior pattern or color can be used. Further techniques to install an empty buffer space between an aesthetic treatment and the interior edge of the white transverse crosswalk markings have also been observed in the field. This strategy is also perceived to be an attempt to circumvent FHWA's prior position on contrast. However, an empty buffer space between a subdued-colored, uniform-patterned aesthetic treatment can be implemented to enhance contrast between the aesthetic treatment and the white transverse pavement markings. When used properly, buffer spaces can be an effective tool to disseminate a necessary contrast in order to visually enhance an otherwise difficult to discern white transverse crosswalk marking, provided that the aesthetic treatment conforms to the conditions in the preceding paragraph.

In order to recognize the safety reasons for the MUTCD statement and the FHWA Interpretation Letter, but to not completely exclude creative crosswalks, it is recommended that only white paint be used for the transverse crosswalk lines. The application of white paint is recommended so that the transverse crosswalk markings remain clearly visible. Due to the narrow spacing between stripes of continental crosswalks and triple four crosswalks, it is recommended to avoid creative crosswalk treatments at all continental crosswalks and triple four crosswalks.

GUIDELINES FOR THE IMPLEMENTATION OF CREATIVE CROSSWALKS

This section presents the guidelines for the design and implementation of creative crosswalks in the City of Salinas. These guidelines are based in part on the requirements of the CA-MUTCD as documented above and on the research and case studies referenced at the end of this memo. These guidelines document the desired practice and are subject to the engineering judgement of the City Traffic Engineer.

Location Requirements:

- Must be at a location where traffic is required to stop because of a stop sign or traffic signal.
- Approved on local or collector streets where speeds do not exceed 35 mph. Arterial streets will be considered at the discretion of the City Traffic Engineer.
- If the intersection pavement is in poor condition, materials will not bond; pavement must be in satisfactory condition in order to receive approval.
- The approval of the creative crosswalk will be at the discretion of the City Traffic Engineer

Design Guidelines:

• Creative crosswalk treatments may be installed (1) within the transverse line crosswalks or (2) within the central portion of the intersection as indicated on **Exhibit 1**.



- Crosswalks shall contain two white transverse lines with reflectivity to be compliant with minimum
 crosswalk standards. All creative crosswalk treatments must be contained within the two
 transverse (horizontal) lines or within the interior portion of the intersection and should not
 overlap with or distract from visibility of the transverse crosswalk lines.
- Transverse crosswalk lines shall be limited to white paint only, with the exception of school zones which require yellow transverse crosswalk lines.
- Creative crosswalk treatments located within the central portion of the intersection can be varied in color but bold yellow, red, blue, and green paint should be avoided as these colors may detract from visibility of the transverse or continental crosswalk markings.
- All creative crosswalk treatments must contrast with the visibility of the crosswalk markings and must be devoid of reflective properties.
- Painting between the solid white vertical lines in a continental crosswalk is not allowed per federal guidelines. If installing at a location where a continental or triple four crosswalk already exists; striping must first be removed and converted to a transverse crosswalk.
- No logos, text, or advertising shall be utilized in the creative crosswalk design.
- The creative crosswalk treatments shall not contain octagons, triangles, other shapes, text, or logos that could be confused with a standard traffic control devices or legends.

Materials / Paint Type:

- A street-grade paint must be used and provide a non-slip surface for pedestrians, bicyclists, or those who use wheelchairs and other assistive mobility devices.
- All artwork must utilize a non-reflective paint.
- Materials must be reviewed and approved by the City Traffic Engineer

Maintenance and Implementation:

- Depending on materials used and the location, creative crosswalks typically last from three to six months when using street grade paint or three to five years when using thermo-plastic paint.
- The City of Salinas will maintain crosswalk markings and other traffic control devices but assumes no responsibility for maintaining the artwork portions of the creative crosswalks.



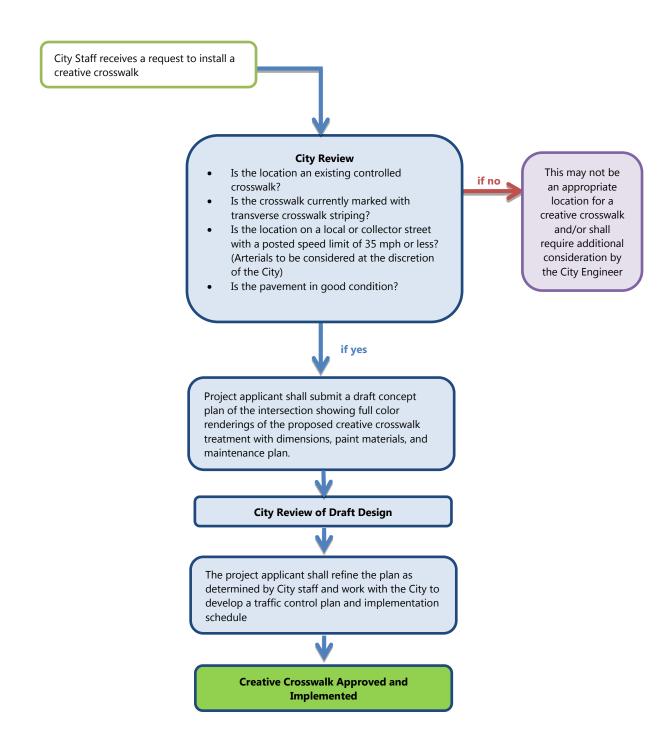
- A maintenance plan that details the continued maintenance of the creative crosswalk markings including periodic paint touch-ups and/or removal if the crosswalks are temporary a temporary. Touch up of the creative crosswalks markings should occur at least every six months.
- A traffic control plan and street occupancy permit must be obtained prior to implementation and each time the creative crosswalk requires maintenance.

Figure 1 describes the overall procedures from the moment City staff receives a request for a new creative crosswalk to the installation of the treatment. As described, the first steps to determine the appropriate location and treatment for the creative crosswalk shall be evaluated according to the creative crosswalk guidelines provided above.



INSERT EXHIBIT 1 HERE







7. EDUCATION, ENFORCEMENT, AND ENCOURAGEMENT PROGRAMS

The prior chapters in this policy describe engineering treatments to improve pedestrian safety and enhance walkability. Engineering, however, is only one aspect of a comprehensive pedestrian safety strategy. Education, enforcement, and encouragement, are also crucial, as outlined in the City's *Pedestrian Master Plan*. This section presents best practices for education, encouragement, and enforcement components of pedestrian safety programs that may be considered to supplement the *Crosswalk Policy Guidelines*.

EDUCATION

The following is a list of pedestrian safety practices for educating pedestrians and motorists about safe and lawful behavior:

- Website provide informational materials relating to pedestrian safety
- Videos post information such as public service announcements to the City's website
- Community outreach events provide opportunities for pedestrian education such as Mayor's night out events
- Pamphlets make informational materials available through the City
- Student group involvement promote pedestrian safety by involving and educating student groups
- Street/Bus Stop/School Banners place advertisements in high activity pedestrian areas
- Yard Signs communicate roadway conditions to motorists and pedestrians
- Strategic partnerships partner with groups such as American Association of Retired Persons (AARP) to promote pedestrian safety
- Local media campaigns involve local media in pedestrian safety campaigns
- Classroom curricula collaborate with local school districts to develop pedestrian safety curricula for schools
- Structured skills practice develop a program that trains pedestrians in safe behavior
- Games, coloring books, etc. develop or provide fun and educational materials for children

ENFORCEMENT

The following is a list of pedestrian safety practices for enforcing pedestrian and vehicular right-of-way laws:



- Officer training courses provides law enforcement with full understanding of pedestrian laws and safety practices
- Traffic complaint hotline provides a method for citizens to alert the City when a public facility is of concern, such as inoperable traffic signal
- Community enforcement provides a mechanism for community members to help enforce traffic laws, such as a radar gun checkout program
- Adult school crossing guards provides a trained adult to help pedestrians cross the street
- Pedestrian decoys target enforcement activities with a staged pedestrian or motorist, targeting motorists or pedestrians who do not comply with traffic laws
- Partnership with media, stakeholders, and City departments involve various stakeholders in pedestrian education campaigns and efforts

ENCOURAGEMENT

The following is a list of pedestrian safety practices that encourage pedestrians and motorists to engage in safe and lawful behavior:

- Wayfinding install signage directing pedestrians to designated routes and destinations
- Walking school buses/Walking Wednesdays –organize activities by schools and/or parents that have students walk to school in groups on selected days
- Community walking audits lead or support community members on walk around an area noting positive practices and areas for improvement
- Silver sneaker awards distribute awards encouraging physical activity among seniors
- Incentives/contests reward those who walk or demonstrate safe walking habits
- Peer-to-peer education develop program to educate pedestrians through interaction with peers trained in pedestrian safety



APPENDIX A: CITYWIDE CROSSWALK INVENTORY



APPENDIX B: PEDESTRIAN LEVEL OF SERVICE CALCULATIONS



The pedestrian delay calculations included in the Crosswalk Tool rely on the methodology recommended in NCRHP Report 562 (http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_562.pdf). A full discussion of this methodology is found in Appendix A of the NCHRP report. The key equations in the tool include:

TABLE 9: PEDESTRIAN LOS CALCULATIONS

Road Characteristics	Description
Speed on the major street (mph)	Use the major road posted or statutory speed limit for the facilities or, if available, the 85th percentile speed.
Pedestrian crossing distance (ft)	Pedestrian crossing distance represents the distance that a pedestrian would need to cross before reaching either the far curb or a median refuge island. The distance would be between the near and far curbs if a painted or raised median refuge island is not present, or to the median refuge island if the island is present. Note if a parking stall is present, its width should be included in the crossing distance measurement. Crossing distance rather than number of lanes was selected for the procedure so that the extra time needed by a pedestrian to cross bike lanes, two-way left-turn lanes, wide lanes, etc. could be considered.
Counts	Description
Peak-hour pedestrian volume crossing major roadway (ped/h)	Pedestrian volume is the number of pedestrians crossing the major roadway in a peak hour. The count includes all pedestrian crossings of the major roadway at the location.
Major road peak hour vehicle volume (veh/h)	Vehicle volume represents the number of vehicles and bicycles on both approaches of the major road during a peak hour. If a painted or raised median refuge island is present of sufficient size to store pedestrians (minimum of 6 ft [1.8 m] wide), then consider the volume on each approach individually. In the signal warrant calculations, use the volume on both approaches (Vmaj-s). For the delay calculations, the volume (Vmaj-d) would reflect either both approaches if a refuge island is not present or each approach individually if a refuge island is present.
Local Parameters	Description
Motorist compliance for region (high or low)	Compliance reflects the typical behavior of motorists for the site. If motorists tend to stop for a pedestrian attempting to cross at an uncontrolled location, then compliance is "high." If motorists rarely stop for a crossing pedestrian, then compliance is "low."
Pedestrian walking speed (ft/s)	Walking speed represents the speed of the crossing pedestrians. Recent research has suggested walking speeds of 3.5 ft/s (1.1 m/s) for the general population and 3.0 ft/s (0.9 m/s) for the older population. If calculating for a site, determine the 15th percentile value of those using the crossing.
Pedestrian start-up time and end clearance time (s)	Start-up time is used in the calculation of the critical gap. A value of 3 s is suggested in the Highway Capacity Manual.



TABLE 9: PEDESTRIAN LOS CALCULATIONS

Calculations	Description
Signal warrant check (ped/hr)	Regression equations were determined for the plots shown in the 2012 CA MUTCD Figures 4C-7 and 4C-8. These equations can calculate the minimum number of pedestrians crossing the major road needed to meet the signal warrant based on the major road volume. The recommendation made in 2006 to the National Committee on Uniform Traffic Control Devices is that the vehicles signal warrants values for crossing two lanes be used as the pedestrian signal warrant values. Both the peak vehicle hour and the peak pedestrian hour may need to be checked.
HAWK warrant check	Regression equations were determined for the plots shown in the 2012 CA MUTCD Figures 4F-1 and 4F-2. These equations can calculate the minimum number of pedestrians crossing the major road needed to meet the HAWK signal warrant based on the major road volume.
Critical gap (s), tc	Critical gap is the time in seconds below which a pedestrian will not attempt to begin crossing the street. For a single pedestrian, critical gap (tc) can be computed using Equation 18-17 of the 2000 Highway Capacity Manual. The equation includes consideration of the pedestrian walking speed (Sp), crossing distance (L), and start-up and end clearance times (ts). $tc = (L/Sp) + ts$
Major road flow rate (veh/s), v	Flow rate is a measure of the number of vehicles per second (v). For high-speed conditions, the number of vehicles is adjusted by dividing by 0.7. Flow rate is determined by: Low speed: $v = Vmaj-p/3600$ high speed: $v = (Vmaj-p/0.7)/3600$ It is based on the major road volume (Vmaj-d), which is the total of both approaches (or the approach being crossed if median refuge island is present) during the peak hour (veh/h).
Average pedestrian delay (s/person), dp	The 2000 Highway Capacity Manual includes Equation 18-21 that can be used to determine the average delay per pedestrian at an unsignalized intersection crossing (s/person). dp = $(1/v)*(EXP(v*tc)-(v*tc-1))$. It depends upon critical gap (tc), the vehicular flow rate of the crossing (v), and the mean vehicle headway.
Total pedestrian delay (ped-h)	Total pedestrian delay (Dp) uses the average pedestrian delay (dp) and multiplies that value by the number of pedestrians (Vp) to determine the total pedestrian delay for the approach. Dp = $(dp \times Vp)/3,600$

Source: NCHRP Report 562, http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp rpt 562.pdf



APPENDIX C: PEDESTRIAN COLLISION ANALYSIS





PEDESTRIAN COLLISION ANALYSIS

Vehicle-pedestrian collision data is one source of information to identify pedestrian safety "hotspots". Collision data was obtained from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) for the City of Salinas between January 2005 and December 2010, the five (5) most recent years of available data at the time this report was authored.

The locations of pedestrian collisions were mapped to illustrate the pedestrian-vehicle collisions throughout Salinas. A total of 363 vehicle-pedestrian collisions occurred in Salinas between 2005 and 2010. **Figure 4** shows the number and location of collisions at intersections throughout Salinas from 2005-2010. **Table 10** lists the locations with the highest number of vehicle-pedestrian collisions Citywide. As shown, the intersection of N. Sanborn Road and Garner Avenue has the most frequent pedestrian collisions, with 14 occurring between 2005 and 2010.²⁹

TABLE 10: TOP PEDESTRIAN-VEHICLE COLLISION LOCATIONS, SALINAS, 2005-2010

Intersection	Number of Collisions	Intersection	Number of Collisions
N. Sanborn Road and Garner Avenue	14	Lincoln Avenue and Central Avenue	4
Salinas Street and W. Alisal Street	7	Geil Street and S. Main Street	4
N. Main Street and E. Laurel Drive	6	N. Main Street and Lamar Street	4
Williams Road and Bardin Road	5	Alisal Street and Wood Street	4
Harden Parkway and N. Main Street	5	E. Alisal Street and N. Madeira Avenue	4
E. Alisal Street and Sanborn Street	5	E. Market Street and Carr Avenue	4
E. Bernal Drive and N. Main Street	4	N. Sanborn Road and Freedom Parkway	4

Source: SWITRS, 2005-2010.Fehr & Peers, 2013.

Notes: This list is based on number of collisions and does not adjust for vehicle or pedestrian volumes (exposure). Collisions occurring 25 feet or closer to an intersection were assigned to the nearest intersection.

²⁹ The City recently received a Highway Safety Improvement Program (HSIP) grant to provide intersection safety improvements along the Sanborn Road Corridor that includes pedestrian benefits. (countdown signals/eliminates permitted left turns).



Figure 4: Salinas Pedestrian-Vehicle Collisions, 2005-2010



Figure 5 shows the higher severity pedestrian-vehicle collisions, including those with pedestrian injuries and fatalities, and **Table 11** lists the locations with the highest number of fatalities and injuries. Similar to Table 1, N. Sanborn Road and Garner Avenue has the highest frequency of pedestrian-vehicle collisions, with 14 injuries and two fatalities occurring between 2005 and 2010.

TABLE 11:
TOP PEDESTRIAN-VEHICLE COLLISIONS LOCATIONS, INJURY OR FATALITY, 2005-2010

Intersection	Number of Injuries (Fatalities)	Intersection	Number of Injuries (Fatalities)
N. Sanborn Road and Garner Avenue	14 (2)	E. Alisal Street and N. Pearl Street	4 (0)
N. Main Street and E. Laurel Drive	7 (0)	Freedom Parkway and N. Sanborn Road	4 (0)
Salinas Street and W. Alisal Street	7 (0)	E. Laurel Drive and Towt Street	4 (0)
E. Alisal Street and N. Sanborn Road	6 (0)	W. Alisal Street and Lincoln Avenue	4 (0)
Williams Road and Bardin Road	6 (0)	S. Main Street and Geil Street	4 (0)
Harden Parkway and N. Main Street	5 (0)	N. Main Street and Lamar Street	4 (0)
Alisal Street and Wood Street	4 (0)	N. Main Street and Bernal Drive	4 (1)
E. Alisal Street and N. Madeira Avenue	4 (0)	E. Alvin Drive and McKinnon Street	4 (0)

Source: SWITRS, 2005-2010. Fehr & Peers, 2013.

Notes: This list is based on number of collisions and does not adjust for vehicle or pedestrian volumes (exposure). Collisions occurring 25 feet or closer to an intersection were assigned to the nearest intersection.



Figure 5: Salinas Pedestrian-Vehicle Collisions Resulting in Injuries and/or Fatalities, 2005-2010



Primary Collision Factor

Table 12 lists the most common primary collisions factors (PCFs) for pedestrian-vehicle collisions in Salinas. The top three PCFs were pedestrian right-of-way violation (wherein the motorist is at fault), pedestrian violation (wherein the pedestrian is at fault), and unsafe speed (wherein the vehicle's speed is the primary cause of the collision). In total, motorists are at fault for over 50 percent of pedestrian collisions. Pedestrian violations account for approximately one-third of collision factors.

TABLE 12:
PRIMARY COLLISION FACTORS (PCFS) FOR PEDESTRIAN-VEHICLE COLLISIONS
IN SALINAS, 2005-2010

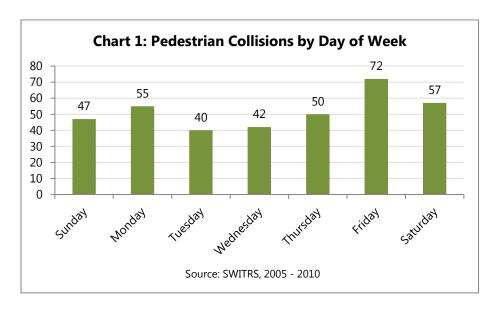
Primary Collision Factor	% of Total
Pedestrian Right-of-Way	36.4%
Pedestrian Violation	34.4%
Not Stated	5.2%
Unsafe Speed	4.4%
Unsafe Starting or Backing	3.0%
Traffic Signals and Signs	2.8%
Unknown	2.8%
Improper Turning	2.5%
Driving or Bicycling Under the Influence of Alcohol or Drug	2.2%
Automobile Right-of-Way	1.7%
Improper Passing	1.1%
Other Improper Driving	1.1%
Wrong Side of Road	0.8%
Other Hazardous Violation	0.8%
Unsafe Lane Change	0.6%

Source: SWITRS 2005-2010, Fehr & Peers, 2013



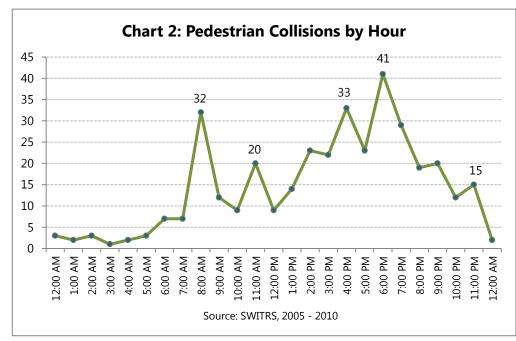
Day of the Week

The following statistics and charts show the number of pedestrian collisions that occur by day of the week and hour of the day. Between 2005 and 2010, collisions occurred most frequently on Fridays and Saturdays, with 72 and 57 collisions, respectively. Monday had the third highest number of pedestrian collisions (55).



Pedestrian collisions occur in a pattern similar to typical morning and evening commute peak hours: between 2005 and 2010, 32 pedestrian collisions occurred in the 8:00 am hour, and 41 collisions in the 6:00 pm hour.





Conditions

Weather

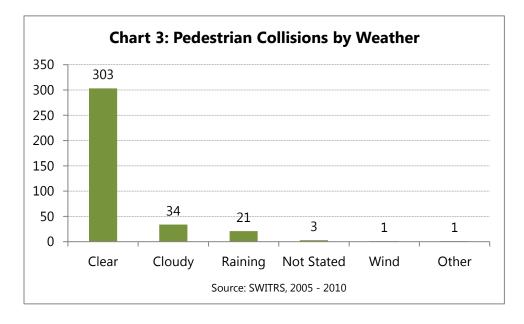


Chart 3 displays the weather conditions during pedestrian collisions in Salinas. The majority of pedestrian collisions took place when the weather was clear, which indicates that in 80% of collisions, weather was likely not a factor in condition of the roadway; however, sun glare may have contributed to some of these collisions. The weather was cloudy in 34 of the collisions and raining in 21. Wind was noted in one (1) collision, "Other" in one (1) collision, and in three (3) reports weather was not reported.



Age Statistics

TABLE 13:
AGE RANGES FOR PEDESTRIAN-VEHICLE COLLISIONS IN SALINAS, 2005-2010

Age Range	% of Total
0-15	28%
16-30	29%
31-45	18%
46-60	17%
61+	9%

Source: SWITRS 2005-2010, Fehr & Peers, 2013

Table 13 provides a summary of pedestrian age data for collisions in Salinas. The ages are grouped in five categories: ages 0-15, ages 15-30, ages 31-45, ages 46-60, and ages 61 and above. The greatest proportion of collisions involved the age group 16-30, which accounted for 29 percent of the collisions, followed closely by the age group 0-15, which accounted for 28 percent of pedestrian collisions. Together, pedestrians under 30 years of age account for over half of the pedestrians involved in collisions.

Near Schools

The frequency of pedestrian-vehicle collisions was also reviewed for school-age children (five years old through 18 years old) within ¼-mile of schools. **Figure 6** shows the locations of these pedestrian-vehicle collisions. In total, 33 collisions occurred that meet these criteria, or approximately 10 percent of the total pedestrian-vehicle collisions occurring Citywide.

SUMMARY

While walking accounts for only a small percentage of trips,³⁰ according to the National Highway Traffic Safety Administration (NHTSA), pedestrian fatalities represented 13 percent of total fatalities in traffic crashes in 2010 ("Traffic Safety Facts: 2010 Data," 2012). This implies that pedestrians are over represented in collisions compared to the number of trips made by walking. Pedestrian collisions are also known to be

³⁰ According to the 2010 American Community Survey 3-Year Estimates, the walking mode for work trips in the United States is 2.8 percent.



underreported, since those collisions with no injury or fatality often go without a police report and are, thus, not added to the City or SWITRS databases for analysis.

Collision data for the City of Salinas was obtained from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) between January 2005 and December 2010, the five (5) most recent years of available data at the time this report was authored. Based on this data, 363 vehicle-pedestrian collisions occurred in Salinas between 2005 and 2010. The most common primary collision factors included pedestrian right-of-way violation (wherein the vehicle is at fault), pedestrian violation (wherein the pedestrian is at fault), and unsafe speed (wherein the vehicle's speed is the primary cause of the collision). Weekends (Fridays through Sundays) had higher collision frequency, on average, than weekdays; however, collision frequency tended to follow peak vehicle commute times – 8:00 am, 4:00 pm, and 6:00 pm have the highest number of pedestrian collisions.

Age is also an important variable in understanding collision frequency, as 57 percent of pedestrian collisions involved pedestrians under the age of 30. This indicates that safe routes to school education, enforcement, and engineering efforts should be a priority for the City.



Figure 6: Pedestrian-Vehicle Collisions for School-Age Children Occurring within 1/4-Mile of Schools





City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-279, Version: 1

Clean California Grant Application for AMOR Salinas Education and Outreach

Approve a Resolution authorizing staff to apply for the Clean California Local Grant Program Cycle 2 funding for up to \$750,000 for AMOR Salinas education and outreach and authorizing acceptance of the grant if awarded to the City.

DATE: MAY 2, 2023

DEPARTMENT: ADMINISTRATION

FROM: STEVEN S. CARRIGAN, CITY MANAGER

BY: SOPHIA ROME, COMMUNITY RELATIONS MANAGER

TITLE: CLEAN CALIFORNIA GRANT APPLICATION FOR AMOR

SALINAS EDUCATION AND OUTREACH

RECOMMENDED MOTION:

A motion to approve a Resolution (1) authorizing staff to apply for Clean California Local Grant Program Cycle 2 funding for up to \$750,000 for AMOR Salinas education and outreach; (2) authorizing acceptance of the grant if awarded to the City of Salinas (City); and (3) authorizing establishment of appropriations and corresponding revenue budget, if grant funds are awarded.

RECOMMENDATION:

Staff recommends the City Council approve a Resolution authorizing staff to apply for Clean California Local Grant Program Cycle 2 funding for up to \$750,000 for AMOR Salinas education and outreach and authorizing acceptance of the grant if awarded to the City.

EXECUTIVE SUMMARY:

The City launched the AMOR Salinas movement in 2020 to address concerns about an increase in litter and debris throughout the City. Heading into year three of AMOR Salinas, the City is seeking to expand education efforts to foster a culture of community commitment to volunteering and keeping the environment clean. The Clean California Local Grant Program (CCLGP) will expand the City's capacity and increase available resources to support education and outreach efforts over the next two years.

BACKGROUND:

During the first year of the pandemic, there were increasing concerns regarding the amount of litter and debris accumulating across the City. Through the formation of the Litter & Debris Subcommittee, the City introduced the AMOR Salinas movement designed to address the need for citywide beautification, engage the community and partners, and focus education efforts to foster a culture of commitment to citywide beautification, increasing volunteerism, and keeping our environment clean.

Year one of AMOR Salinas was focused on immediate need for beautification and increasing volunteerism. Moving into year two, the City committed resources to growing awareness and marketing for AMOR Salinas. The City has increased the number of City-led volunteer clean-ups and has more than doubled the number of volunteers in the City's database that have participated in City-led clean-ups through these AMOR Salinas efforts. There have been a growing number of partner and community-led clean-ups as well that are increasing the impact and reach of the AMOR Salinas movement.

The CCLGP will allow the City to continue to grow the AMOR Salinas movement, bring more awareness to AMOR Salinas, and focus on meaningful and impactful education within the community, including youth education and engagement. This grant application will include:

- AMOR Salinas banners along main corridors across the City
- At least one AMOR Salinas art piece at City Hall with consideration for other AMOR Salinas art placement in public spaces
- Partnership with SUBA to support the Alisal Ambassador program
- Additional City-led clean-ups along corridors, including supplies and materials
- Education, outreach, and marketing materials for events
- Education events at schools
- Part time staff support for AMOR Salinas education and outreach

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

This grant aligns with the Council Strategic goals as follows:

- Economic Development
- Infrastructure and Environmental Sustainability
- Youth and Seniors

DEPARTMENTAL COORDINATION:

There was coordination with the Administration, Community Development, and Library and Community Services departments.

FISCAL AND SUSTAINABILITY IMPACT:

There is no significant impact to the General Fund. For an award of up to \$750,000, the City will be responsible for up to \$93,750 (12.5%). Funds will be appropriated and available in the Communications (Administration) annual operating budget in for fiscal years 2024 and 2025, as well as potential partnering with Community Development and Library and Community Services as this project aligns with Alisal Vibrancy Plan implementation and public art.

ATTACHMENTS:

None.

RESOLUTION NO. ____ (N.C.S.)

CLEAN CALIFORNIA GRANT APPLICATION FOR AMOR SALINAS EDUCATION AND OUTREACH

WHEREAS, the City launched the AMOR Salinas movement in 2020 to address concerns about an increase in litter and debris throughout the City of Salinas (City); and

WHEREAS, heading into year three of AMOR Salinas, the City is seeking to expand education efforts to foster a culture of community commitment to volunteering and keeping the environment clean; and

WHEREAS, the Clean California Local Grant Program (CCLGP) will expand the City's capacity and increase available resources to support education and outreach efforts over the next two years; and

WHEREAS, the CCLGP will allow the City to continue to grow the AMOR Salinas movement, bring more awareness to AMOR Salinas, and focus on meaningful and impactful education within the community, including youth education and engagement.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council authorizes staff to apply for Clean California Local Grant Program Cycle 2 funding for up to \$750,000 for AMOR Salinas education and outreach, authorizes acceptance of the grant if awarded to the City of Salinas, and authorizes establishment of appropriations and corresponding revenue budget, if grant funds are awarded.

PASSED AND APPROVED this 2nd day of May, 2023, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	APPROVED:
	Kimbley Craig, Mayor
ATTEST:	



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-280, Version: 1

Organic Materials Direct Service Provider Agreement with Atlas Organics

Approve a Resolution to approve an organic materials direct service provider agreement between the City of Salinas and Atlas Organics.



DATE: MAY 2, 2023

DEPARTMENT: PUBLIC WORKS

FROM: DAVID JACOBS, PUBLIC WORKS DIRECTOR

BY: ADAM SPAULDING, ENVIRONMENTAL RESOURCE PLANNER

TITLE: A RESOLUTION TO APPROVE AN ORGANIC MATERIALS DIRECT

SERVICE PROVIDER AGREEMENT BETWEEN THE CITY OF

SALINAS, AND ATLAS ORGANICS

RECOMMENDED MOTION:

A motion to approve a resolution to approve an organic materials direct service provider agreement between the City of Salinas and Atlas Organics.

EXECUTIVE SUMMARY:

Service Agreement Revision: After approval of Council, but prior to final execution by Atlas Organics, the previously approved Agreement was requested to be updated to only include the two contractually obligated parties, the City of Salinas and Atlas Organics. Below is a restatement of the Staff Report from the submitted and approved Resolution from April 4, 2023.

In an effort to support the development of organic material recovery and processing facilities throughout the State, a provision in SB 1383 requires that each jurisdiction be responsible for procuring organic material from these vendors (proportionate to its population). To ensure compliance each jurisdiction must provide CalRecycle with a signed Direct Service Provider Agreement with an organic processor for the purchase of these mandated materials or for the associated credits which can be allocated to the jurisdiction.

Over the next three years the City of Salinas will be responsible for achieving 100% compliance with its procurement target. In 2023 however the City is only responsible for 30% of its procurement allocation, representing either 3,844.8 tons of mulch or 2,229.98 tons of compost.

The City, through Salinas Valley Solid Waste Authority secured a SB 1383 Implementation Support Grant that will cover the associated fees for compliance with the 30% threshold in 2023 with no impact or additional revenue required.

BACKGROUND:

Last year the State, acknowledging that since SB 1383 is an unfunded state mandate passed AB 1985 which allowed each jurisdiction up to three-years to fully phase-in organic procurement compliance (30% in 2023, 65% in 2024, and 100% in 2025).

CalRecycle rightfully understood that there would be financial challenges facing jurisdictions in their efforts to comply with SB 1383 implementation, (including organic material procurement purchasing) and established a grant to support SB 1383 adoption. The City, through the Salinas Valley Solid Waste Authority secured grant funding in part to offset these initial procurement costs.

In 2023, with the adoption of AB 1985, the City of Salinas is only responsible for procuring 30% of its overall target which can be achieved through the purchase/allocation of either 3,844.8 tons of mulch or 2,229.98 tons of compost.

The Salinas Valley Solid Waste Authority has worked with Atlas Organics (the organics processor at Johnson Canyon Landfill) to secure reduced pricing for its member agencies at a rate of \$8 per cubic yard of mulch or \$12.50 per cubic yard of compost.

2023 Procurement Target of 30%

	Procurement Targ	get 30% Totals
Member Agency	Mulch (Tons)	Compost (Tons)
Salinas	3,844.80	2,229.98
Soledad	586.80	340.34
King City	359.40	208.45
Gonzales	203.70	118.15
Greenfield	441.60	256.13
County (SVR area)	819.90	475.54

DISCUSSION:

Current grant funding will cover the organic material procurement costs for 2023. However, since procurement targets are being phased-in: 30% for 2023 and 65% for 2024 and 100% in 2025, the allocated funding for procurement will not sustain the City for full compliance in 2024 or for any years beyond. The City will need to identify either alternative uses for current funding or establish

measures in future solid waste rate adjustments to ensure the ability to comply with the organic material procurement component of SB 1383.

Beginning in 2025, the City will need to budget for the annual costs at the 100% procurement target (i.e. 7,433 tons compost), Those annual procurement costs are currently estimated at approximately \$185,825 (this number only includes the purchase of material, or associated credit but does not include any costs for transportation or labor that would be needed if the City would want to utilize the material for City programs). The City additionally has the ability to explore alternative direct service provider agreements where better rates may be available, or to explore alternative energy procurement that is derived from organics recovery (all of which can be utilized to comply with the procurement target established in SB 1383).

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) per Guidelines Section 15378.

STRATEGIC PLAN INITIATIVE:

Compliance with SB 1383 and its associated organic material procurement target supports the reduction of greenhouse gas emissions. This effort further supports the City of Salinas 2022-2025 Strategic Plan Goals and Strategies including *Infrastructure and Environmental Sustainability*.

DEPARTMENT COORDINATION:

This agenda item will be coordinated primarily by the Department of Public Works, but future consideration or continuation of this initial Service Agreement (ending in December of 2023) will also involve communication and discussions with both the Legal and Finance Departments.

FISCAL AND SUSTAINABILITY IMPACT:

There is no direct impact to the City for FY 23-24, as grant funding will offset any fees or charges the City will incur.

ATTACHMENTS:

- 1. Resolution
- 2. Agreement between the City of Salinas and Atlas Organics

RESOLUTION NO.	((N.C.S.))

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SALINAS TO APPROVE AN ORGANIC MATERIALS DIRECT SERVICE PROVIDER AGREEMENT BETWEEN CITY OF SALINAS, AND ATLAS ORGANICS

WHEREAS, Public Resources Code sections 48000 et seq. authorize the Department of Resources Recycling and Recovery (CalRecycle) to administer various grant programs (grants) in furtherance of the State of California's (state) efforts to reduce, recycle and reuse solid waste generated in the state thereby preserving landfill capacity and protecting public health and safety and the environment; and

WHEREAS, CalRecycle administered a one-time grant program meant to provide aid in the implementation of regulations adopted by CalRecycle; and

WHEREAS, The City, in partnership with Salinas Valley Solid Waste Authority submitted and was awarded a SB 1383 Local Assistance Grant to assist the City in the implementation of regulation requirements associated with SB 1383, including organic material procurement costs; and

WHEREAS, The City of Salinas is entering into a contract with Atlas Organics to be the City's direct service provider of Organic Materials in compliance with SB 1383; and

WHEREAS, The contract will remain into effect until December 31, 2023. The term of the Agreement may be extended by mutual agreement of the parties for three (3) optional, one (1) year extensions; and

WHEREAS, City Council approved the execution of a Direct Service Provider Agreement with Atlas Organics and the Salinas Valley Solid Waste Authority on April 4th, 2023, this revised agreement establishes only the City and Atlas Organics as signators; and

The contract will remain into effect until December 31, 2023. The term of the Agreement may be extended by mutual agreement of the parties for three (3) optional, one (1) year extensions.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Salinas that the Organic Materials Direct Service Provider Agreement between the member agencies of the Salinas Valley Solid Waste Authority, City of Salinas, and Atlas Organics is hereby approved; and

BE IT FURTHER RESOLVED, that this Resolution shall supersede any prior resolutions related to the approval of the Organic Materials Direct Service Provider Agreement.

PASSED AND APPROVED this 2nd day of May, 2023, by the following vote:

AYES:

NOES:	
ABSENT:	
ABSTAIN:	
	APPROVED:
	Kimbley Craig, Mayor
ATTEST:	
Patricia M. Barajas, City Clerk	

ORGANIC MATERIALS DIRECT SERVICE PROVIDER AGREEMENT BETWEEN THE CITY OF SALINAS, A MEMBER AGENCY OF THE SALINAS VALLEY SOLID WASTE AUTHORITY, AND ATLAS ORGANICS

THIS AGREEMENT FOR SERVICES (herein "Agreement") is made and entered into this 2 day of MAY, 2023 ("Effective Date") by and between the City of Salinas, a member of the Salinas Valley Solid Waste Authority ("Member Agency") and Atlas Organics CU11, LLC (Processor). The Processor and Member Agency may be collectively referred to as the "Parties" and individually as a "Party."

NOW, THEREFORE, the parties hereto agree as follows:

- 1. **Purpose of Agreement:** This Agreement sets forth the terms and conditions pursuant to which the Parties will cooperate to incentivize residents and solid waste rate payers of the Member Agency (Public Purchasers) to acquire recovered organic waste product in the form of finished compost ("Compost") or mulch ("Mulch") from Processor on behalf of the Member Agency to assist them in complying with the requirements of the California Code of Regulations (CCR), title 14, sections 18993.1 through 18993.4 ("SB 1383 Regulations").
- 2. **Term:** The term of this Agreement shall commence on the Effective Date and remain in effect until December 31, 2023. The term of this Agreement may be extended by mutual agreement of the parties for three (3) optional, one (1) year extensions.
- 3. Services: Processor shall provide to Public Purchasers a discount which is equal to current Member Agency Product Pricing (per cubic yard) for the purchase of Compost and/or Mulch, as applicable, as set forth in Exhibit A. Processor shall provide the Member Agency, or their designated representative, monthly reports evidencing procurement of and payment for the Compost or Mulch for the Public Purchaser for annual reporting purposes. The reports shall include date of purchase, the name of each individual, entity, operation, or facility from whom the Compost was procured, and the amount in tons or cubic yards purchased, and type of Compost and/or Mulch purchased. Processor will charge by the cubic yard. For budgeting purposes, the Member Agency can use a conversion factor of 1.4 cubic yards of compost for 1 ton of compost and 4 cubic yards of mulch for 1 ton of mulch. Compost or Mulch purchased as a part of this agreement shall not exceed combined annual jurisdiction procurement targets for the respective Member Agency, as set forth by CalRecycle and listed in Exhibit B.

- 4. **Payment**: Processor will submit monthly invoices to the Member Agency for reimbursement at the specified per cubic yard rate based on the current pricing listed in Exhibit A. All invoices shall be payable net forty-five (45) days of receipt.
- 5. **Warranties:** Processor warrants and covenants that all Compost or Mulch at the time of delivery conforms with the specifications in this Agreement, SB 1383 Regulations, particularly 14 CCR §§ 18993.1-18993.4, and complies with all federal, state, and local laws, regulations, and ordinances applicable to the manufacture, production and sale of Compost or Mulch.
- 6. **Indemnity:** Each Party (the "Indemnifying Party") agrees to indemnify and hold the other party, including the parties' parents, affiliates, and subsidiaries and each of their officers, employees, and agents (collectively, the "Indemnified Party"), harmless from and against all loss or damage, including reasonable attorneys' fees, costs and expenses incurred by the Indemnified Party as a result of any claims related to or arising out of the Indemnifying Party's performance of its duties hereunder, unless such loss or damage shall arise from the negligence or the intentional acts of the Indemnified Party. In the foregoing sentence, the words "loss or damage" include, but are not limited to, loss or damage arising directly or indirectly from any actions or omissions of any employee or authorized representative of either party.
- 7. **Limitation of Liability.** Notwithstanding anything to the contrary, EXCEPT IN the CASE OF FRAUD, under no circumstances shall EITHER PARTY be liable to THE OTHER PARTY, ITS PARENTS, AFFILIATES AND SUBSIDIARIES and EACH OF THEIR OFFICERS, MANAGERS, EMPLOYEES, CONTRACTORS, OR AGENTS for any LOSS OF PROFITS, OR ANY SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES, HOWEVER CAUSED, KNOWN OR UNKNOWN, ANITICIPATED OR UNANTICIPATED, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THE PARTIES ACKNOWLEDGE THAT THESE LIMITATIONS ON POTENTIAL DAMAGES WERE AN ESSENTIAL ELEMENT IN SETTING CONSIDERATION UNDER THIS AGREEMENT.
- 8. **Governing Law, Venue:** This Agreement shall be deemed to have been made in the County of Monterey, California. This Agreement shall be governed by and construed in accordance with the laws of the State of California. The Parties agree that any action or proceeding to enforce or relating to this Agreement shall be brought exclusively in the federal or state courts located in Monterey County, California, and the Parties hereto consent to the exercise of personal jurisdiction over them by any such courts for purposes of any such action or proceeding.
- 9. **Independent Purchaser:** A Public Purchaser shall act as an independent Purchaser in the performance of this Agreement and in no respect shall a Public Purchaser be considered an agent or employee of the Member Agency. No provisions of this Agreement shall be intended to create a partnership or joint venture between a Public Purchaser, Processor, or the Member Agency and no Party shall have the power

to bind or obligate the other Parties, except as expressly set forth in this Agreement.

10. **Entire Agreement:** This Agreement contains the entire agreement between the Parties with respect to the subject matter of this Agreement and any agreement or representation with respect to the same or the obligations of any other Party with respect to the same which is not expressly provided in this Agreement or in a written document which is signed by the Party to be charged, shall be null and void.

IN WITNESS WHEREOF, the Parties have hereunto set their hands on the first day date above written.

Member Agency:	Processor: Atlas Organics CU11, LLC
By:City of Gonzales	<u> </u>
Date:	Ву:
	Date:
Approved as to Form	
By:	
Date:	

Member Agency:	Processor: Atlas Organics CU11, LLC
By:	
Date:	By:
	Date:
Approved as to Form	
By:	
Date:	_

Member Agency:	Processor: Atlas Organics CU11, LLC
By:City of Greenfield	<u> </u>
City of Greenfield	By:
Date:	
	Date:
Approved as to Form	
Ву:	<u> </u>
Date:	

Member Agency:	Atlas Organics CU11, LLC
By:City of Salinas	_
Date:	By:
	Date:
Approved as to Form	
By:	_
Date:	

Member Agency:	Processor: Atlas Organics CU11, LLC
By:City of Soledad	<u> </u>
Date:	Ву:
	Date:
Approved as to Form	
Ву:	_
Date:	

Member Agency:	Processor: Atlas Organics CU11, LLC	
By:County of Monterey		
Date:	By:	
	Date:	
Approved as to Form		
By:		
Date:		

Exhibit A

Member Agency Product Pricing

Mulch: \$8.00 per cubic yard

Compost: \$12.50 per cubic yard

Exhibit BMember Agency SB 1383 Procurement Targets

CVD Marshau		Procurement Targets* (Tons)		
SVR Member		Total Organic		
Agency	Population*	Waste	Mulch	Compost
Salinas	160,206	12,816	12,816	7,433
Soledad	24,454	1,956	1,956	1,134
King City	14,977	1,198	1,198	695
Gonzales	8,490	679	679	394
Greenfield	18,402	1,472	1,472	854
Unincorp County ^	34,158	2,733	2,733	1,585
		TOTALS:	20,854	12,095

Conversion Factors:

1 ton of organic waste = 0.58 ton of compost

1 ton of organic waste = 1 ton of mulch



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-282, Version: 1

San Juan Grade Road Sidewalk and Street Light Improvements Project

Approve a Resolution authorizing the establishment of a new CIP account named, "San Juan Grade Road Sidewalk and Street Light Improvements Project"; and authorize the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$1,344,690.00; and authorize the establishment of a Measure X appropriation of up to \$149,410.00 and use of fund balance as matching funds.

DATE: MAY 2, 2023

DEPARTMENT: PUBLIC WORKS DEPARTMENT

FROM: DAVID JACOBS P.E., L.S., PUBLIC WORKS DIRECTOR

BY: ANDREW EASTERLING, TRAFFIC ENGINEER

TITLE: SAN JUAN GRADE ROAD SIDEWALK AND STREET LIGHT

IMPROVEMENTS PROJECT

RECOMMENDED MOTION:

A motion to:

- 1) Authorize the establishment of a new CIP account named, "San Juan Grade Road Sidewalk and Street Light Improvements Project" with an appropriation of \$1,494,100;
- 2) Authorize the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$1,344,690;
- 3) Authorize a transfer of \$1,344,690 from the Special Construction Assistance Federal & State Fund (5201) to the CIP Fund (5800) for the Project and corresponding revenue budget;
- 4) Authorize a transfer of \$149,410 from the Measure X (2510) Fund to the CIP Fund (5800) for the Project and use of Measure X (2510) fund balance as matching funds for the Project; and
- 5) Authorize the Public Works Director to execute all agreements and any required paperwork with Caltrans for the Highway Safety Improvement Program Grant Program.

EXECUTIVE SUMMARY:

On September 15, 2021, the City Council adopted the City of Salinas Vision Zero Action Plan. During the plan development San Juan Grade Road was identified as part of the High Injury Network within the City of Salinas. The City submitted an application for grant funding to enhance the crosswalk, and the project was selected to receive \$1,344,690.00. The City will be responsible for \$149,410.00 in matching funds.

BACKGROUND:

The City of Salinas adopted a Vision Zero Policy on February 11, 2020, and shortly after developed a Vision Zero Action Plan (Attachment 1) approved by Council Resolution No. 22184 on September 14, 2021. The Vision Zero Action Plan is rooted in the understanding that traffic deaths

are preventable. The Vision Zero Action Plan used a systems-based approach and the application data to identify emphasis areas, priorities and actionable strategies with the goal of eliminating severe injury and fatal crashes.

The Vision Zero Action Plan compiled 10 years (2009-2018) of collision data and created maps using geographic information systems (GIS) technology to display and filter collision data to help illustrate spatial patterns and trends. This data-driven analysis helped reveal collision trends and patterns in collision type, driver factors, roadway features, vehicle factors or environmental conditions. Trends in the data helped identify the High Injury Network (HIN) and reveal emphasis areas where a higher frequency of collisions can be evaluated to achieve the goal of zero fatalities and serious injuries most effectively.

During the plan development San Juan Grade Road was identified as part of the High Injury Network within the City of Salinas. The Vision Zero Action Plan only included data between 2009-2018, however more recently there were two fatal collisions in close proximity to each other on the corridor between 2018 and 2020. One of the recent collisions involved a pedestrian walking at night. This data suggests that street lighting and sidewalk improvements may be an effective countermeasure for the specific collision trends.

The City is working on a pavement rehabilitation project on San Juan Grade Road (CIP 9080). As part of this project the City was planning to install new sidewalks where there are currently gaps in the network. The City was able to repackage some of the existing plans to separate the pavement work and safety improvements components into a competitive Highway Safety Improvement Program (HSIP) grant application. The City was successful in its application and was selected to receive \$1,344,690.00 in grant funds with a 10% match. The grant funds will go towards installing sidewalks, ADA ramps, streetlights, intersection lights, and radar feedback signs.

Following the acceptance of grant funding, City staff would begin to develop plans and specifications. The project would come back to City Council to approve plans and specifications before going to construction. Additionally, Caltrans will review the project documents before authorizing the use of grant funds for construction.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

This item supports the City Council's goals of "Public Safety" and "Infrastructure and Environmental Sustainability".

DEPARTMENTAL COORDINATION:

The Public Works Department and Finance Department manage the project accounting. The Public Works Department manages construction contract, inspection, and final acceptance of construction projects.

FISCAL AND SUSTAINABILITY IMPACT:

There is no impact to the General Fund. The total project cost is estimated to be \$1,494,100.00. The Highway Safety Improvement Program requires a 10% match. If accepted, the grant amount would be \$1,344,690.00, and the City would be required to contribute \$149,410.00 as a local match. Staff recommends the establishment of a Measure X (2510) appropriation of up to \$149,410.00 and use of Measure X (2510) fund balance as matching funds.

ATTACHMENTS:

Resolution

Attachment 1: Vision Zero Action Plan Attachment 2: Project Location Map

RESOLUTION No. _____ (N.C.S.)

A RESOLUTION TO: 1) AUTHORIZE THE ESTABLISHMENT OF A NEW CIP ACCOUNT NAMED, "SAN JUAN GRADE ROAD SIDEWALK AND STREET LIGHT IMPROVEMENTS PROJECT"; 2) AUTHORIZE THE ACCEPTANCE OF HIGHWAY SAFETY IMPROVEMENT PROGRAM GRANT FUNDS IN THE AMOUNT OF \$1,344,690.00; AND 3) AUTHORIZE THE ESTABLISHMENT OF A MEASURE X (2510) APPROPRIATION OF UP TO \$149,410.00 AND USE OF MEASURE X (2510) FUND BALANCE AS MATCHING FUNDS FOR THE SAN JUAN GRADE ROAD SIDEWALK AND STREET LIGHT IMPROVEMENTS PROJECT.

WHEREAS, on September 15, 2021, the City Council adopted the City of Salinas Vision Zero Action Plan; and

WHEREAS, during the plan development San Juan Grade Road was identified as part of the High Injury Network within the City of Salinas; and

WHEREAS, the City submitted an application for grant funding to enhance the crosswalk, and the project was selected to receive \$1,344,690.00; and

WHEREAS, the City will be responsible for \$149,410.00 in matching funds; and

WHEREAS, the City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

NOW, THEREFORE, BE IT RESOLVED BY THE SALINAS CITY COUNCIL authorizes the establishment of a new CIP account named, "San Juan Grade Road Sidewalk and Street Light Improvements Project" with an appropriation of \$1,494,100; and

BE IT FURTHER RESOLVED that the Salinas City Council authorizes the acceptance of Highway Safety Improvement Program Grant funds in the amount of \$1,344,690; and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution authorizing a transfer of \$1,344,690 from the Special Construction Assistance - Federal & State Fund (5201) to the CIP Fund (5800) for the Project and corresponding revenue budget; and

BE IT FURTHER RESOLVED that the Salinas City Council authorizes a transfer of \$149,410 from the Measure X (2510) Fund to the CIP Fund (5800) for the Project and use of Measure X (2510) fund balance as matching funds for the San Juan Grade Road Sidewalk and Street Light Improvements Project; and

BE IT FURTHER RESOLVED that the Salinas City Council approves a Resolution to Authorizing the Public Works Director to execute all agreements and any required paperwork with Caltrans for the Highway Safety Improvement Program Grant Program.

PASSED AND APPROVED this 2nd day of May 2023 by the following vote:

AYES:		
NOES:		
ABSENT:		
ABSTAIN:		
	APPROVED:	
ATTEST:	Kimbley Craig, Mayor	
Patricia M. Barajas, City Clerk		





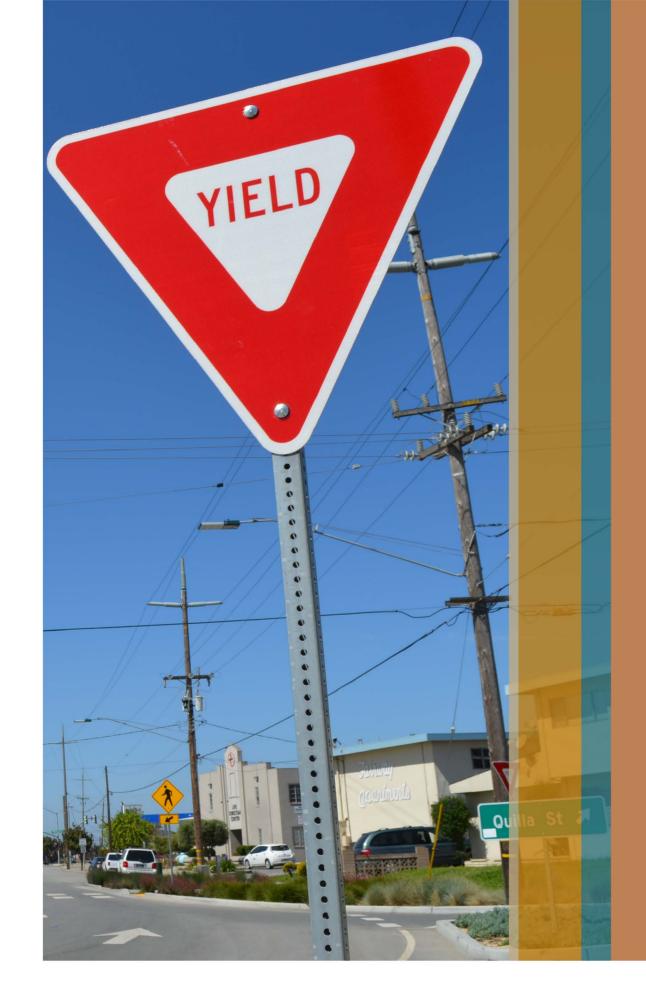












INTRODUCTION

The City of Salinas will work collaboratively in a data-driven effort to eliminate traffic-related fatalities and serious injuries.

To help achieve this goal, the City developed this Action Plan. The Plan uses historic crash data to pinpoint the factors contributing to traffic-related deaths and serious injuries, and identifies countermeasures to address those factors.

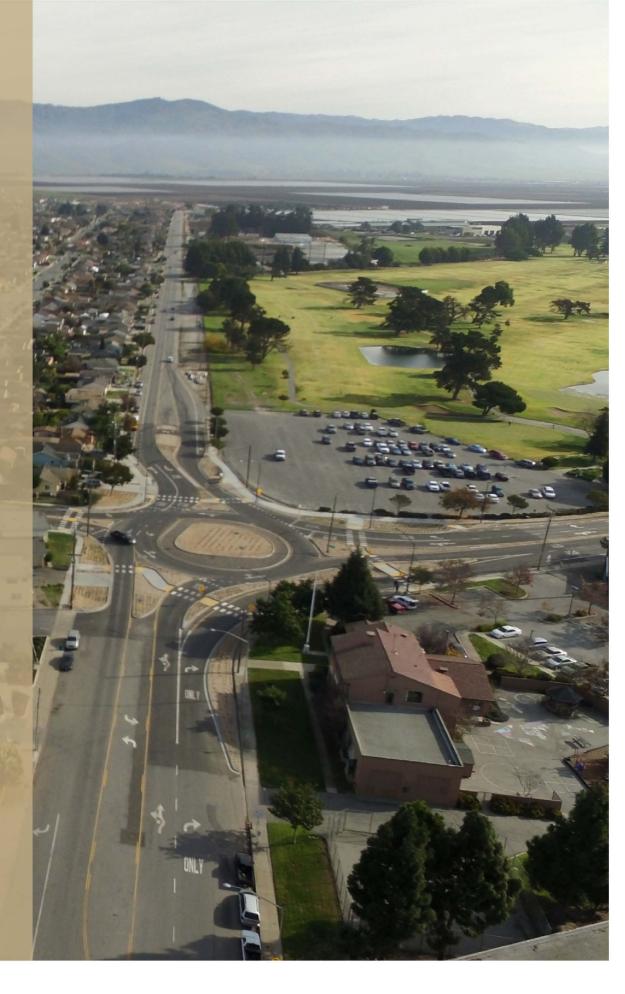
Vision Zero is an international traffic safety philosophy that rejects the notion that traffic crashes are simply "accidents", but instead preventable incidents that can and must be systematically addressed. Through Vision Zero, the City of Salinas and its partners are committed to working together, supported by a comprehensive data-driven process to create safer streets and bring the number of people killed or seriously injured down to zero.

Through Vision Zero, Salinas approaches transportation safety differently; not only addressing site specific improvements but taking a systematic and holistic approach to our transportation environment.

Tackling such a complex challenge requires reaching across multiple disciplines, working together to evaluate data differently, and investing financial and staff resources in transportation safety.

CONTENTS

INTRODUCTION	ii
LETTER FROM THE LATE MAYOR	V
A CALL TO ACTION TO MAKE OUR STREETS SAFER	2
ABOUT VISION ZERO	6
VISION ZERO STATEMENT & GUIDING PRINCIPLES.	10
VISION ZERO RESOLUTION	12
CRASH TRENDS	14
COLLISION PROFILES & COUNTERMEASURES TOOLBOX	
EXISTING EFFORTS	27
ACTION PLAN	30
ACKNOWLEDGEMENTS	44
TECHNICAL APPENDIX	





LETTER FROM THE LATE MAYOR

To the Salinas community,

As the City continues to grow, addressing traffic safety in Salinas becomes even more critical. We want to ensure that all users of our public streets, pedestrians, bicyclists, transit users, drivers and those with mobility impairments can travel safely, no matter how they choose to travel or where they are going.

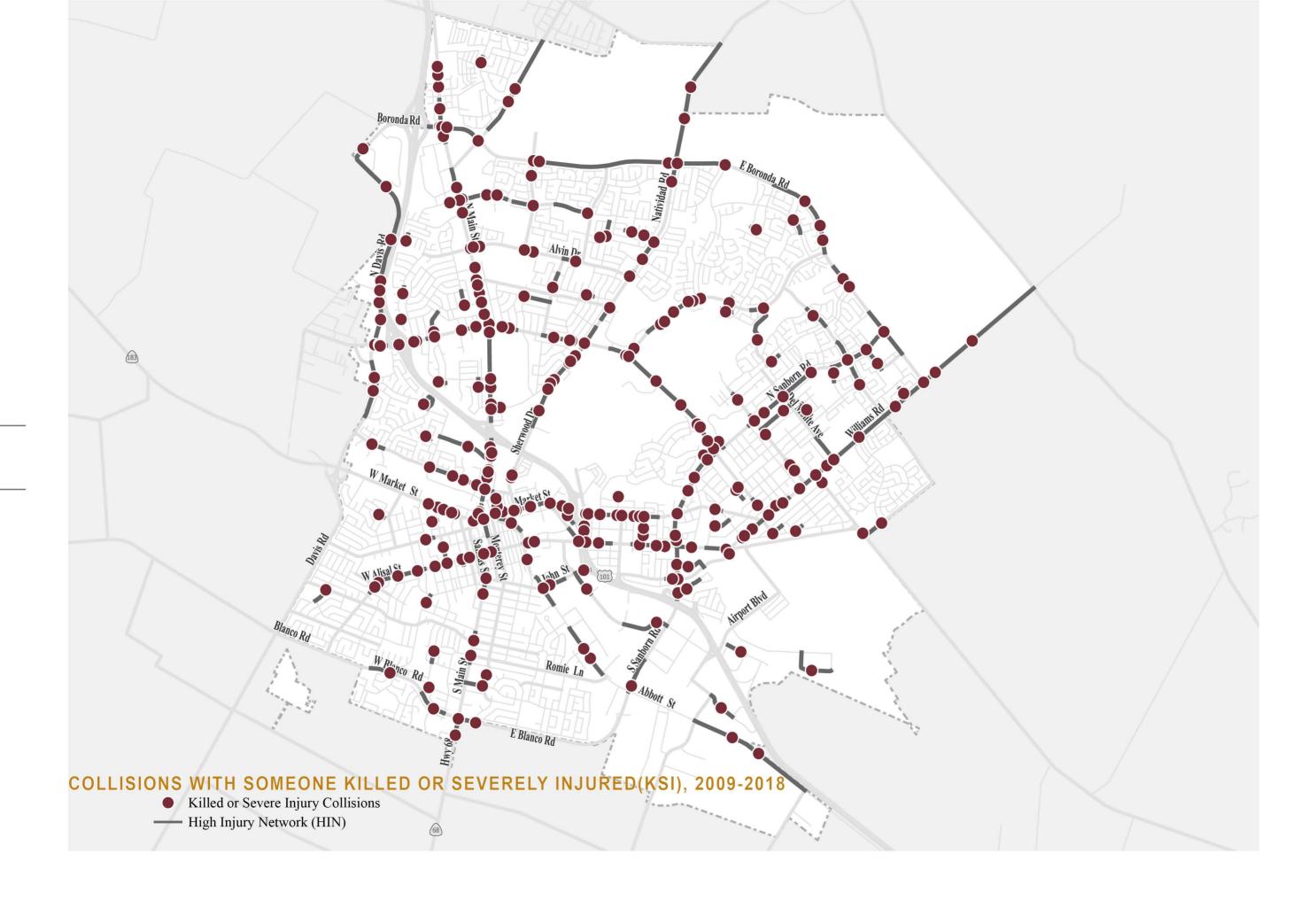
One death on a City street is one too many. I am pleased to present the City of Salinas Vision Zero Action Plan, which is committed to eliminating traffic fatalities and serious injuries on our City streets. Crashes are unacceptable and are often preventable through enforcement, education and engineering.

The City is undertaking an effort to develop a Vision Zero Action Plan, a data-driven and comprehensive process to achieve a goal of zero severe injuries and fatalities on our streets. The commitments outlined in this plan, and the actions the City will undertake to achieve them, will help strengthen and provide more opportunities for residents to prosper in a healthy, sustainable, and safe community.

Achieving Vision Zero is critically important. I am grateful to the City Council for its leadership, the hard work of City Staff and our community's participation in the planning process to make our community even stronger, and above all, a safer City.

Respectfully,
City of Salinas Late Mayor
Joe Gunter





A CALL TO ACTION

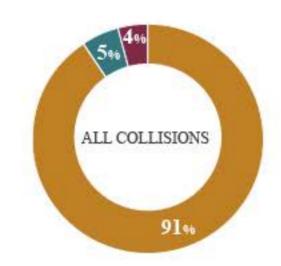
Between 2009 and 2018, sixty-two (62) lost their lives while traveling on Salinas streets. Included in these fatalities were people walking and cycling. These individuals are from all neighborhoods of Salinas, and they cross geographic and demographic boundaries. These deaths have resulted in tragic personal loss for family and friends and significantly impact the Salinas community.

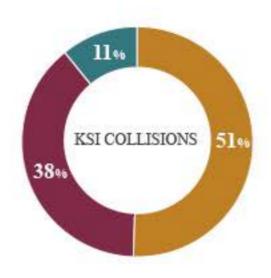
Tragedies and fatalities caused by vehicle collisions can be prevented by taking a proactive approach that prioritizes traffic safety. The loss of life extends beyond personal loss to deep community impacts, it includes personal economic costs and emotional trauma to those suffering; and significant taxpayer spending on emergency response and long-term healthcare costs. Without safe streets there is no true freedom of mobility, and as a result we compromise our public health with increasing sedentary diseases and higher carbon emissions.

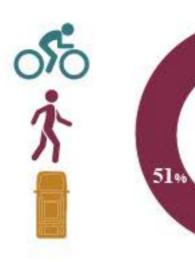
Traditionally, traffic-related deaths and severe injuries have been considered inevitable. Culturally we often hear of traffic-related deaths and severe injuries which have resulted from traffic "accidents", seeming to suggest that these occurrences are an inevitability for which no preventable solutions exist. However, vehicle collisions are often the result of individual decisions, driver behavior or the physical environment and the reality is that many of the incidents are preventable and are not inevitable.



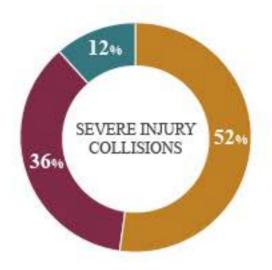
TRAVEL AND COLLISION BY MODE





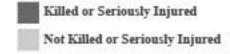


FATAL COLLISIONS



SHARE OF VICTIMS WHO WERE KILLED OR SEVERELY INJURED BY MODE









WHAT IS VISION ZERO?

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all. It is a policy that acknowledges that traffic deaths are preventable. A Vision Zero Action Plan sets a goal of eliminating traffic fatalities and severe injuries with clear measurable strategies. The strategy is a multidisciplinary approach that brings together a diverse set of stakeholders to address the complex problem of traffic safety and to achieve the shared goal of zero fatalities and severe injuries.

Vision Zero is a significant departure from the traditional approach to traffic safety in two major ways:

- 1. Vision Zero recognizes that people will sometimes make mistakes and integrates human failure in its approach. Traffic safety becomes the priority over other transportation considerations to ensure those mistakes do not result in fatalities or severe injuries.
- 2. Vision Zero is a multidisciplinary approach, bringing together different stakeholders to address the complex problem of traffic safety. Vision Zero acknowledges that many factors contribute to safe mobility including roadway design, traffic speeds, behaviors, technology, and policies. Vision Zero sets clear goals to achieve the shared goal of zero fatalities and severe injuries.

WHY VISION ZERO?

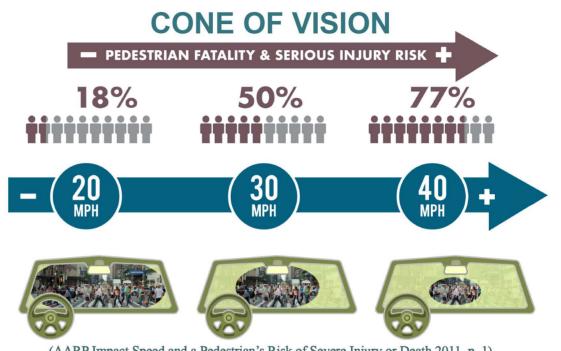
The City of Salinas is willing to do what is necessary to work towards the goal of eliminating traffic deaths and serious injuries. Only by changing the approach to transportation safety with bold interventions can the City improve one of its largest preventable public health crises.

The City of Salinas is regularly working to increase the availability of safe and comfortable multi-modal transportation choices, reduce carbon emissions, improve public health through increased physical activity, and improve quality of life for all. The adoption of the Vision Zero policy and Action Plan provides the road map to make City streets safe for all transportation modes.



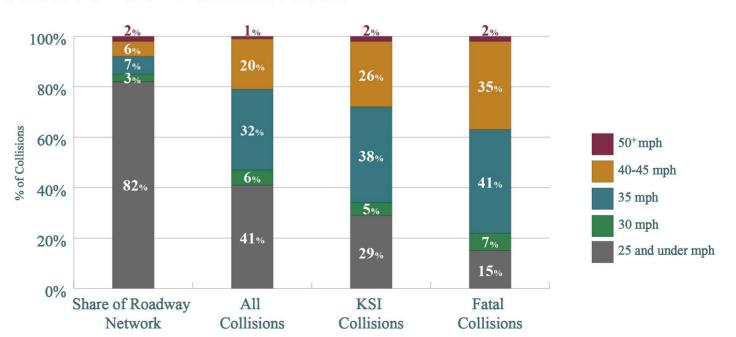
SPEED KILLS

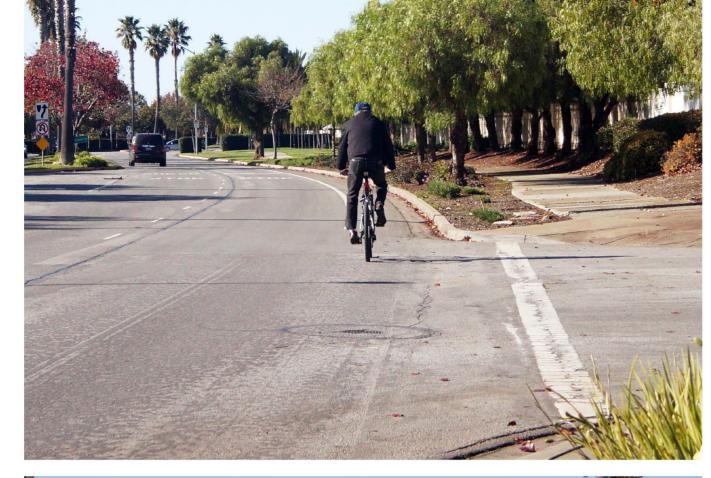
A major component of Vision Zero is the recognition that speeding kills and has an outsized impact on collision severity. In the City of Salinas 53% of all collisions and 66% of KSI collisions occur on city streets where the posted speed is 35 mph and greater. Reduction of traffic speed can be accomplished when streets are designed to reflect a range of different modes of transportation. Along with street design, public education, and targeted enforcement efforts will assist in reducing the number of people being killed or severely injured throughout the streets of Salinas.



(AARP Impact Speed and a Pedestrian's Risk of Severe Injury or Death 2011, p. 1)

POSTED SPEED OF ROADWAYS AND SEVERITY OF COLLISIONS









VISION ZERO STATEMENT

Traffic safety impacts our community, neighborhoods, health, and quality of life. No fatality or serious injury is acceptable on City streets because traffic collisions are preventable and can be addressed through education, enforcement, and engineering.



Guiding Principles

- Public safety is paramount and the top priority. Safety takes precedence over travel delays, speeds, congestion, and convenience.
- · Traffic deaths and serious injuries are preventable and unacceptable.
- · Actions towards Vision Zero is a culture change requiring a comprehensive, collaborative, and equitable approach through education, enforcement, and engineering.
- Data driven analysis will lead to influence actions towards Vision Zero.
- Vision Zero will be ongoing, and will routinely measure the performance against the Vision Zero Action Plan objectives every 5 years.
- Provide safety for vulnerable users, such as pedestrians and bicyclists.



VISION ZERO RESOLUTION

Background

- A. Traffic safety impacts our community, neighborhoods, health, and quality of life in Salinas.
- Between 2009-2018 sixty-two (62) individuals died in traffic collisions in Salinas.
- Collisions where someone was killed or seriously injured while walking or biking on Salinas streets has increased by 66%*.
- Although annual traffic collisions have decreased by 27%, there is a 7% increase in the number of KSI collisions*.(see page B2 in the Technical Appendix)

Resolution

On February 11, 2020 the Salinas City Council approved a Resolution (No. 21790) adopting a Vision Zero Policy, specifically: A clear goal of eliminating traffic fatalities and severe injuries on City streets.

- Human life is our highest priority. Traffic deaths and serious injuries are preventable, and a public health issue that must be addressed.
- Fatal and serious injuries on Salinas streets can be addressed through engineering, enforcement, and education.
- Salinas Vision Zero is a collaborative effort to eliminate traffic fatalities and serious injuries.
- Actions towards Vision Zero will be data driven based on available collision data.
- Evaluation of reaching the goal to eliminate traffic fatalities and serious injuries will be ongoing, measuring performance against the Vision Zero Plan objectives. The Vision Zero Action Plan will be updated every 5 years.

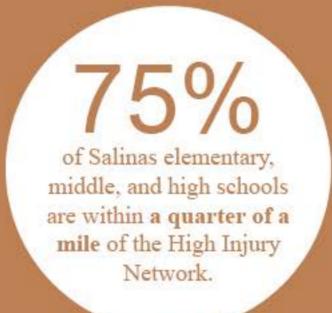
^{*}Comparing 2009 and 2018 data



CRASH TRENDS

Study Methodology

Vision Zero is a data-driven process. While developing the Action Plan, the City analyzed traffic collisions that occurred on City streets focusing primarily on fatalities or severe injuries for the years 2009 through 2018. This granted the City access to identify historic collision trends and high-risk locations. This information is utilized to provide the primary data to support key analyses.



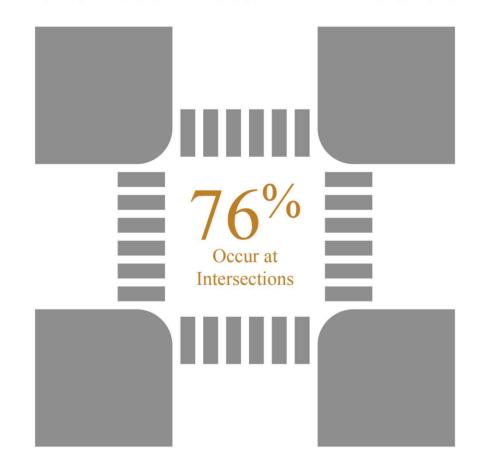
53%
of all crashes occur on the HIN, which accounts for 12% of Salinas roadways.

High Injury Network

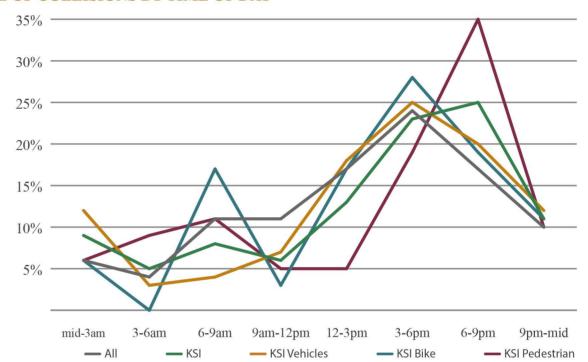
The City developed a High Injury Network, which identifies roadways with the highest level of fatal and severe injury traffic collisions for pedestrians, bicyclists, and motorists. There are 305 centerline miles of roadway within Salinas, but KSI collisions do not occur on the majority of the roads. By developing the HIN, the City is able to focus safety improvements on priority corridors where the most serious traffic collisions occur with the most frequency.

CRASH STATISTICS

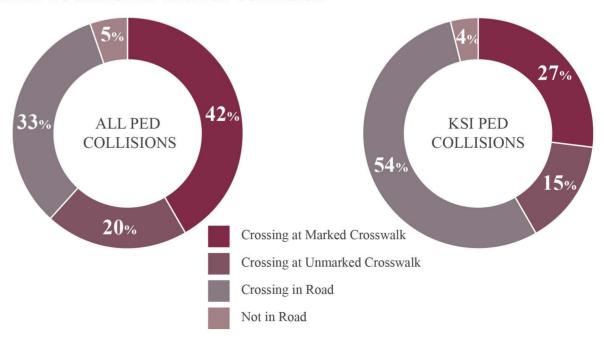
SHARE OF COLLISIONS THAT OCCURED AT INTERSECTIONS



SHARE OF COLLISIONS BY TIME OF DAY



PEDESTRIAN LOCATION AT TIME OF COLLISION



COLLISION PROFILES & COUNTERMEASURES TOOLBOX

The City developed ten collision profiles to represent the top patterns of KSI collisions occurring throughout the City of Salinas over a ten-year period (2009-2018). These collision profiles represent different types of collision characteristics, such as speed related, location of pedestrian at collision, broadside involvement with bicycle, or alcohol involved related collisions.

In the following pages the ten collision profiles are presented with details and key countermeasures. There are three key countermeasures per collision profile directed to address the trend and minimize its effect on collisions.

Collision Profile	% of All KSI (# of All KSI)	% of Auto KSI (# of Auto KSI)	% of Bicycle KSI (# of Bicycle KSI)	% of Pedestrian KSI (# of Pedestrian KSI)
Pedestrian Action	38.63% (129)		6 7	100% (129)
Broadside	27.55% (92)	40.25% (68)	55.56% (20)	3.11% (4)
Alcohol Involved	23.06% (77)	25.45% (43)	13.89% (5)	22.49% (29)
Pedestrian Violation	19.77% (66)	-	-	51.17% (66)
Auto R/W Violation	17.67% (59)	27.23% (46)	25% (9)	3.11% (4)
Head-On	12.28% (41)	19.53% (33)	2.78% (1)	5.43% (7)
Unsafe Speed	9.29% (31)	15.39% (26)	5.56% (2)	2.33% (3)
Rear-End	8.09% (27)	14.22% (24)	5.56% (2)	0.78% (1)
Improper Turning	8.09% (27)	11.85% (20)	13.89% (5)	1.56% (2)
Broadside Involved with Bicycle	5.99% (20)	-	55.56% (20)	
Total of KSI Collisions	334	169	36	129

COUNTERMEASURES

PROFILE 1: **Pedestrian Action**



Pedestrian-Activated Crosswalk Warning Beacon

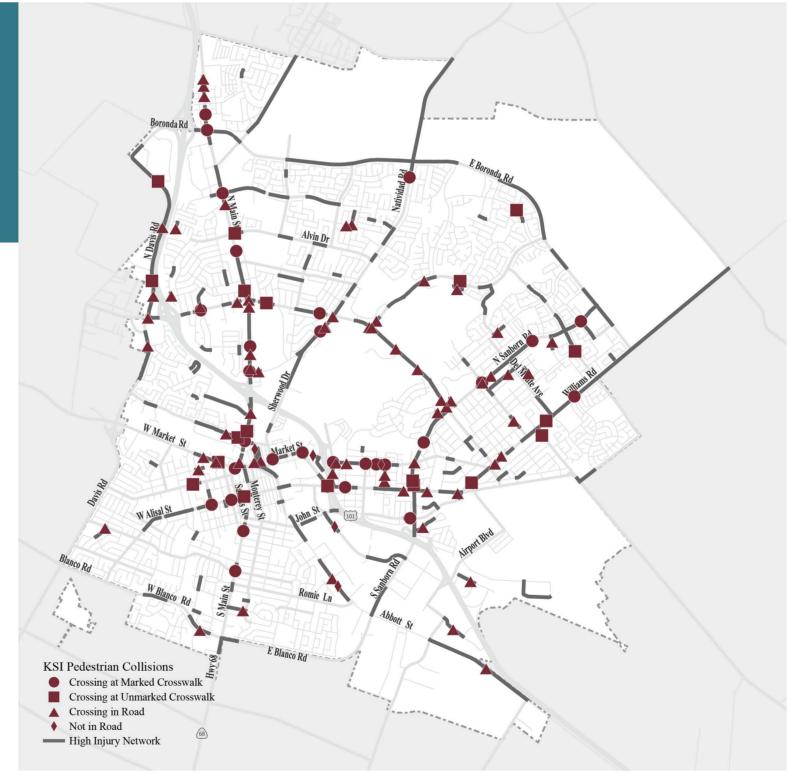


High Visibility Crosswalks



Pedestrian Hybrid Beacon





PROFILE 2: Broadside Collisions

COUNTERMEASURES



»Collision Type was reported as "Broadside"

*Definition: When one motor vehicle impacts another vehicle or bicycle close to an angle of 90 degrees 92 KSI Collisions

"Accounts for 28% of

all KSI Collisions

«30% of these collisions occured at a signalized intersection

Reduce Parking at Intersections



Intersection Control



Raised Median and Street Trees





PROFILE 3: Alcohol Involved Collisions



Traffic Education and Outreach



Enforcement







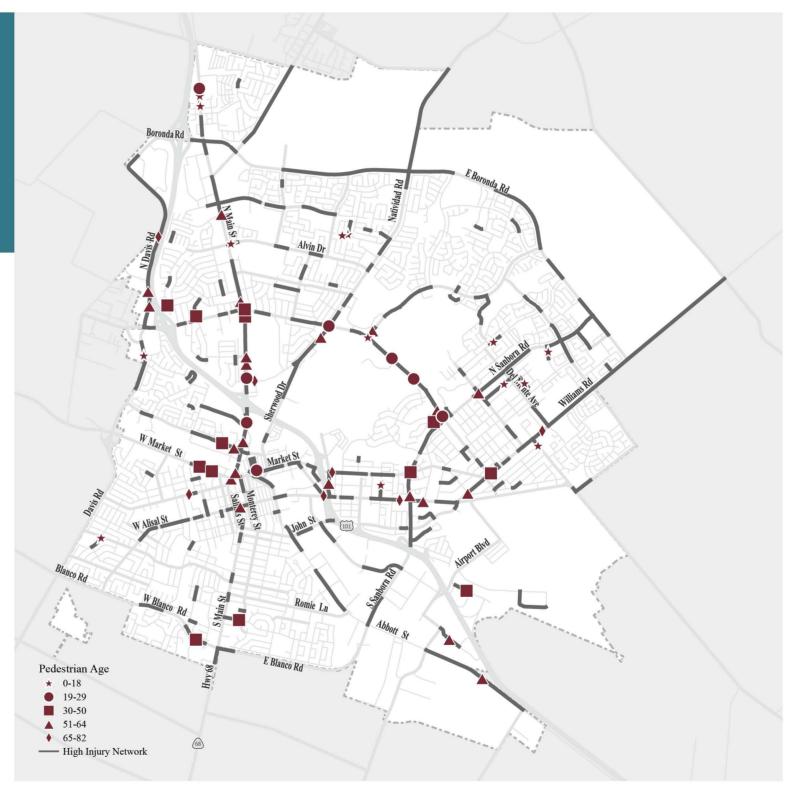
KSI Pedestrian Collisions KSI Bicycle Collisions KSI Vehicle Collisions - High Injury Network

PROFILE 4: **Pedestrian Violation Collisions**





COUNTERMEASURES



PROFILE 5: **Auto R/W Violation Collisions**





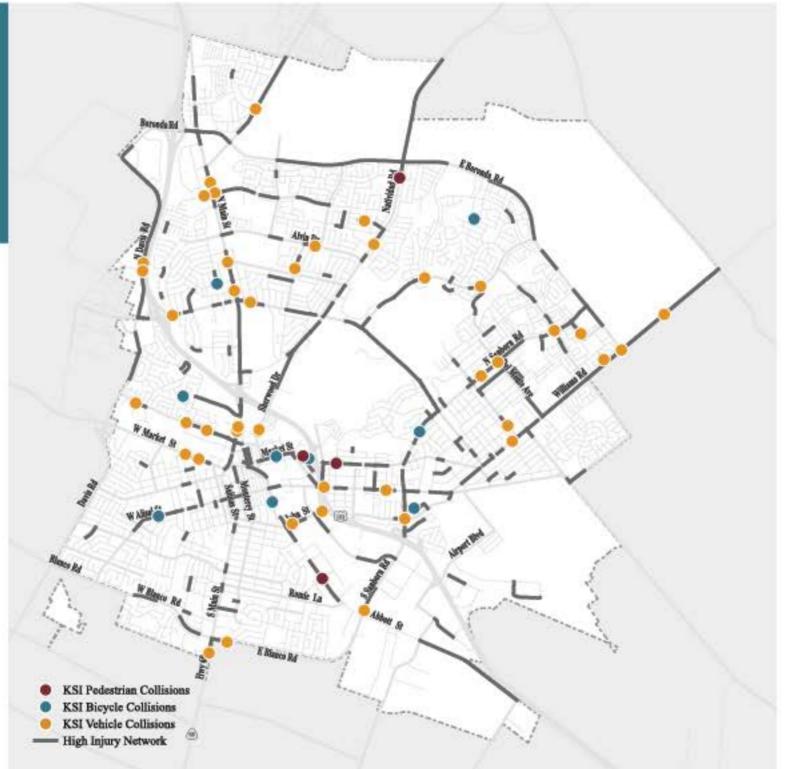


Intersection Control



Lane Reduction





PROFILE 6: Head-On Collisions

COUNTERMEASURES

*Collision Type was reported as "Head-On"

»Collisions at signalized intersctions were 100ft or less of the intersection 41 KSI Collisions

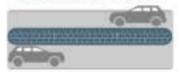
*Accounts for 12% of all KSI Collisions

*29% of these collisions occured at a signalized intersection

Vehicle Speed Feedback Sign



Raised Median



Intersection Control





ACTION PLAN

PROFILE 7: Unsafe Speed Collisions



Vehicle Speed Feedback Sign



Lane Reduction



Enforcement





PROFILE 8: Rear-End Collisions



COUNTERMEASURES



Adaptive Traffic Signal Control



Signal Timing and Phasing Improvements



Enforcement





PROFILE 9: **Improper Turning Collisions**





Lane Reduction



Intersection Control



Raised Median and Street Trees





PROFILE 10:

COUNTERMEASURES

Broadside Involved with Bicycle

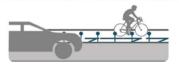
"Collision Type was reported as "Broadside"

20 KSI Collisions

»Accounts for **6%** of all KSI collisions and **56%** of KSI bicycle collisions

"25% of these collisions occured at a signalized intersection

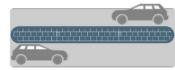
Protected Bike Lane



Reduce Parking at Intersections



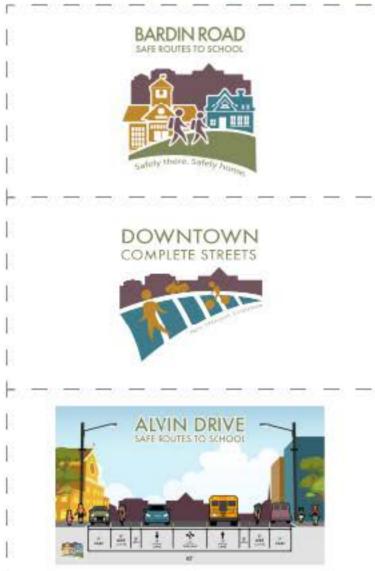
Raised Median





EXISTING EFFORTS

The City, alongside with developing this action plan and adopting the Vision Zero policy, is working on projects that aim to accomplish the goal of eliminating fatalities and severe injuries in Salinas streets. Those projects include, but not limited to, Bardin Road Safe Routes to School, Downtown Complete Streets, and Alvin Drive Safe Routes to School. In addition, the City has developed other Plan documents with focus similar to Vision Zero such as the Chinatown Revitalization Plan and the Alisal Vibrancy Plan. Safe Routes to School is a program tailored towards providing safe walkable and biking paths with designed countermeasures related to effectively reducing KSI collisions on City streets.



Bardin Road Safe Routes to School: A "Complete Streets" project that includes a dual roundabout system, buffered bike lanes, pedestrian crossing enhancements, pedestrian path improvements, and a road diet. Project limits are Bardin Rd.-Williams Rd. to Sconberg Pkwy., E. Alisal St.-Tampa St. to Bardin Rd., and a portion of Alisal Rd. east of city limits.

Downtown Complete Streets: A "Complete Streets" project that includes the enhancement for usability of streets for all users, pedestrian, transit users, bicyclists and drivers. Project includes an enhanced signal system. Project limits are Alisal St.-Blanco Rd. to Front St., Lincoln Ave.-Alisal St. to W. Market St.(SR183)

Alvin Drive Safe Routes to School: This project includes a multi-modal "complete street" corridor that provides improvements to bicycle and pedestrian facilities. A road diet is planned on Alvin Dr. - Main St. to Natividad Rd. Bicycle facilities on Maryal Dr., Linwood Dr., Chaparral St. In addition, it provides pedestrian ramps and crosswalk at key locations.



Chinatown Revitalization Plan: This plan proposes many goals such as, upgrading sidewalks and pedestrian crossings, new bike lanes, and improving bus service. The goals aim to provide a pedestrian-friendly environment and promote walkability.



Alisal Vibrancy Plan: The Alisal Vibrancy Plan will create safe, livable, and inviting environments for pedestrians, bicyclists, motorists, and public transit users of all ages and abilities. Directing investments to improve sidewalks, bicycle facilities, and pedestrian crossings will increase the mobility of residents, including youth and people without cars.



Salinas Safe Routes to School: The goal of the project is to improve safety for students biking and walking to 44 schools in Salinas. Proposed recommendations would include infrastructure recommendations such as new sidewalks, improved crosswalks, and signage, as well as, program recommendations such as bike and pedestrian safety education, crossing guards, drop-off zone management, and school carpooling.



ACTION PLAN

The City's collision trends and collision profiles allow the City of Salinas to begin taking action towards eliminating fatal and severe injury collisions. The compiled collision data is plotted on a map to identify locations where collisions or specific collision types occur at the highest frequencies. This approach allows the City to focus on these Emphasis Areas, listed below, in the network to address high priority crash types and risk factors. The City will work towards accomplishing this goal through targeted investments strategically tailored and directed towards the High Injury Network, as well as the Emphasis Areas identified below. The City will continue to implement recommendations from the Action Plan and its updates until we achieve the Vision Zero goal of eliminating all fatalities and severe injuries on Salinas streets.

The technical appendix includes the descriptions and recommendations for each of the Emphasis Areas. The recommendations for each of the locations will be improvements that the City has put together to effectively minimize the number of fatal and severe injuries throughout the City of Salinas.

Emphasis Areas

High Collision Corridors:

Focuses on prioritizing where high number of KSI collisions have occurred on corridors.

High Collision Intersections:

Focuses on prioritizing where high number of KSI collisions have occurred on intersections.

Pedestrian Involved Intersections:

Focuses on prioritizing where high number of pedestrian KSI collisions have occurred.

Bicycle Involved Corridors:

Focuses on prioritizing where high number of bicycle KSI collisions have occurred

Alcohol Involved Corridors:

Focuses on prioritizing corridors where high number of KSI collisions occurred with some amount of alcohol involved from any party.

Nearby Schools Locations:

Focuses on prioritizing locations where high number of KSIcollisions occurred nearby school

HIGH COLLISION CORRIDORS

- 1. East Market Street
- 2. Williams Road
- 3. East Laurel Drive
- 4. East Boronda Road
- 5. East Alisal Street
- 6. North Main Street
- 7. West Laurel Drive
- 8. North Sanborn Road
- 9. East Laurel Drive
- 10. Sanborn Road



HIGH COLLISION INTERSECTIONS

- 1. North Sanborn Road at Freedom Parkway
- 2. North Sanborn Road at Garner Avenue
- 3. Boronda Road at North Main Street
- 4. North Main Street at Bernal Drive
- 5. East Laurel Drive at Granada Avenue
- 6. Williams Road at Del Monte Avenue
- 7. East Alisal Street at Griffin Street
- 8. East Market Street at North Madeira Avenue
- 9. East Laurel Drive at Constitution Boulevard
- 10. East Market Street at Kern Street



PEDESTRIAN INVOLVED INTERSECTIONS

1. North Sanborn Road at Garner Avenue

2. East Alisal Street at **Griffin Street**

3. North Main Street at **Lamar Street**



BICYCLE INVOLVED CORRIDORS



- 2. West Laurel Drive
- 3. Natividad Road



ALCOHOL INVOLVED CORRIDORS

- 1. East Market Street
- 2. East Laurel Drive
- 3. Williams Road



NEAR SCHOOLS LOCATIONS

- 1. Martin Luther
 King, Jr. Elementary
- 2. Sacred Heart School
- 3. Alisal High School



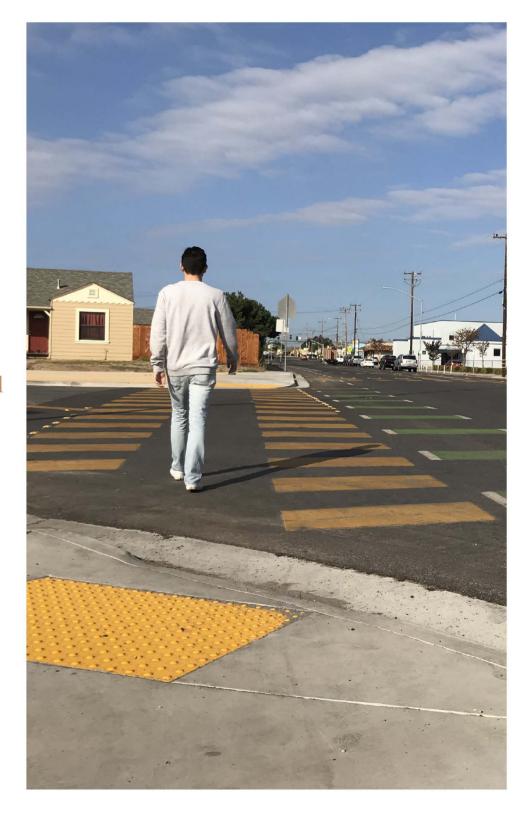
IMPLEMENTATION PLAN

Vision Zero implementation will involve a committed Vision Zero Task Force, comprised of City departments, the local community, and partner organizations. The project team has identified a set of key actions to serve as a roadmap towards Vision Zero. Each action is assigned a timeframe and a metric to measure progress. Short-term actions could be implemented within 2 years; medium-term actions could be completed within 2 to 5 years; long-term actions could be implemented within 5 to 10 years; and ongoing actions will be operational changes which will continue to develop over time.

Meeting the City's Vision Zero goal requires immediate action, yet it allows for feasible implementation with incremental improvements over the years. The actions in this plan should be evaluated and refined on an on-going basis, and their successful implementation depends upon funding availability.

The Implementable Actions are organized into four action areas:

- Vision Zero Program
 Focuses on bringing Vision Zero to the table
- Street Design and Operation Focuses on designing and implementing based on Vision Zero analyses
- Behavioral Change Focuses on targeting and educating public on street changes
- Vulnerable Road Users Focuses on designing and implementing for bicycle and pedestrian



IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
1 Vision Zero Program		
1.1 Integrate Vision Zero principles into City, community group, and stake holder meetings	City Council, Neighborhood Associations, Public Works Department, Neighborhood Services (LCS)	Ongoing
1.2 Identify permanent dedicated funding sources for Vision Zero implementation and coordination	City Council, Public Works Department	Medium-Long
1.3 Incorporate Vision Zero principles into future City plans, specifically the General Plan Update	Community Development Department, Public Works Department	Short
1.4 Update and publish the Vision Zero Action Plan every five years to measure progress against the goals of the Vision Zero	Public Works Department	Ongoing
1.5 Provide online, interactive collision data map and website	GIS Division, Public Works Department, City Manager's Office	Short-Medium
1.6 Develop a workshop on how to best communicate traffic collisions and roadway safety concepts	City Manager's Office, Public Works Department, Police Department	Short-Medium

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
2. Street Design and Operation		
2.1 Develop designs and secure grant funding for high priority High Collision Corridors and High Collision Intersections	Public Works Department	Medium-Long
2.2 Develop a priority list on specific segments from the High Injury Network	Public Works Department	Short-Medium
2.3 Install low-cost safety improvements that includes new road markings, signs, and minor signal modifications with planned maintenance projects	Public Works Department	Short-Medium
2.4 Update signal timing and phasing to accommodate for all modes of transportation	Public Works Department, Traffic Division	Short
2.5 Update City street design standards to reflect complete street principles	Public Works Department	Short
2.6 Establish internal process for Vision Zero countermeasures to be evaluated and implemented, where feasible, on projects on the HIN	Public Works Department	Medium-Long

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
2.7 Require that new development incorporate Vision Zero principles for any new road construction	Community Development Department, Public Works Department	Short
2.8 Require that any redevelopment contribute to street safety improvements required to meet the demand generated by the project	Community Development Department, Public Works Department	Short-Medium
2.9 Whenever possible, in new or re-development projects, reduce the number of driveways and access points on arterial streets	Community Development Department, Public Works Department	Ongoing
3. Behavioral Change		
3.1 Launch high-visibility education campaigns against speeding, distracted driving, impaired driving, and other high-risk behaviors. Campaign will focus on HIN corridors	Salinas Police Department, Transportation Agency of Monterey County, County of Monterey	Short-Medium
3.2 Increase the use of vehicle speed feedback signs to discourage speeding	Public Works Department, Police Department	Short
3.3 Explore opportunities to expand free or subsized transit fares during holidays and for special events	Monterey-Salinas Transit	Short-Medium

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
3.4 Develop public promotional campaign to encourage late-night transit, taxi, rideshare, and other services to provide alternatives to impaired driving	Salinas Police Department, County of Monterey	Long
3.5 Deter impaired driving by targeting education and outreach at or near alcohol-serving establishments	City Manager's Office, Salinas Police Department, County of Monterey	Medium-Long
3.6 Integrate Vision Zero policies into Police Academy curriculum and in-service Police Officer Training	Salinas Police Department	Long
3.7 Create targeted enforcement campaigns where collision trends indicate traffic enforcement is needed	Salinas Police Department	Medium-Long
3.8 Utilize automated enforcement technology where feasible	Salinas Police Department	Long
3.9 Provide adequate staffing and dedicated funding for the traffic enforcement unit to patrol and enforce traffic regulations on City streets	Salinas Police Department, City Manager's Office	Ongoing

IMPLEMENTATION ACTION	DEPARTMENT/ORGANIZATION	TIMEFRAME
4. Vulnerable Road Users		
4.1 Install, upgrade or remove pedestrian crossing treatments on the HIN	Public Works Department	Short-Medium
4.2 Upgrade Pedestrian Push buttons to most recent standards of all traffic signals	Public Works Department	Ongoing
4.3 Develop targeted education for drivers to increase safety for pedestrian 60+	City Manager's Office, Recreation and Community Services	Short-Medium
4.4 Upgrade to high-visibility crosswalks near schools	Public Works Department	Short-Medium
4.5 Develop and implement projects that improve bicycle and pedestrian safety related to turning vehicles at intersections	Public Works Department	Long
4.6 Continue building and improving the bikeway and pedestrian network consistent with the Bicycle Master Plan and Pedestrian Master Plan	Public Works Department	Medium

ACKNOWLEDGEMENTS

ELECTED OFFICIALS

Kimbley Craig, Mayor Council Members

Carla Viviana Gonzalez (District 1)

Tony Barrera (District 2)

Steve McShane (District 3)

Orlando Osornio (District 4)

Christie Cromeenes (District 5)

Anthony Rocha (District 6)

CITY OF SALINAS DEPARTMENTS

Public Works Department Community Development Deaprtment Fire Department Police Department

VISION ZERO TASK FORCE

Monterey County Health Department Salinas Police Department Monterey County Blue Zones Project

Transportation Agency for Monterey County – Technical Advisory Committee Transportation Agency for Monterey County – Bicycle and Pedestrian Committee Alisal Union School District Salinas City Elementary School District Salinas Union High School District

Santa Rita Union School District









A. SUMMARY OF PUBLIC ENGAGEMENT



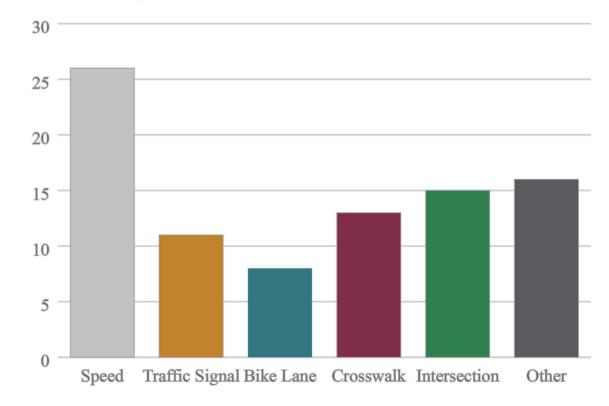
The City of Salinas posted a survey for the Vision Zero Plan to provide the public the ability to comment on emphasis locations and the issue found within those locations. The survey was posted online and open for public feedback from Late-Sept to end of year 2020.

This section discusses the online survey and the results based on what the City received.

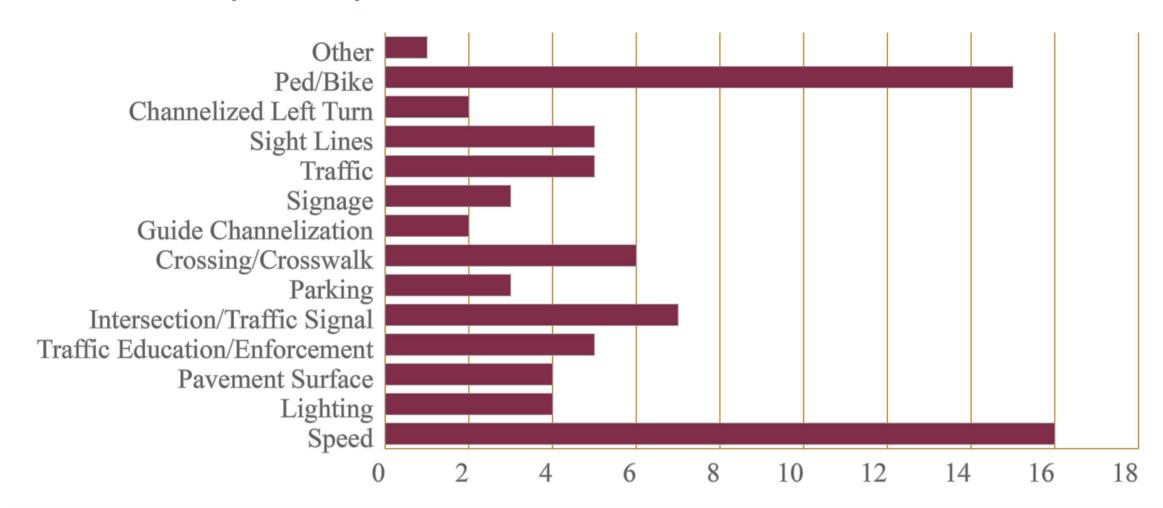
1. Place a point to the location or area of concern



2. Choose concern from list. Select as many as apply to your concern



3. Please describe your safety concern



Based on the descriptions of the safety concerns from the online survey the following categories were identified.

-Speeding

-Crossing/Crosswalk

-Intersections/TS

-Channelized Left Turn

-Traffic

-Parking -Ped & Bike

-Lighting

-Guide Channelization

-Signage

-Traffic Education/Enforcement

-Sight Lines

The four top concerns received on the online survey from the categories above are: Speed (16,38%), Ped/Bike (15,36%), Intersection/Traffic Signal (7,17%), Crossing/Crosswalk (6,14%).

3. Please describe your safety concern contd. Following are the descriptions of safety concerns of the public

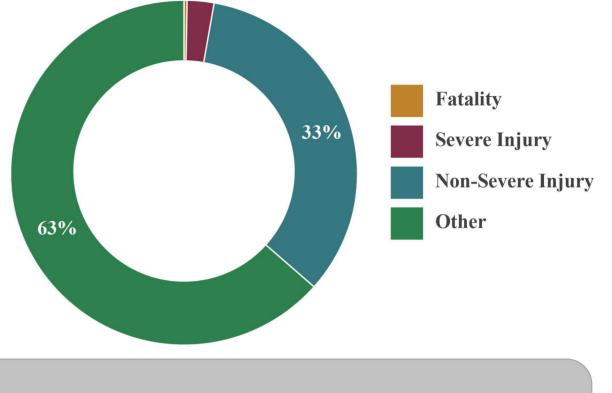
Topics	Description of Safety Concern	Approx. Location
speed	People are driving too fast.	W Alisal St - Capitol St to Lincoln Ave
peed,bike_lane,crosswalk	The sped on my street is bad the cars pass fast and we live close to school and have a daycare too, also we went for a bike ride with my family and doesen't have bike line	Elwood St - Linwood Dr to Tampico Ave
raffic_signal,bike_lane,intersection,ot ler	En mi vecindario no respetan el límite de velocidad q es de 25 y los automovilistas pasan como a 65 o 70 como si fueran en el freeway y a pasado accidentes en la RIDER AVE. Esa es mi preocupación y las calles q estan muy deterioradas.	Rider Ave
crosswalk	There are two pedestrian crossing on Market St. between Carr and Pearl. These two ped crossing usually used by elementary students. It will be my suggestion to install a pedestrian flashing light with solar power.	Market St @ Carr Ave, Market St @ Pearl St
peed,other	Many drivers speed 40-45 miles an hour even though it is a residential area and hospital zone Also, the street desperately needs restriping to clearly mark lanes,. The speed limit needs to be displayed every few blocks-is it 35 mph or 25 mph? As a pedestrian and bicyclist, this street really scares me due to these issues, even when just trying to cross at a marked crosswalk.	Romie Ln
pike_lane,crosswalk	Falta de luces para la gente que cruza y mal condición del pavimento	E Alisal St near Sanborn Rd
peed,bike_lane	Many areas in Salinas are unsafe for bicyclists and pedestrians. Non-motorized pathways, trails and roads, properly illuminated and safe, need to be designed to limit accidents and promote healthy living and exercise.	Laurel Dr - Constitution Blvd to Sherwood Dr
peed,traffic_signal,crosswalk,other	Major, crashes, tires have exploded while these people burn rubber, speed and peel out routinely and I've seen numerous cars never stopping. And or almost running over kids at the crosswalk. It is an accider waiting to occur. Please do something. Speeding cars, not making complete stops. Lots of cars use this busy for neighborhood with foot traffic. People peeling out and doing donuts. Large 18 wheelers making illegal u turns and hitting stop signs, getting stuck at least 3 to 5 times per day.	
speed,crosswalk	Cars parked on the street block visibility of people crossing the street. Also, people cross without using the crosswalk.	E Market St - N Madeira Ave to Carr Ave
crosswalk,other	People cross from the shopping areas there without using the crosswalk at the intersection. People will stand on the island between lanes while traffic passes sometimes close enough to where they can be hit by a vehicle. People cross between cars without using the crosswalk	S Sanborn Rd - E Alisal St to McGowan Dr
peed,traffic_signal,intersection	velocidad	E Laurel Dr - Consittution Blvd to Sherwood Dr
peed,traffic_signal,crosswalk,other	My mom got hit and killed by a car. There is a cross walk, but a enhanced crosswalk would be better in this intersection. Beacon lights at the cross walk	E Alisal St @ Skyway Blvd/Quilla St
peed,traffic_signal,bike_lane,crossw llk,intersection	Why is there no stop sign/traffic signal at this intersection?	W Alisal St @ Capitol St
other	No road lines to direct traffics. Very faded. Street lines. They're faded- many times people will be driving in the middle because they can't see that it's two lanes.	W Laurel Dr - Tyler St to N Main St
other	North Sanborn Rd is quite dense around that area and has many lanes that makes it unsafe to cross and there should be more cross walks along that street or a roundabout for pedestrians to cross as well. Walkability	N Sanborn Rd @ Garner Ave
other	Folks too often Fail to stop at this four-way STOP sign. They slow,, and then zoom through it. I was on a ride-along with a Salinas police officer. We sat near the intersection of Inca Way and Cherokee in s-marked-police car. Within ten minutes we saw (and stopped) two vehicles that ran the STOP sign Guess what both drivers are police officers.!!! One from Soledad and the other from Watsonville departments.f Inca Way at Cherokee Drive.	a Cherokee Dr @ Inca Way
peed,other	People drive too fast through Boronda at all times. Traffic	Boronda Rd - El Dorado Rd to Nativiad Rd
peed	People drive too fast on Boronda Road	Boronda Rd - Independence Blvd to Constitution Blvd
speed,intersection,other	Merging lane is inexisting. Creates a lot of confusion for drivers on right lane.	San Juan Grade Rd near Northridge Way
peed,intersection	Poor lighting along San Juan Grade Rd. This intersection would benefit from a left turn pocket.	San Juan Grade Rd - Northridge Way to Russell Rd

Topics	Description of Safety Concern	Approx. Location
speed,traffic_signal,crosswalk,intersetion,other	These location can benefit from a traffic study and reconfiguration of stripping and pavement markings. Also, could benefit from a road rehabilitation, as the AC is in bad shape. Overall, I will give the intersection a level of service E. Much needed improvements to bring these intersection to a level of service C or above. By making such improvements the collision incidents will potentially decrease. These intersection should be considered a top priority for CIP. AC work and grading.	Boronda Rd @ N Main St
bike_lane	The Davis bike lanes are constantly full of debry from the fields. Making it difficult to ride a Road bike that requires relatively clean roads to keep from losing traction and possibly falling on to the fast moving traffic on Davis. The city should either require the farms owners to sweep the excess dirt they created from driving and parking on the dirt or charge an extra fee to each farm for street sweeper services rendered by the city.	Davis Rd - Blanco Rd to Central Ave
speed,other	These location has multiple problems; high traffic for oneway lane on both directions, poor visibility at night, no turning lane for Van Buren Ave. or apartment complex on San Juan grade, poor AC, and speeding area. Lighting	San Juan Grade Rd - Northridge Way to Russell Rd
speed,crosswalk	With the new library opening, there are residents walking to the library that need to cross the busy 4 lane street. Many of these residents are young adults or families with young children.	N Main St @ Navajo Dr
intersection	There's an elementary school just feet away from this intersection and a crosswalk where drivers just don't respect. People seemed rushed to get onto the highway and often times this intersection is back up especially during traffic hours in the morning and evening. Installing a traffic light or a crosswalk light would help the issue.	John St @ Wood St
speed	Kids in the neighborhood almost get run over playing due to cars speeding.	Eisenhower St
speed	Cars pass to fast.	Natividad Dr - Boronda Rd to Rogge Rd
speed,intersection	I see so many people overspeeding along Coleridge Drive. Also, they don't make any effort to use a turn signal and make a turn without slowing down. Also, there are many cars in the Los Olivos/Riker Street neighborhood that are obvious not home owners. They take the liberty of parking their cars in front of someone else's home without expressed consent form the homeowners. These issues need to be addressed as there are children and and people with special needs living in this neighborhood.	Coleridge Drive - Los Olivos Dr to Riker St
speed	People drive way too fast here.	San Juan Grade Rd - Van Buren Ave to Russell Rd
speed,intersection	Previous 4 Way Stop recently changed to 2 Way Stop. Observed scenes of collisions (after collisions occurred) on 2 different days. A friend told us of coming upon an accident scene on a different date. Another individual we know often drives in the area and has seen multiple near misses of pedestrians as cars drive through West Alisal even when pedestrian has right of way; and has also witnessed near collisions as drivers are apparently confused by 4 Way Stop changed to 2 Way. The 4 Way Stop was much safer and we see no reason why it has been changed to 2 Way.	W Alisal St @ Capitol St
speed,other	Cars drive fast through here, people park their cars overnight next to the fields and cross the street to the apartments and mobile home park, its hard to see them when they cross at night. Russell Rd. needs more street lighting	Russell Rd - N Main St to Van Buren Ave
traffic_signal	They moved the traffic light about 20-30 ft up but they failed to move the sign "no turn on red" along with it. So the sign is 30 ft behind where the light is and people are confused whether they have to wait for the light to turn green before they can turn right onto 101S highway. Please either move the sign up or take it away if it doesn't apply anymore so that people will stop honking at me when I don't turn right when the road is clear.	S Sanborn Rd @ Elvee Dr
intersection	I'm on Abbot, Chevron on my left and cemetery on my right, waiting to turn left onto Sanborn and the car on my left almost hits me as we turn because the car didn't realize that my lane turns left also. There needs to be a sign with those arrows that shows the direction each lane can turn up on the traffic light. I don't blame that car because there is no other indication my lane turns left also except for the arrows on the ground which get covered by cars.	Abbott St @ Sanborn Rd/Blanco Rd
bike_lane	Getting from North Salinas to South Salinas is challenging. Main street does not have space and the sidewalk often has pedestrians. Sherwood and East Market's a little better but still requires crossing multiple lanes of traffic with drives not used to cars.	Market St - Front St to Sherwood Dr
traffic_signal,crosswalk,intersection	reinstall 4 way stop sign. Many people cross Alisal St to get to and from County offices there	W Alisal St @ Capitol St
traffic_signal	The intersection of Alisal and Capitol Streets needs a traffic signal. The 4-way stop was removed and there are a lot of new accidents. It's really dangerous with several deaths occurring there. Please put in a traffic light!	W Alisal St @ Capitol St
traffic_signal,intersection	making a left turn onto Sherwood Dr. from Calle Cebu is dangerous and confusingBIG intersection, no left turn signal and cars come dangerously close from Rossi St. as you wait to turn left.	Sherwood Dr @ Rossi St/Calle Cebu
speed,crosswalk,intersection	Many vehicles speed through the area of University Avenue making it hard for pedestrians to cross the street and for the children who are walking to school. Thank you	University Ave - Central Ave to Ambrose Dr
other	Before Covid, the traffic halted due to Pedestrians crossing to Alvarez, vehicular traffic halts to a stand. This causes students to get off in the middle of the street and dart into traffic which can cause an accident. Pedestrian Crossing Bridge	Independence Blvd - Nantucket Blvd to Boronda Rd
speed,traffic_signal,bike_lane,crossw lk,intersection,other	If there are soooo many issues in 93905, why was WEST Alisal turned into single lane traffic but it does not continue into EAST Alisal? What message are we sending to the Hispanic community? Minimal traffic/bike/pedestrian collisions are only addressable if you live in a higher educated, a higher income, more desirable zip code? You have major issues going on with traffic in the 93905 and socioeconomic differences says the poor people are more expendable or less important according to the changes you have already made. Quite an insult to the POC in your community. You need people to answer a survey (which will be filled out primarily by people of means) for you to have an excuse on "well we didn't make the changes we can see proved by your own statistics above, because the survey said it was more important to do work in 93901! Pathetic.	E Alisal St
speed,intersection	Unsafe lane change, unsafe speed, lack of signage at the Constitution & Laurel Intersection.	E Laurel Dr - Constitution Blvd to Natividad Rd
other	In the residential areas in east salinas there are way to many cars parked in the street to the point that you can't see the sidewalks or if your pulling out into another street you can't see unless you pull out into traffic which isn't safe for anymore. I've noticed south salinas isn't allowed to park on street without a permit, why can't east salinas have the protocol in place as well? To many cars parked on the streets.	Garner Ave - Rider Ave to N Sanborn Rd

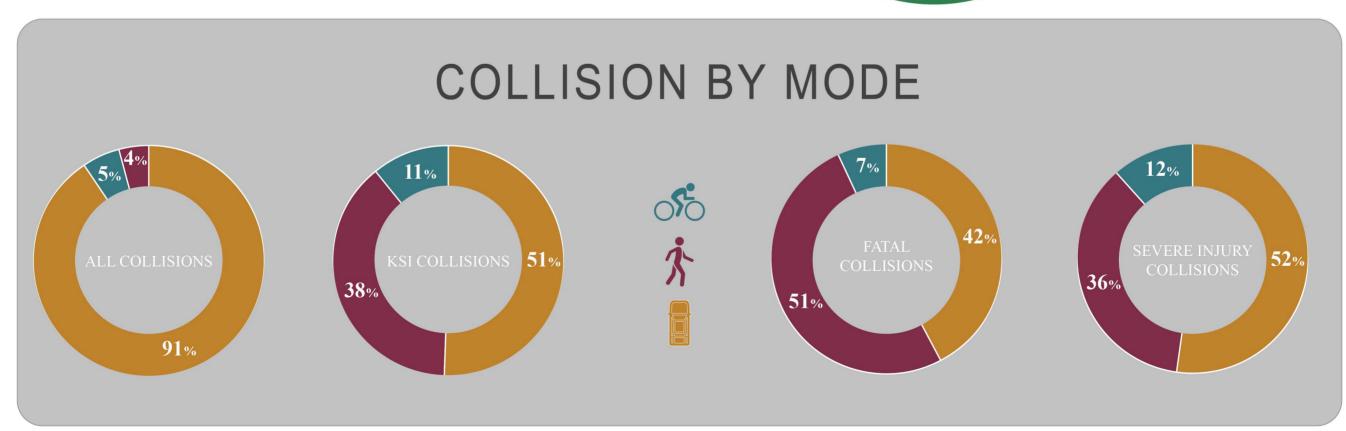
B. SUMMARY OF COLLISION TRENDS

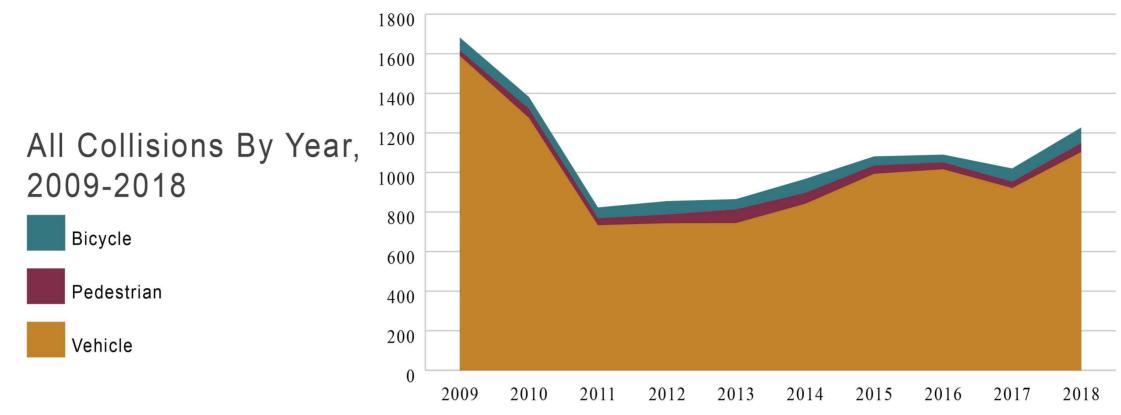


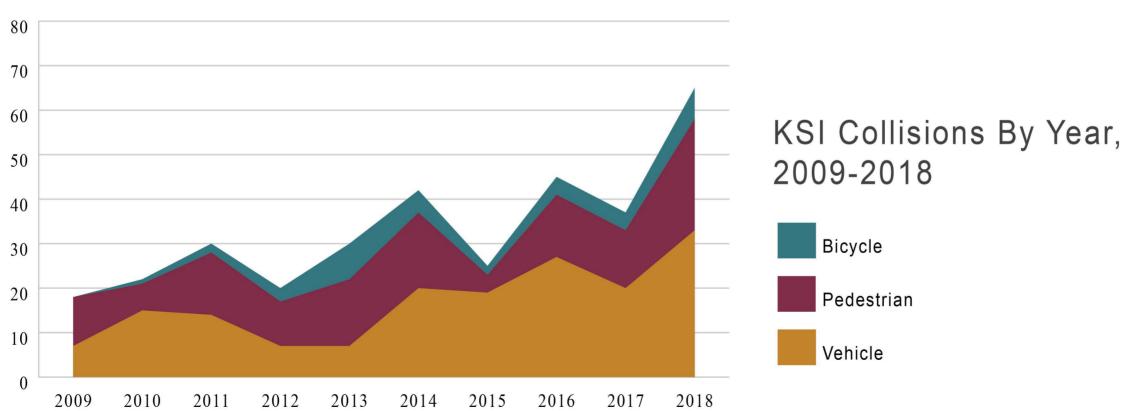
334 KSI Collisions Fatal(59) & Severe Injury(275) between 2009-2018, out of 10,992



1% 3%

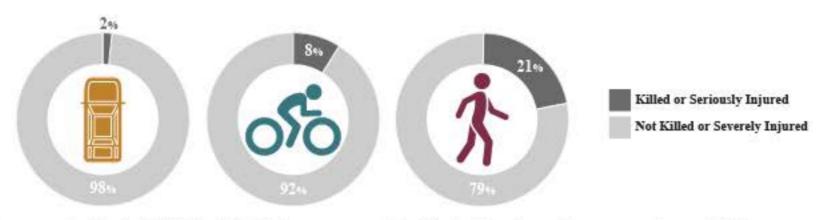






SHARE OF VICTIMS WHO WERE KILLED OR SEVERELY INJURED

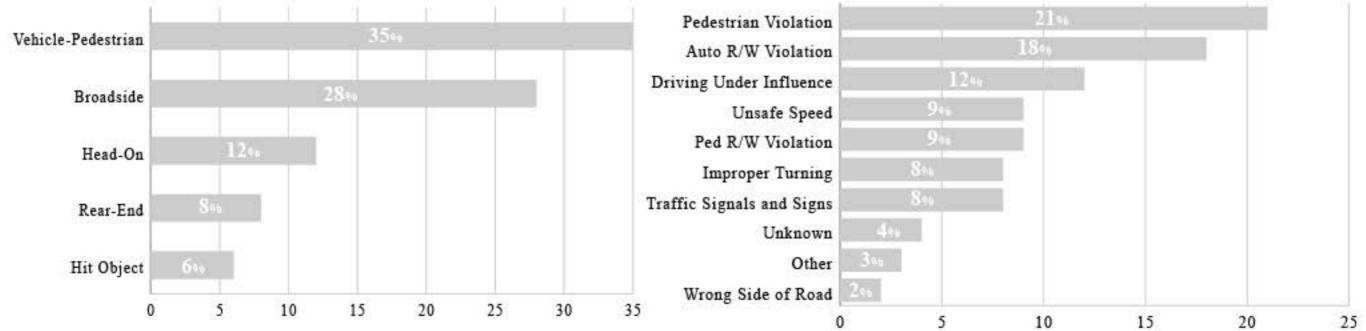




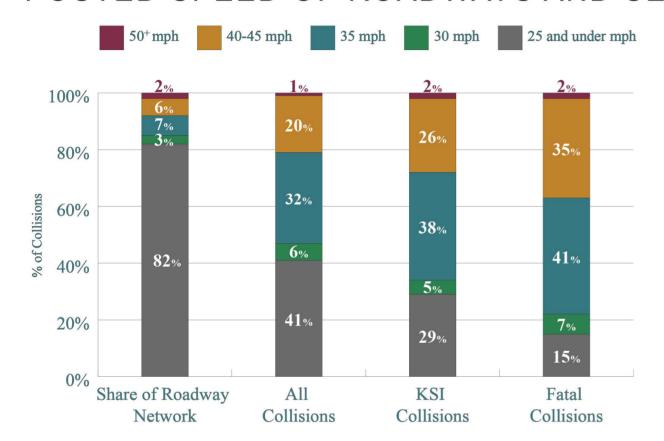
As reported half of KSI Ped Collisions occured by Ped at Fault and three-quarters of KSI Bicycle Collisions occured by bicyclist at Fault

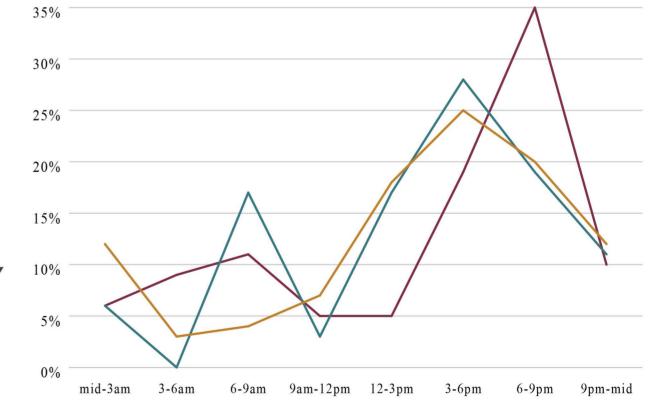
KSI COLLISION TYPES TOP TRENDS, 2009-2018

KSI PRIMARY COLLISION FACTORS TOP TRENDS, 2009-2018



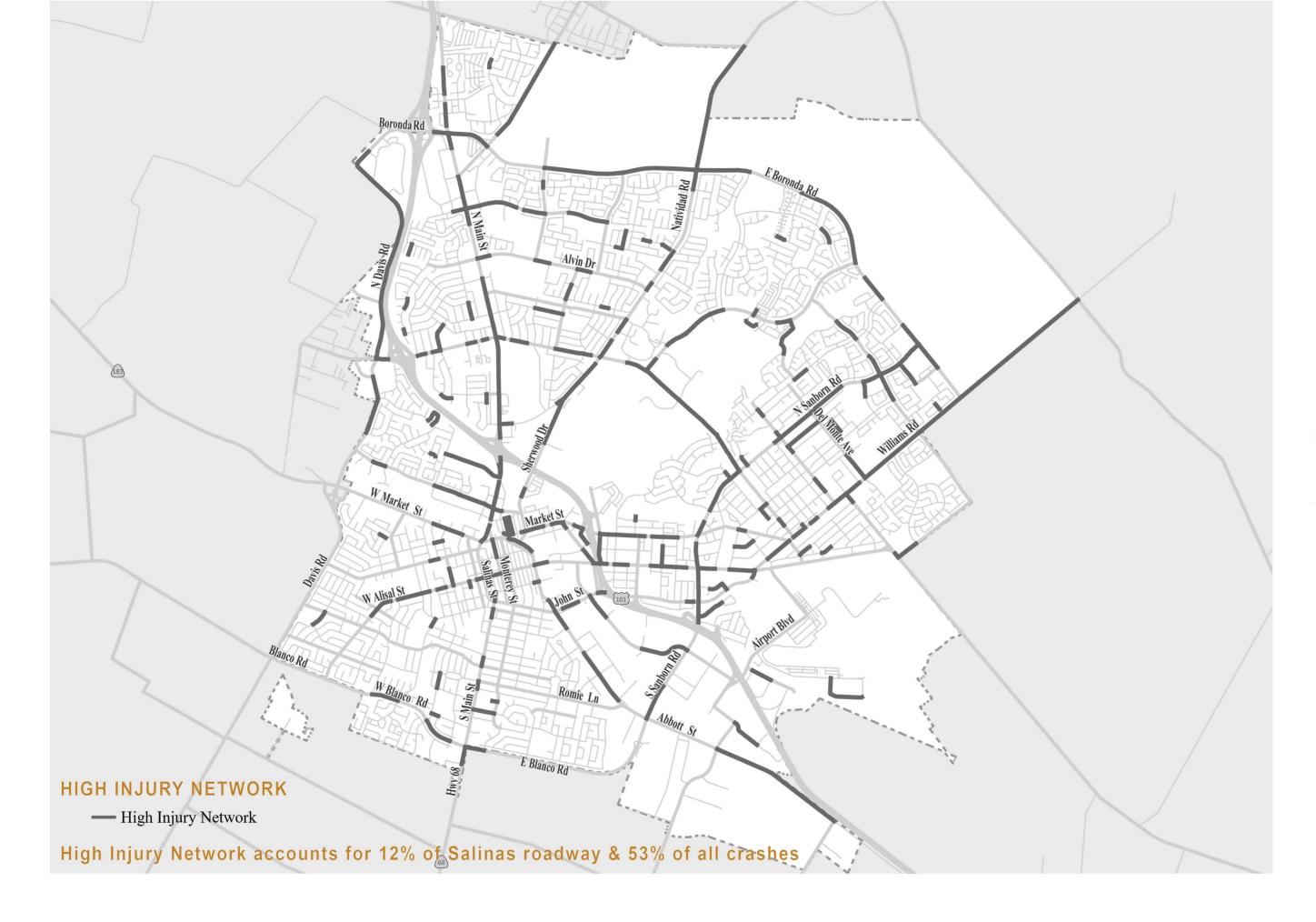
POSTED SPEED OF ROADWAYS AND SEVERITY OF COLLISIONS



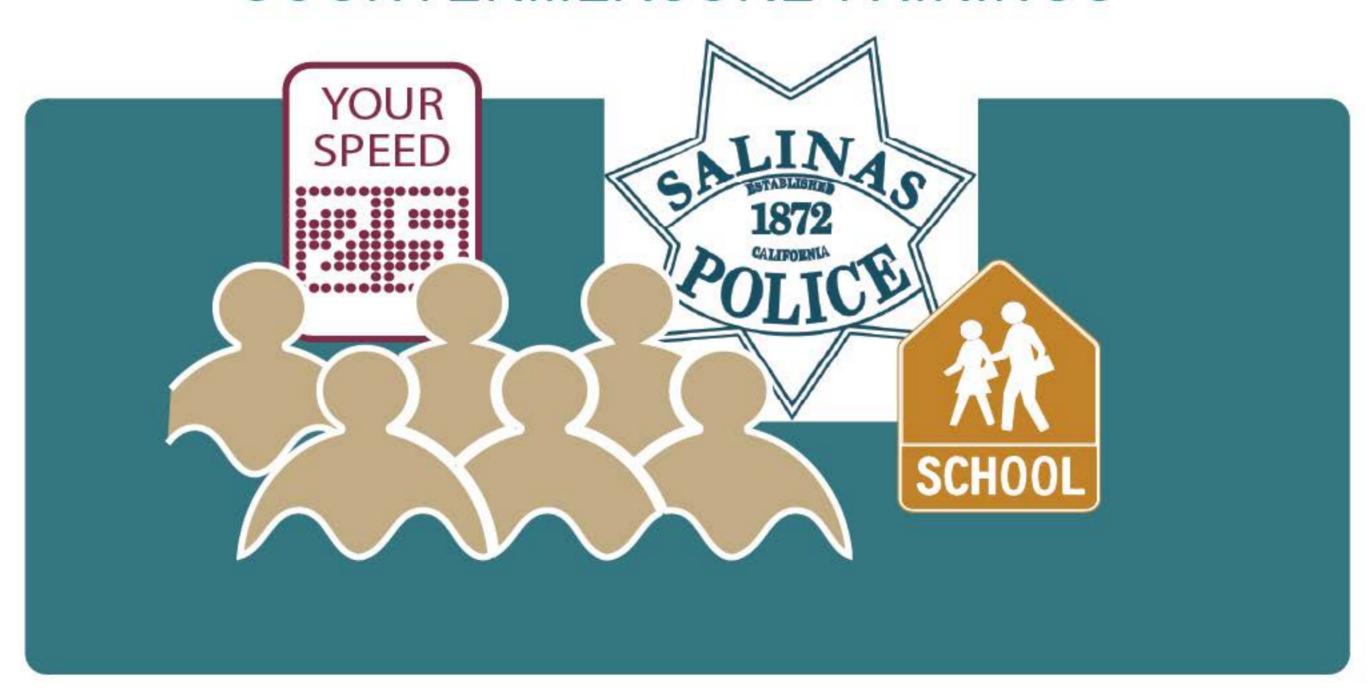


SHARE OF COLLISIONS BY TIME OF DAY

—KSI Vehicles **—**KSI Bike **—**KSI Pedestrian



C. COLLISION PROFILES AND COUNTERMEASURE PAIRINGS



				90	Q	Collision Profile	es	140	.0 .	93				
Countermeasures Categories		1	2	3	4	5	6	7	8	9 All Modes	10			
	Countermeasures	Pedestrian	Vehicle	All modes	Pedestrian	All Modes	Vehicle	All Modes	Vehicle		Bicycle			
		ies	Pedestrian Action	Broadside Collisions	Alcohol Involved	Pedestrian Violation	Auto R/W Violation	Head-On Collisions	Unsafe Speed	Rear-End Collisions		Broadside Involved with Bicyc		
	New Traffic Signals							х						
	Traffic Signal Heads Visibility					Х	Х	10000	X					
	Accessible Pedestrian Signal	Х			Х			-						
	Pedestrian Countdown Signal Head(City Standard)	х			х			6.						
	Leading Pedestrian Interval	X						-						
	Pedestrian Exclusive Phase				х			la .						
	Pedestrian Hybrid Beacon	Х												
Signalization	Protected Left Turns	120	Х		Î	X	Х	1		X				
	Signal Timing and Phasing Improvements		х			х		x	х	x				
	Coordinate Traffic Signals								X					
	Advanced Dilemma Zone Detection		x					х	x					
	Pedestrian Activated Crosswalk Warning Beacon	×												
	Pedestrian Refuge and Median	х			ï			fo.						
	Road Diets					x		х		X	Х			
	Consolidate Driveways				Ú.	Х		la .		X				
Geometric	Separated Bikeways – Cycle Tracks							х						
	Bulb Outs and Curb Extensions	X			Х			X						
	Raised Median with Street Trees(left turn at major intersections only)		x			х	х	x	х	x				
	Roundabouts		х				Х	х	X	x				
	Controlled Intersections		х			Х	8650	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100	-	Х			
Signs, Markings, Operational	High Visibility Crosswalks	Х			X									
	Roadway and Intersection Lighting	х					х		х	х	x			
	No Parking On-Street or near intersections		х			х	х			x	x			
101701000000000000000000000000000000000	Bike Lane										X			
	Buffered Bike Lane				ĵ						X			
	No Right Turn	X			0			ř.	(A	X				
	Marked Crossing	X			Х			22						
	Vehicle Speed Feedback Sign	W.			Ĭ Z		Х	X						
Speed Control	Traffic Calming	х			X X									
Speed Control	Reduced Speed School Zone(City Standard)				(A			х						



D. EMPHASIS AREAS CUT OUT SHEETS



COLLISION CORRIDORS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

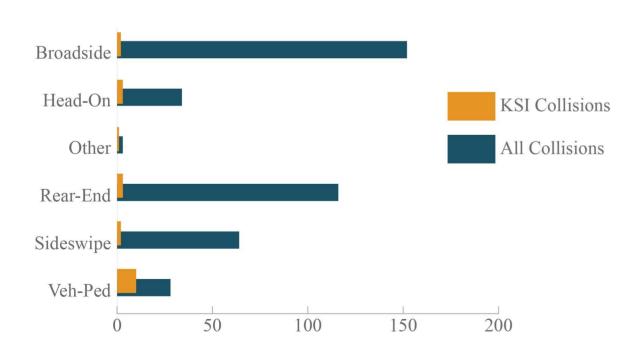




IMPROPER TURNING 11%

DUI 10%

NOTABLE COLLISION TYPES





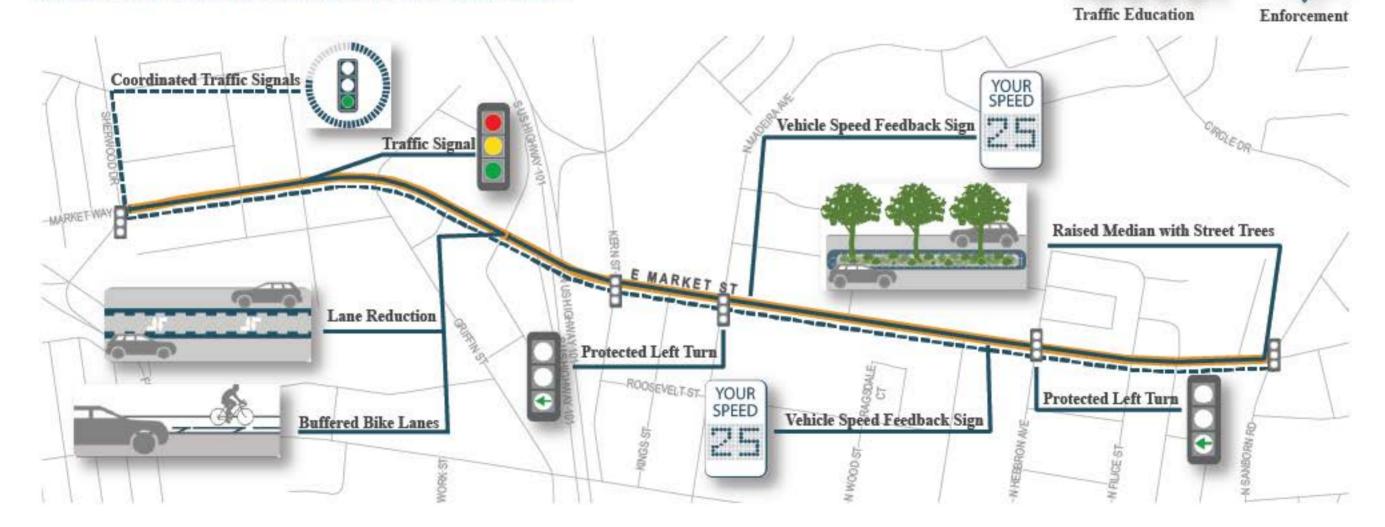
COLLISION CORRIDORS RECOMMENDATIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision

potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira Ave, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.



Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



VIOLATION

27%



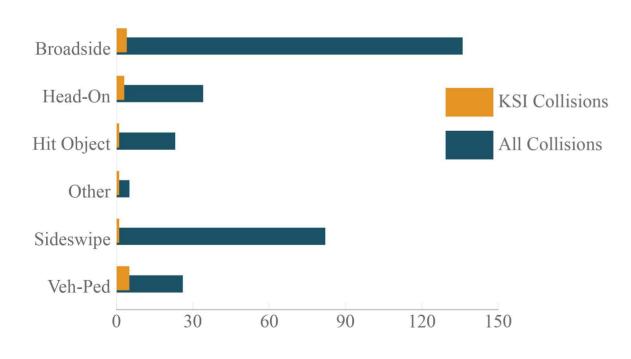


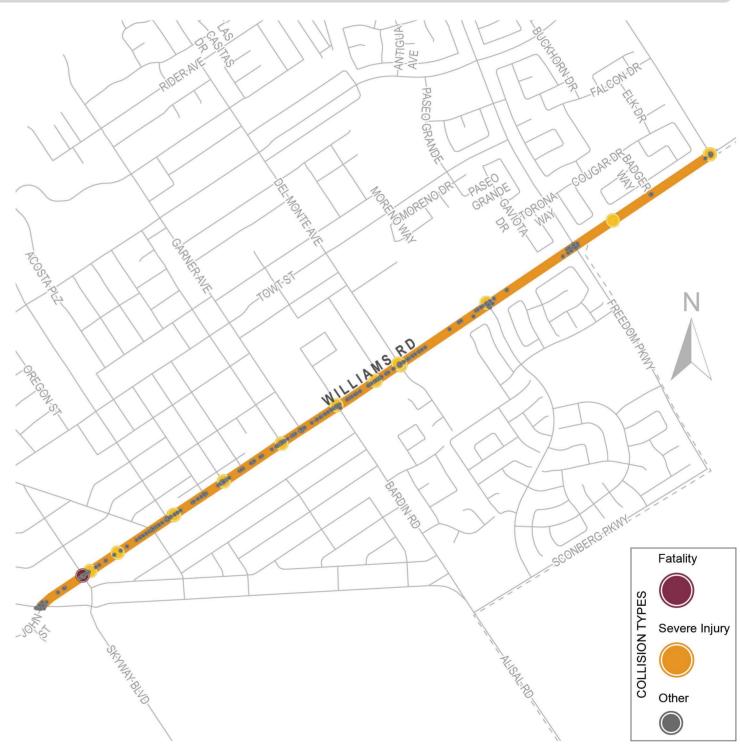
14%



UNSAFE **IMPROPER SPEED TURNING** 16%

DUI 11%

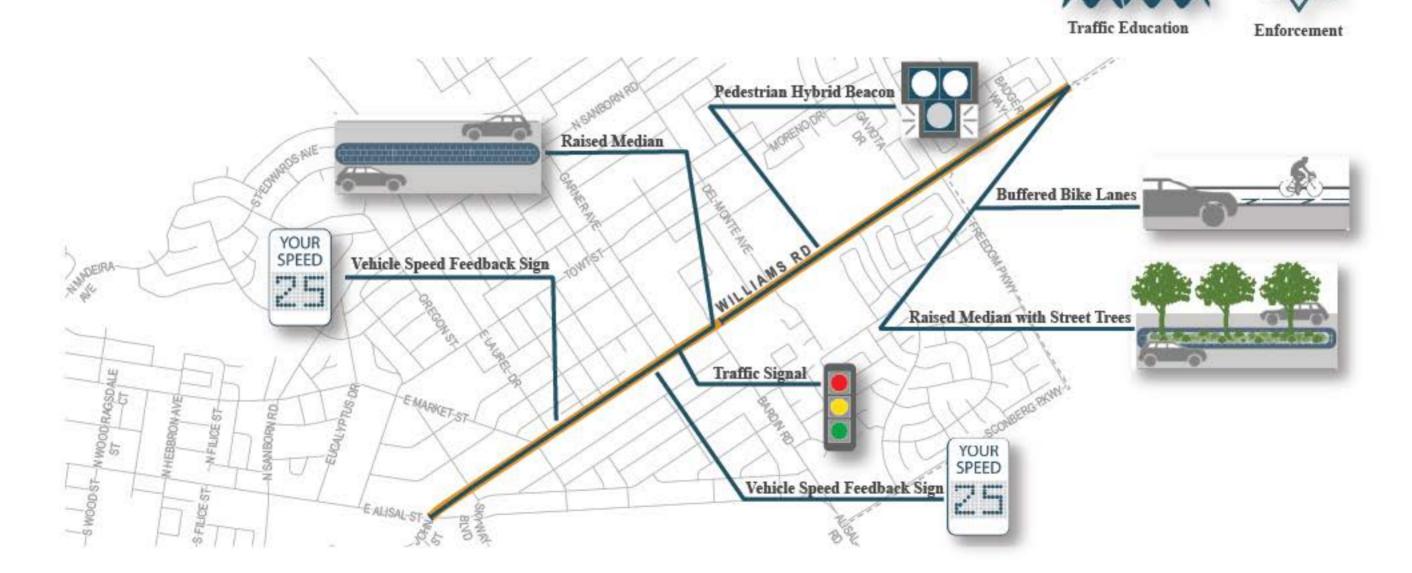




Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

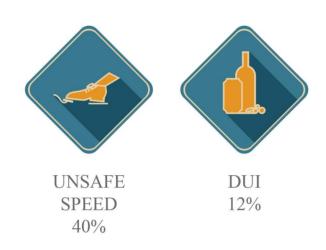
Williams Road between East Alisal Street to Bardin Road recommended countermeasures include a raised median and a new traffic signal at Williams Rd and Garner Ave. Williams Rd between Bardin Rd and Boronda Rd recommended countermeasures include a raised median and street trees, and adding buffered bike lanes. A pedestrian hybrid beacon is recommended to provide driver visibility of crosswalk location.

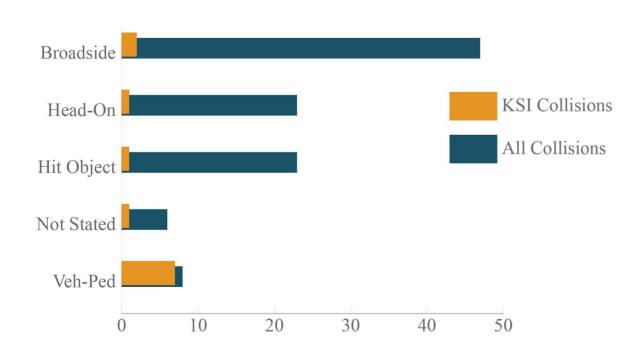
Increased traffic enforcement is recommended.

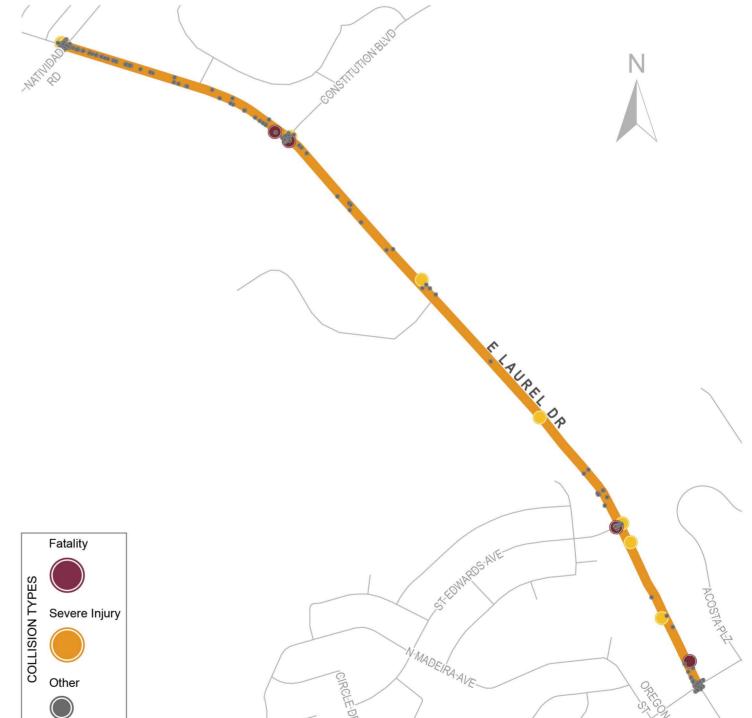


East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

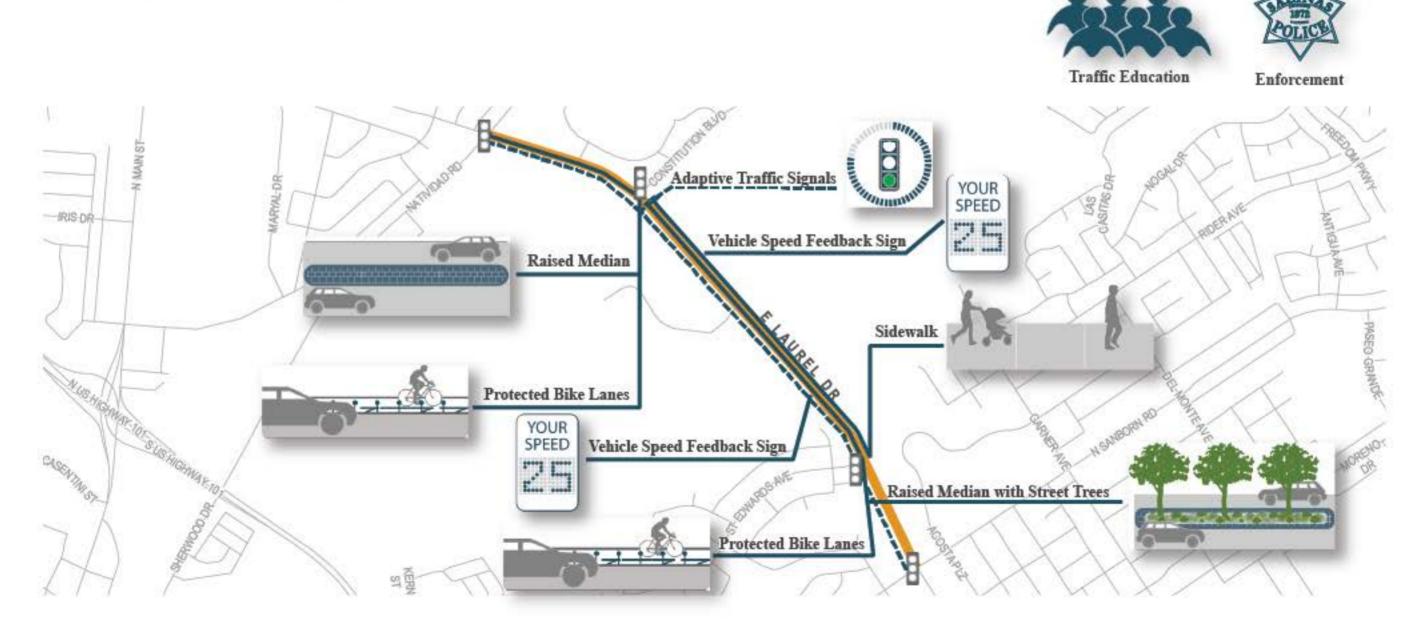






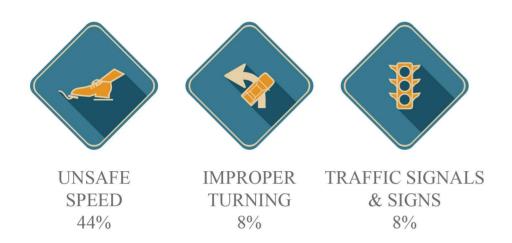
East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

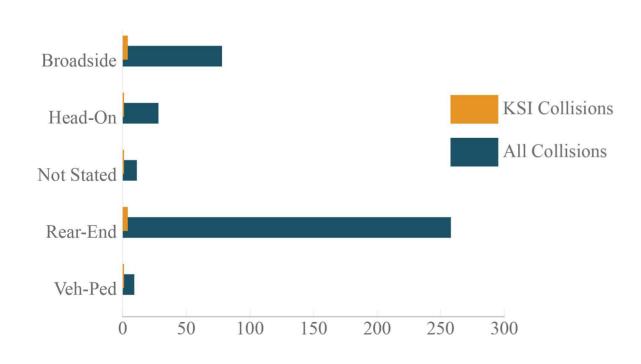
East Laurel Drive between Natividad Road and Constitution Boulevard recommended countermeasures include a raised median with street trees and protected bike lanes. An adaptive traffic signal system is recommended to reduce collision potential. To reduce speed throughout the corridor radar feedback signs are recommended to slow down vehicles, and increased traffic enforcement is recommended



East Boronda Road, from US 101 to Natividad Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

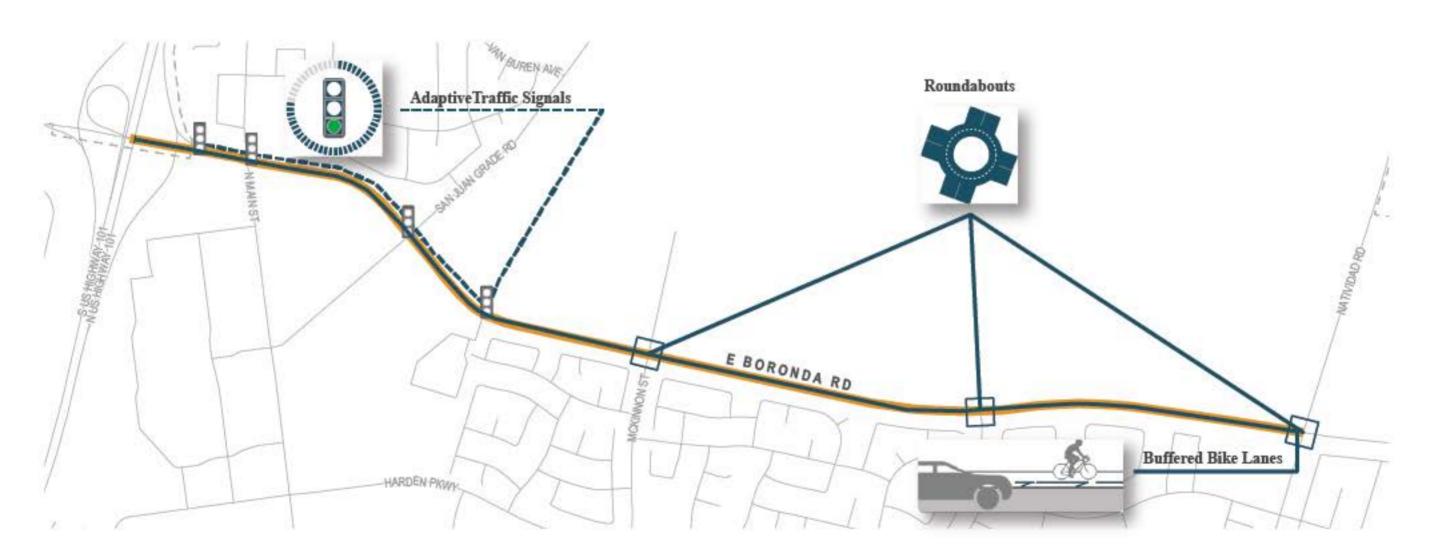






East Boronda Road, from US 101 to Natividad Road: 2009-2018

East Boronda Road between US Highway 101 and Natividad Road recommended countermeasures include roundabouts. The roundabouts are part of an ongoing project that consists of the construction of multiple roundabouts at McKinnon St, El Dorado Dr, and Natividad Rd. The project also includes the installation of buffered bike lanes. An adaptive traffic signal system is recommended to reduce stops and minimize rear-end potential collisions. Increased traffic enforcement is recommended.



East Alisal Street, from Front Street to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



UNSAFE SPEED 24%



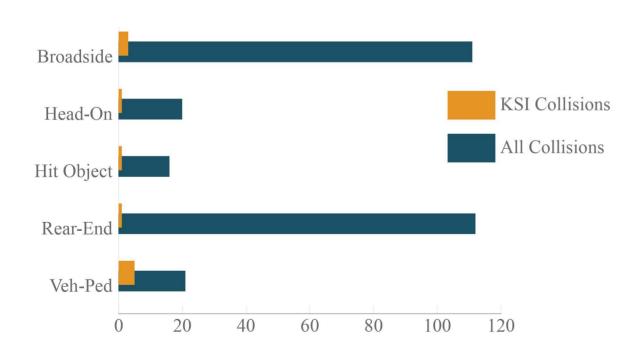
AUTO R/W VIOLATION 18%



IMPROPER TURNING 11%



TRAFFIC SIGNAL & SIGNS 13%





East Alisal Street, from Front Street to North Sanborn Road: 2009-2018

East Alisal Street between Front Street and Kern Street recommended countermeasures include a raised median with street lighting, protected left turns, and protected bike lanes.

East Alisal Street between Kern Street and North Sanborn Road recommended countermeasures include a lane reduction from 5 to 3 lanes and protected bike lanes. The recommended countermeasures for this segment will refine what has been proposed on the Alisal Vibrancy Plan. Included in the Alisal Vibrancy Plan are a designated bus travel lane to serve the transit system, protected bicycle lanes, and pedestrian crossing enhancements.

All traffic signals are recommended to be coordinated along this corridor. Increased traffic enforcement

Raised Median

Protected Left Turn

North Main Street, from Market Street to Casentini Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



UNSAFE SPEED 31%



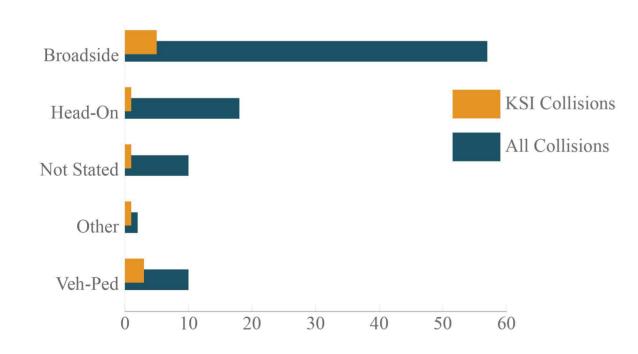
AUTO R/W **VIOLATION** 9%



TRAFFIC SIGNALS & SIGNS 14%



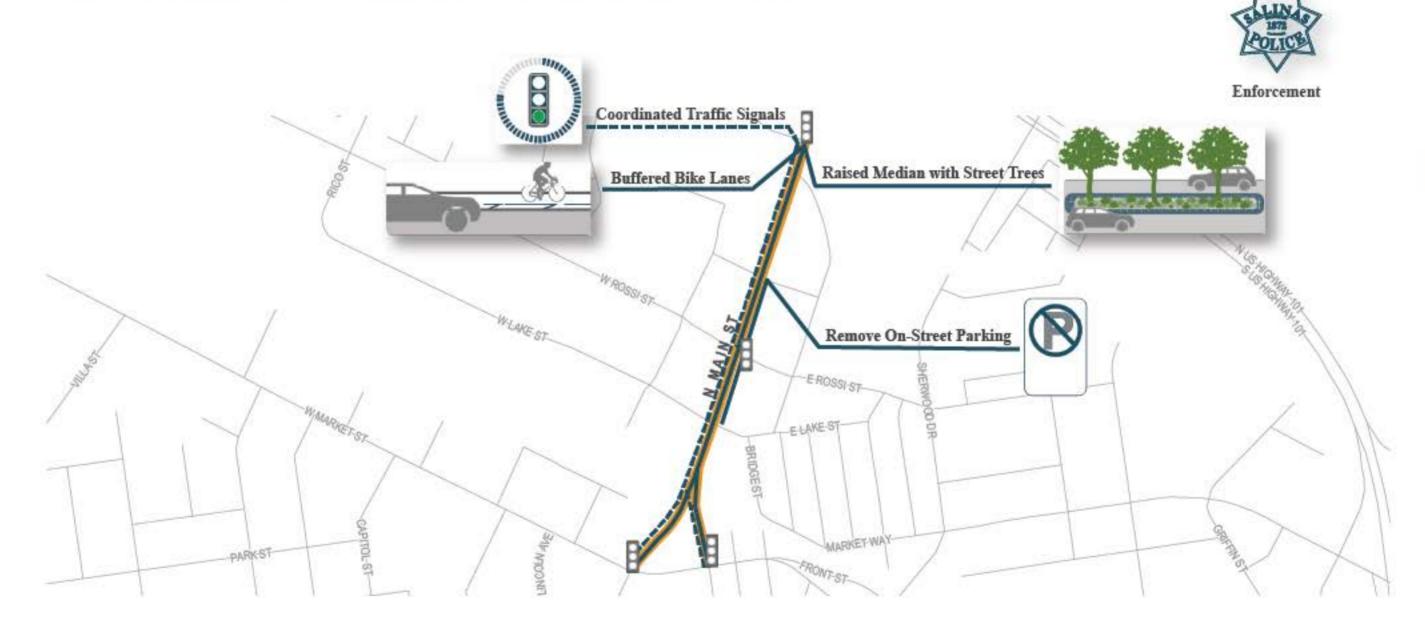
IMPROPER TURNING 11%





North Main Street, from Market Street to Casentini Street: 2009-2018

North Main Street(SR183) between Market Street and Casentini Street recommended countermeasures include the installation of buffered bike lanes and the removal of on-street parking. Additionally, a raised median and street trees is recommended to limit left turn movement at minor roads and driveways to reduce collision potential. Traffic signals are recommended to be coordinated throughout the entire corridor.



West Laurel Drive, from North Davis Road to North Main Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



SPEED

25%

UNSAFE

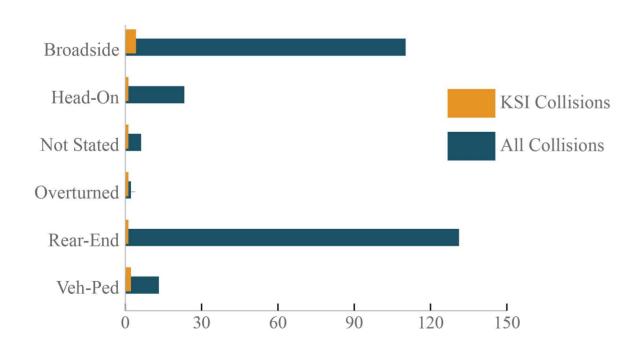




TRAFFIC SIGNALS & SIGNS 19%

AUTO R/W **VIOLATION** 12%

IMPROPER TURNING 10%





West Laurel Drive, from North Davis Road to North Main Street: 2009-2018

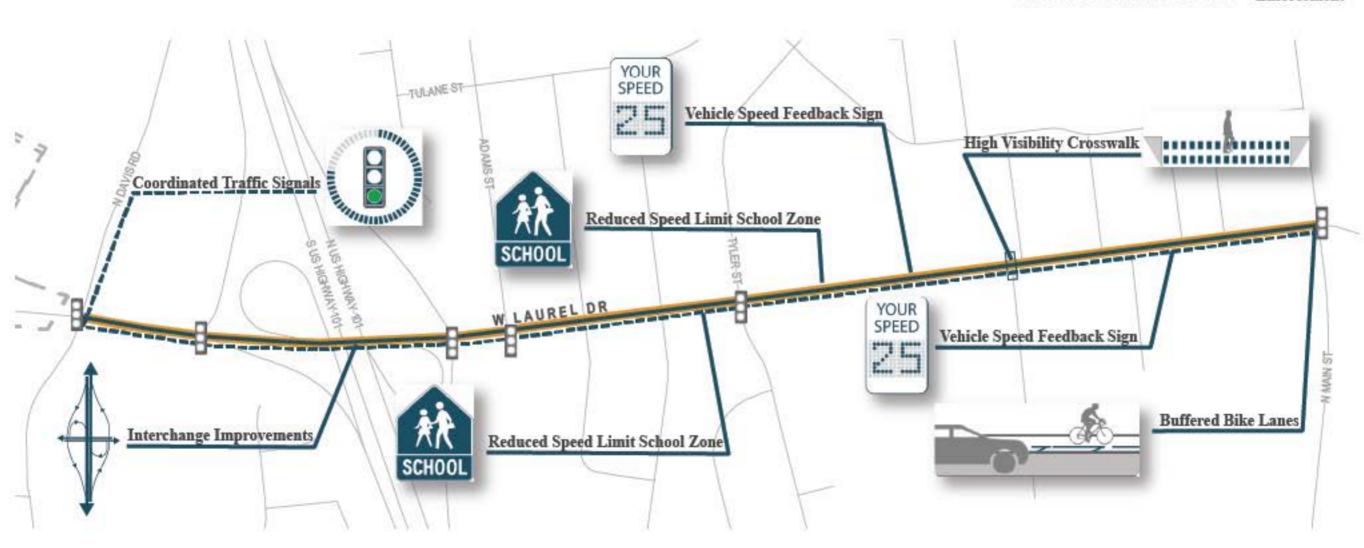
West Laurel Drive between North Davis Road and North Main Street recommended countermeasures include a raised median and street trees to limit left turn at minor roads and driveways, buffered bike lanes, reduced speed limit for

school zone, and vehicle speed feedback signs. All traffic signals are recommended to be coordinated. Increased traffic enforcement is recommended.





Raised Median with Street Trees



North Sanborn Road, from Del Monte Avenue to East Boronda Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS



AUTO R/W

VIOLATION

46%



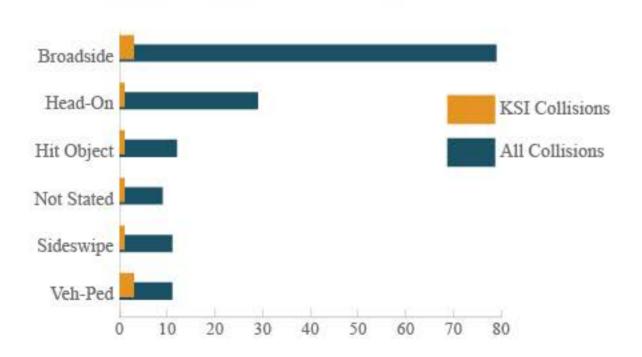


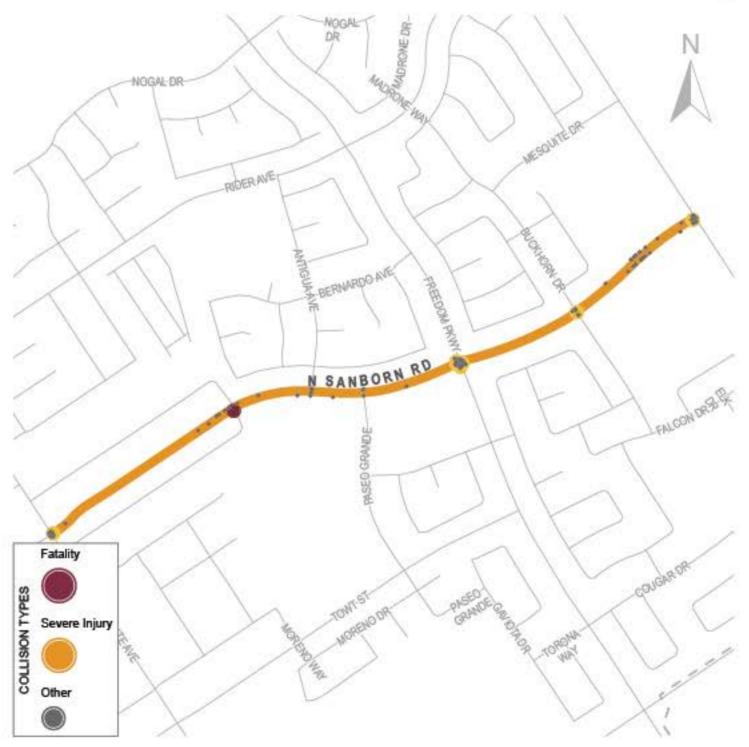


TRAFFIC SIGNALS & SIGNS 14%

UNSAFE SPEED 11%

IMPROPER TURNING 8%

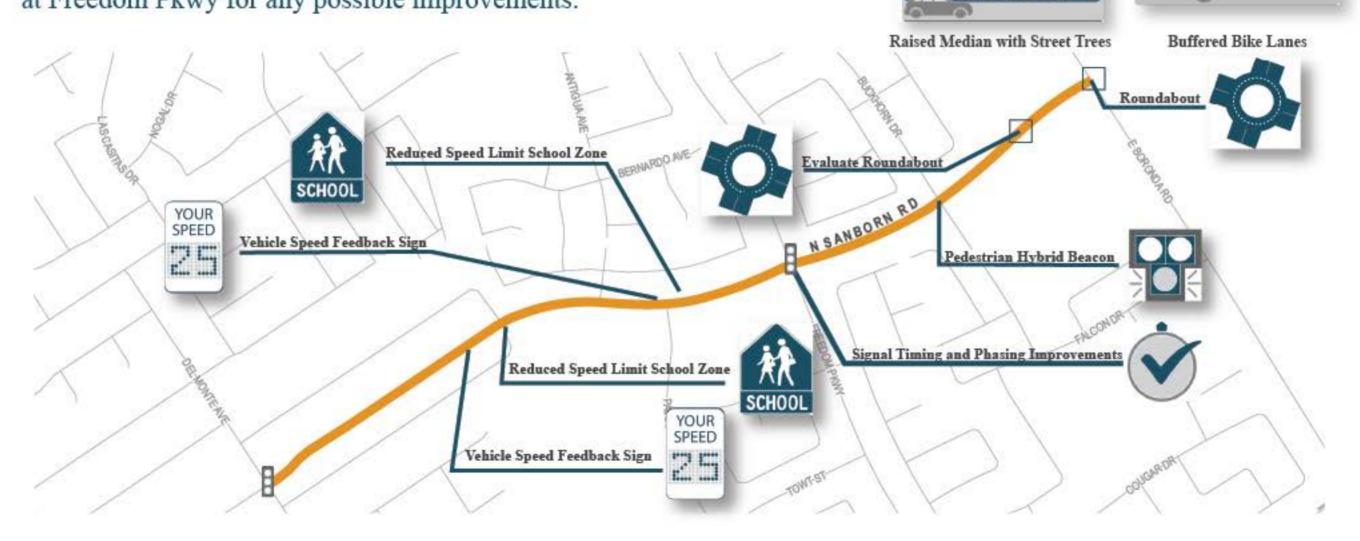




North Sanborn Road, from Del Monte Ave to East Boronda Road: 2009-2018

North Sanborn Road between Del Monte Avenue and East Boronda Road recommended countermeasures include a raised median and street trees. A road diet is recommended to be evaluated which could reduce the travel lanes from 4 to 2 lanes and installation of buffered bike lanes. Recommended is one roundabout at Boronda Rd and the consideration of another roundabout at the shopping center entrance. Additionally, a reduced speed limit school zone,

vehicle speed feedback sign, and interconnect of traffic signals for improved signal timing and phasing. Intersection control evaluation is recommended at Freedom Pkwy for any possible improvements.



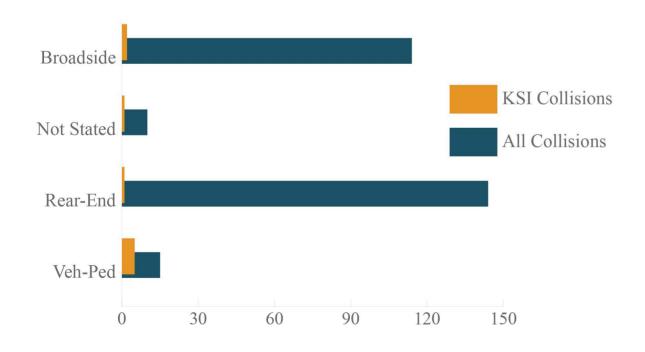
TECHNICAL APPENDIX

COLLISION CORRIDORS

East Laurel Drive, from North Main Street to Natividad Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS







East Laurel Drive, from North Main Street to Natividad Road: 2009-2018

East Laurel Drive between North Main Street and Natividad Road recommended countermeasures include a raised median and street trees to limit left turn on minor roads and driveways. Traffic signals are recommended to be coordinated, protected left turn phase at Maryal Dr, and protected pedestrian phase at Linwood Dr. The removal of

on-street parking is recommended towards the east part of the corridor and the installation of a pedestrian activated crosswalk warning beacon at Tapadero St.







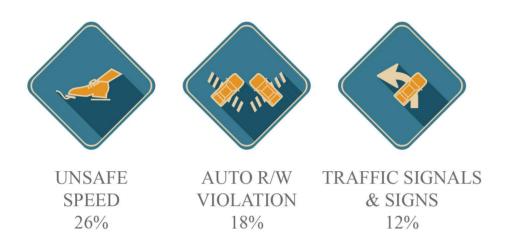
Enforcement

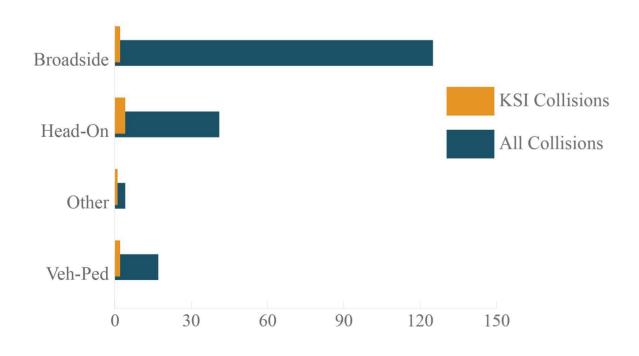
Raised Median with Street Trees Remove On-Street Parking



Sanborn Road, from US Highway 101 to East Laurel Drive: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS







Sanborn Road, from US Highway 101 to East Laurel Drive: 2009-2018

Sanborn Road between Fairview Avenue and East Laurel Drive recommended countermeasures include a raised median with street trees and buffered bike lanes. Traffic signals are recommended to have protected left turn phases at

Circle Dr, Oregon St/Madeira Ave, and all traffic signals should be coordinated. The on-street parking is recommended to be removed. Increased traffic enforcement is recommended.







Raised Median with Street Trees

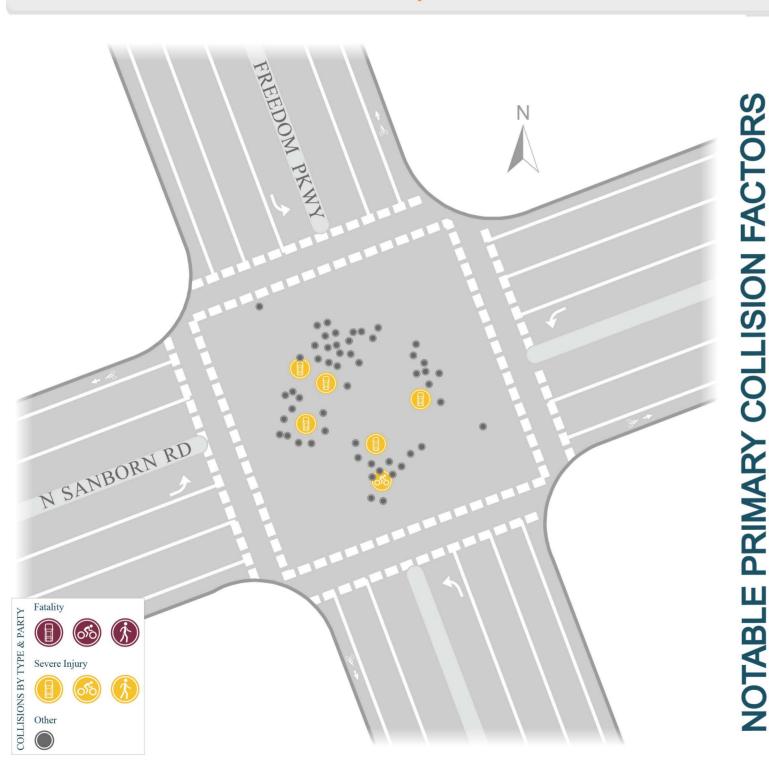
Remove On-Street Parking

Enforcement



North Sanborn Road at Freedom Parkway: 2009-2018

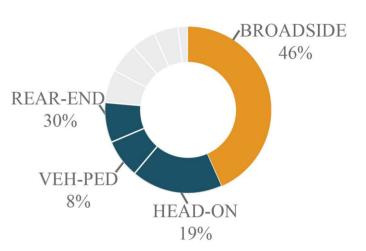




AUTO R/W VIOLATION 44%









North Sanborn Road at Freedom Parkway: 2009-2018



North Sanborn Road at Freedom Parkway recommended countermeasures include signal timing and phasing improvements that provide protected left turn phase, leading pedestrian interval, coordinated signals and traffic control. An intersection control evaluation is recommended. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS



TRAFFIC SIGNALS & SIGNS Signal Timing and Phasing



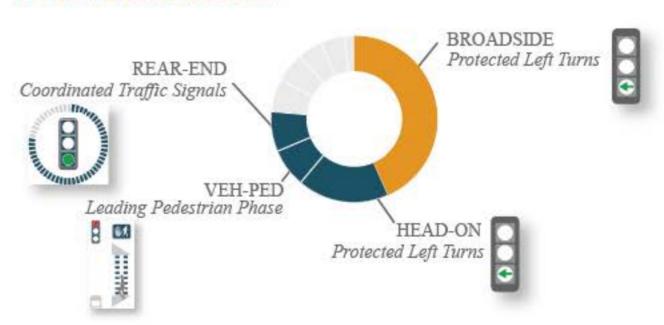


CoordinateTraffic Signals



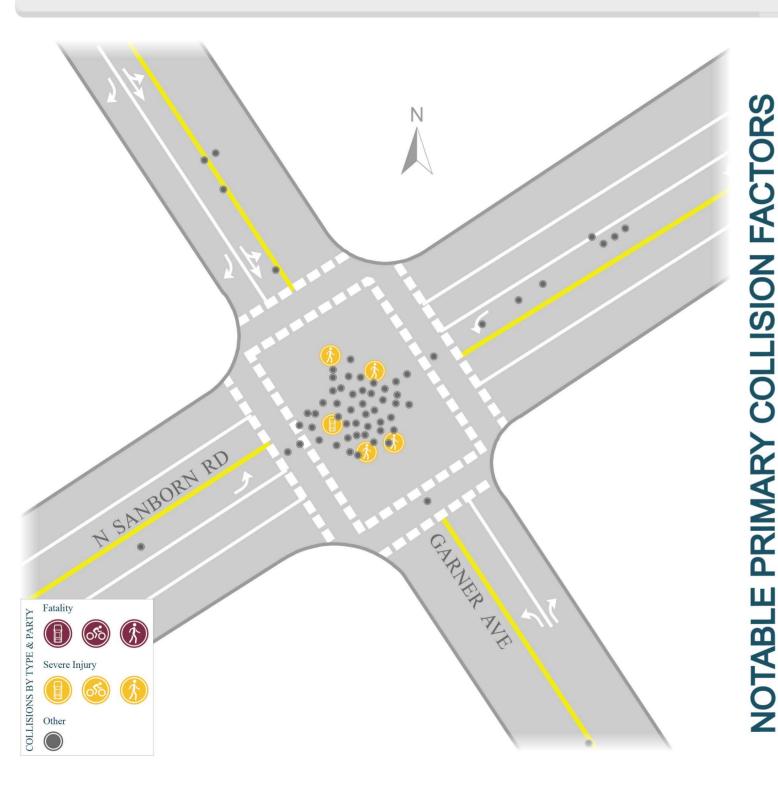
NOTABLE COLLISION TYPES

RECOMMENDATIONS



North Sanborn Road at Garner Avenue: 2009-2018

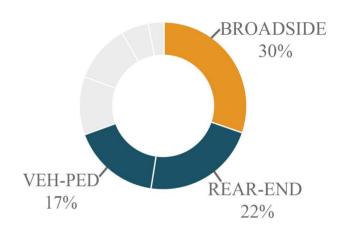




TRAFFIC SIGNALS & SIGNS 20%

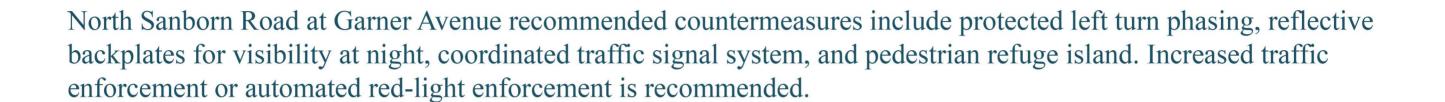








North Sanborn Road at Garner Avenue: 2009-2018



NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

TRAFFIC SIGNALS & SIGNS
Retroreflective Backplate



Coordinate Traffic Signals



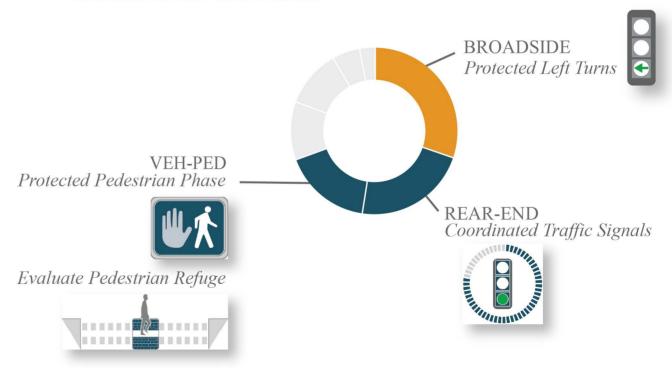


UNSAFE SPEED



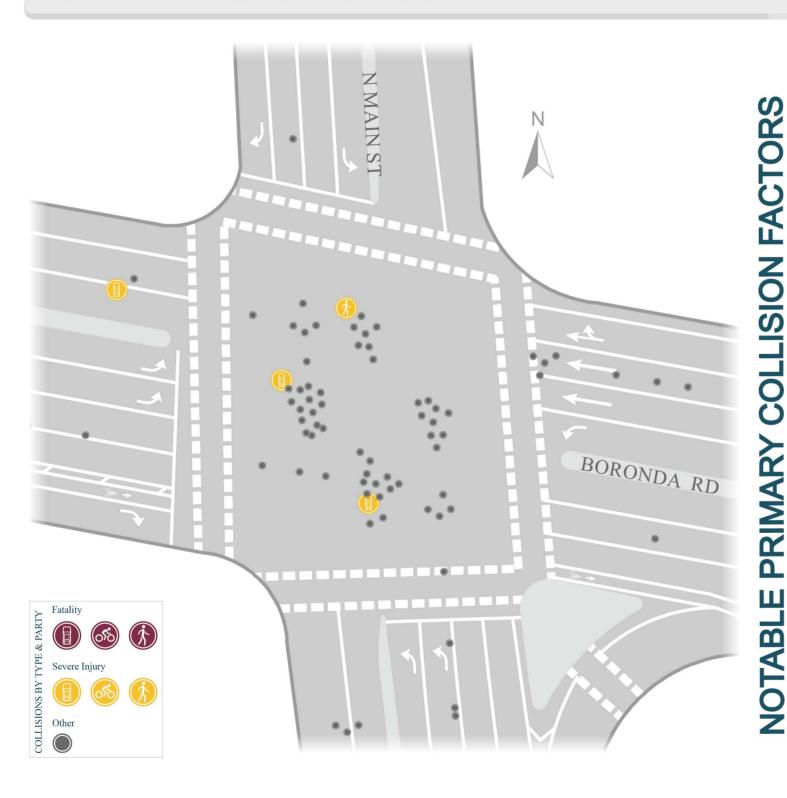
NOTABLE COLLISION TYPES

RECOMMENDATIONS



Boronda Road at North Main Street: 2009-2018



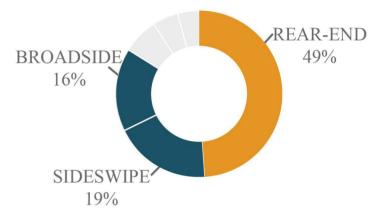


UNSAFE SPEED 37%



VIOLATION 9%







Boronda Road at North Main Street: 2009-2018

Boronda Road at North Main Street recommended countermeasures include guide signs and channelization to improve access onto and off US 101. Signal timing, phasing and coordination with other traffic signals is recommended. Increased traffic enforcement or automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS



AUTO R/W VIOLATION

Signal Timing and Phasing



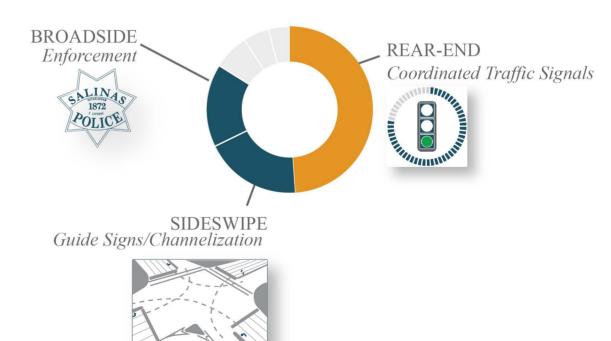
FOLLOWING TOO CLOSELY Enforcement





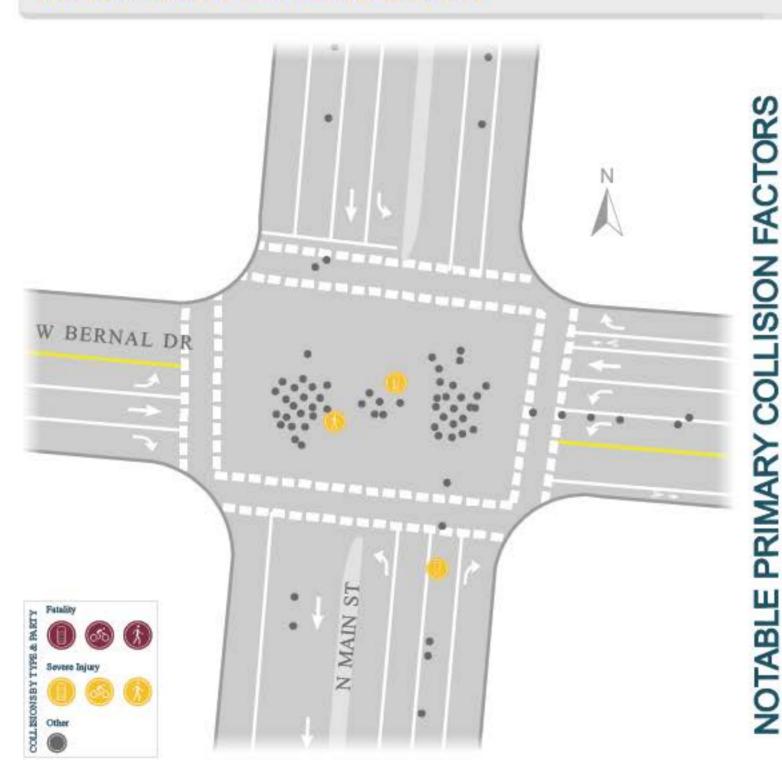
NOTABLE COLLISION TYPES

RECOMMENDATIONS



North Main Street at Bernal Drive: 2009-2018

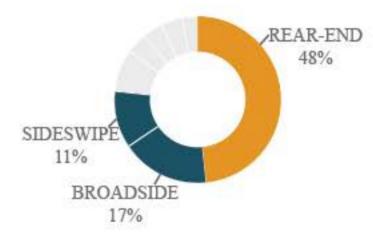




UNSAFE SPEED 35%









North Main Street at Bernal Drive: 2009-2018



North Main Street at Bernal Drive recommended countermeasures include guide signs and channelization to improve access onto and off US101. Signal timing, phasing, and coordination with other traffic signals for a better traffic flow is also recommended. Retroreflective backplate on traffic signal heads for more visibility at night and the installation of advance warning signs to warn motorists of upcoming traffic signal. Recommended are also the increased of traffic enforcement or automated red light enforcement and an intersection control evaluation.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED Enforcement

TRAFFIC SIGNALS & SIGNS

Coordinate Traffic Signals



Signal Timing and Phasing



Retroreflective Backplate



IMPROPER TURNING Guide Signs/Channelization



NOTABLE COLLISION TYPES

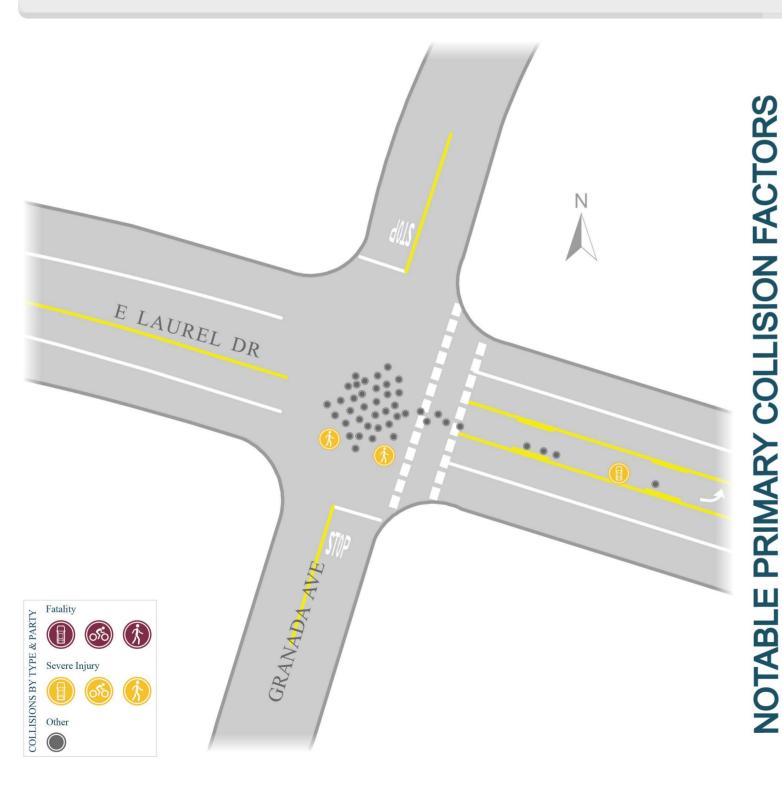
RECOMMENDATIONS



D29

INTERSECTION COLLISIONS

East Laurel Drive at Granada Avenue: 2009-2018

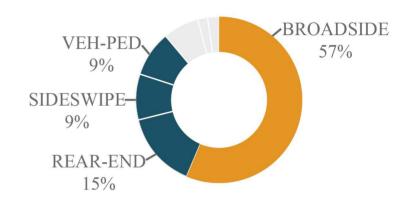


AUTO R/W **VIOLATION** 48%











East Laurel Drive at Granada Avenue: 2009-2018

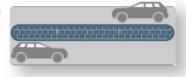
East Laurel Drive at Granada Avenue is recommended for an intersection control evaluation. This intersection is part of a corridor improvement in this action plan which recommends a raised median with channelized left turn pockets at this intersection and reduction of on-street parking. Other considerations include the installation of a pedestrian refuge island alongside with the recommended pedestrian signal interconnected with Natividad Rd and Laurel Dr. Increased traffic enforcement and traffic education is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS







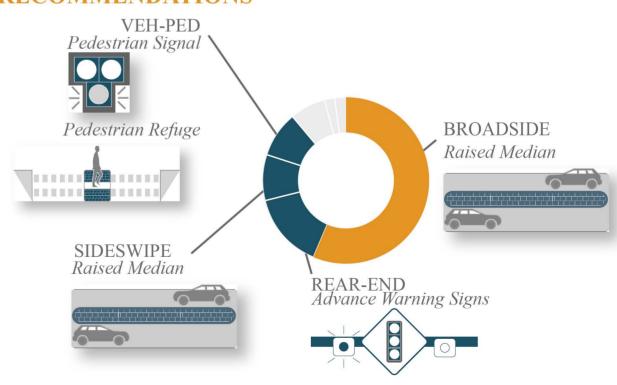






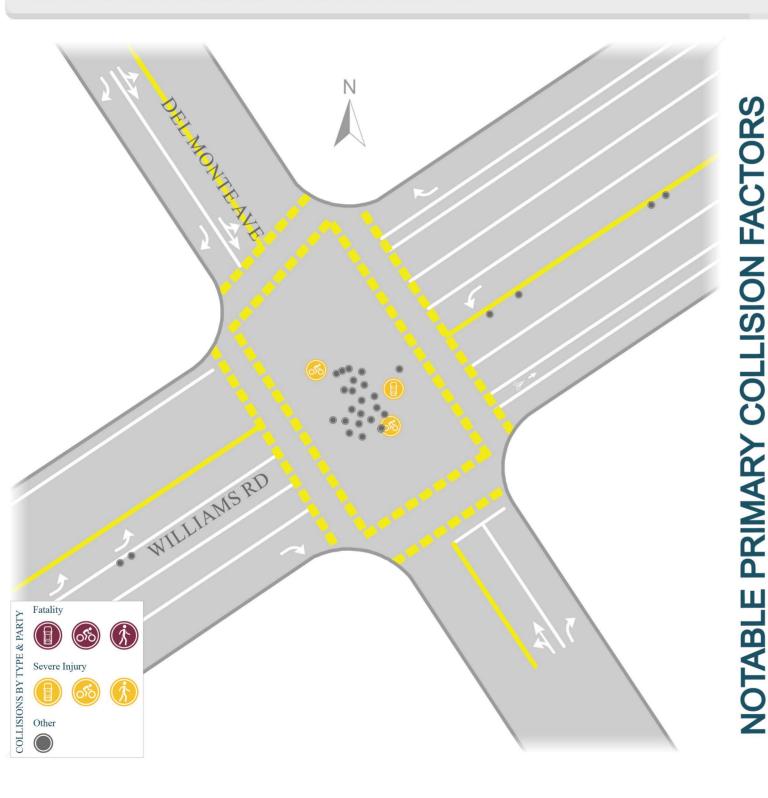
NOTABLE COLLISION TYPES

RECOMMENDATIONS



Williams Road at Del Monte Avenue: 2009-2018

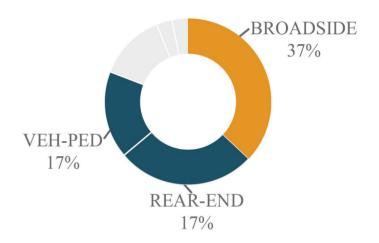




TRAFFIC SIGNALS & SIGNS 23%









Williams Road at Del Monte Avenue: 2009-2018



Williams Road at Del Monte Avenue recommended countermeasures include coordination with other traffic signals along Williams Rd and signal timing and phasing improvements for an improved traffic flow. Protected left turn phasing is recommended to provide safety for motorists making left turns and pedestrians. Additional recommended countermeasures are a pedestrian refuge island median and pedestrian signal. This intersection is part of a corridor improvement on this action plan which recommends a raised median on Williams Rd. Increased traffic enforcement or automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

TRAFFIC SIGNALS & SIGNS Coordinate Traffic Signals



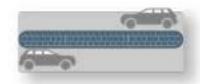
Signal Timing and Phasing



IMPROPER TURNING
Protected Left Turns



Raised Median



PEDESTRIAN VIOLATION

Traffic Education

and Outreach

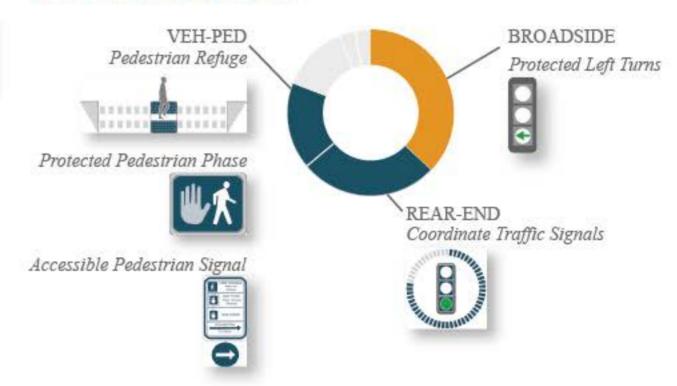


Enforcement



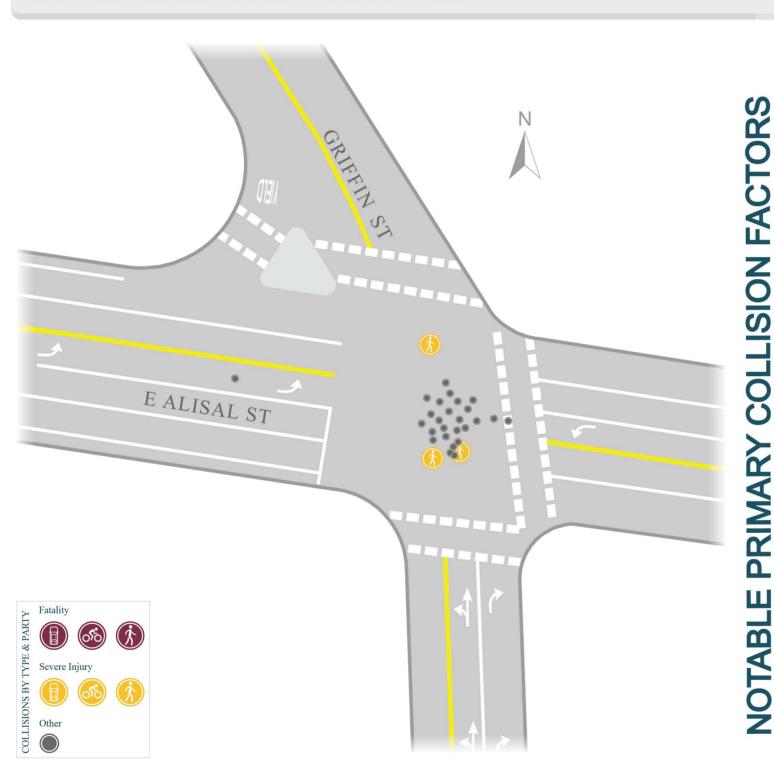
NOTABLE COLLISION TYPES

RECOMMENDATIONS



East Alisal Street at Griffin Street: 2009-2018

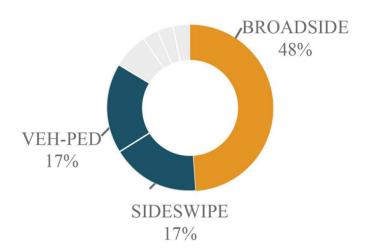


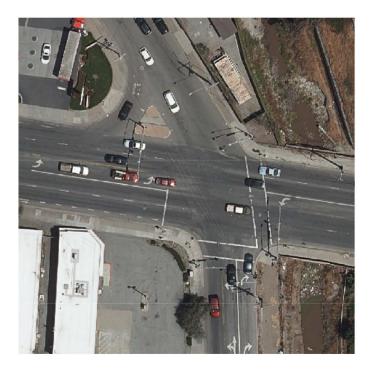












East Alisal Street at Griffin Street: 2009-2018



East Alisal Street at Griffin Street recommended countermeasures include protected left turn phasing and coordination for an improved traffic flow. Retroreflective backplate are recommended on traffic signal heads for more visibility at night. It is also recommended to remove the slip lane and add sidewalk where none exist. Furthermore, a pedestrian refuge island and median is recommended to provide a two-stage crossing. The traffic signal is recommended to include accessible pedestrian signals. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS



TRAFFIC SIGNALS &SIGNS

Retroreflective

Backplate



PEDESTRIAN R/W VIOLATION Accessible Pedestrian Signal

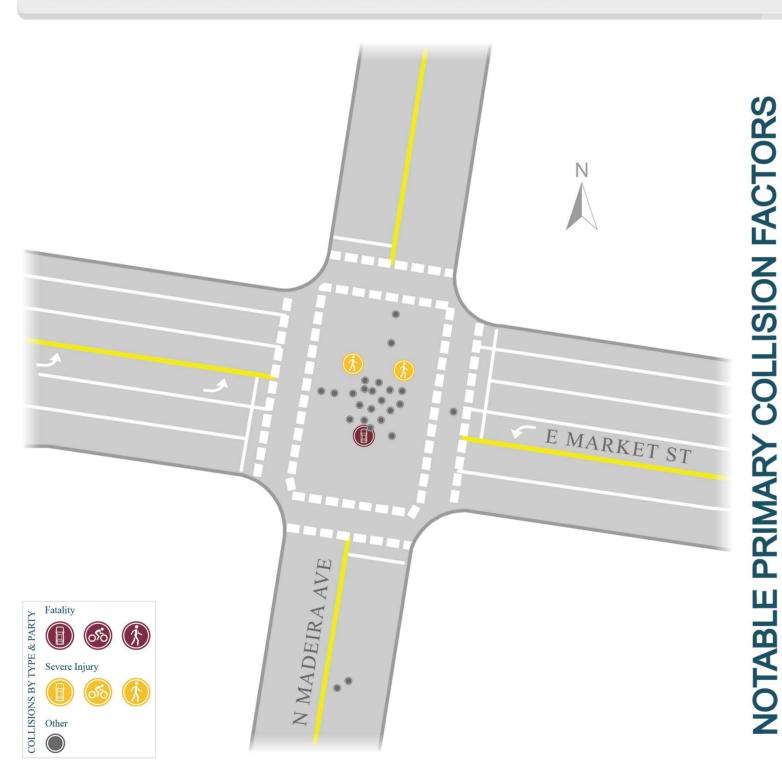


NOTABLE COLLISION TYPES

Protected Pedestrian Phase BROADSIDE Signal Timing and Phasing

East Market Street at North Madeira Avenue: 2009-2018

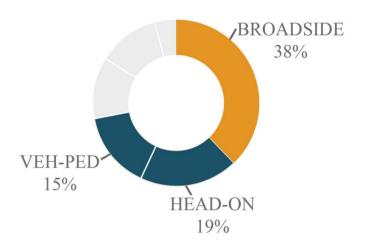




AUTO R/W VIOLATION 27%









East Market Street at North Madeira Avenue: 2009-2018



East Market Street at North Madeira Avenue recommended countermeasures include a raised median and lane reductions which is part of a corridor recommendation on this action plan. Protected left turn phasing traffic signals timing and signal coordination is also recommended. Increased traffic enforcement and automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

AUTO R/W VIOLATION Raised Median





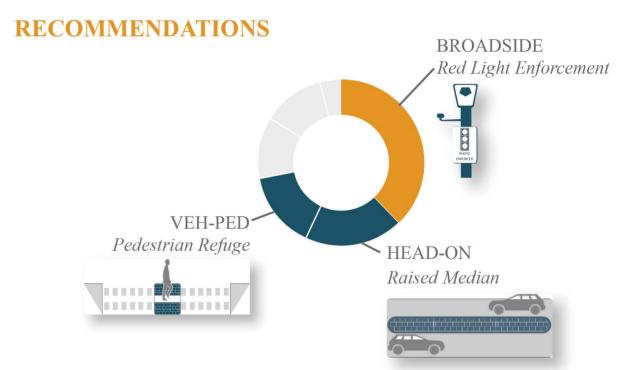






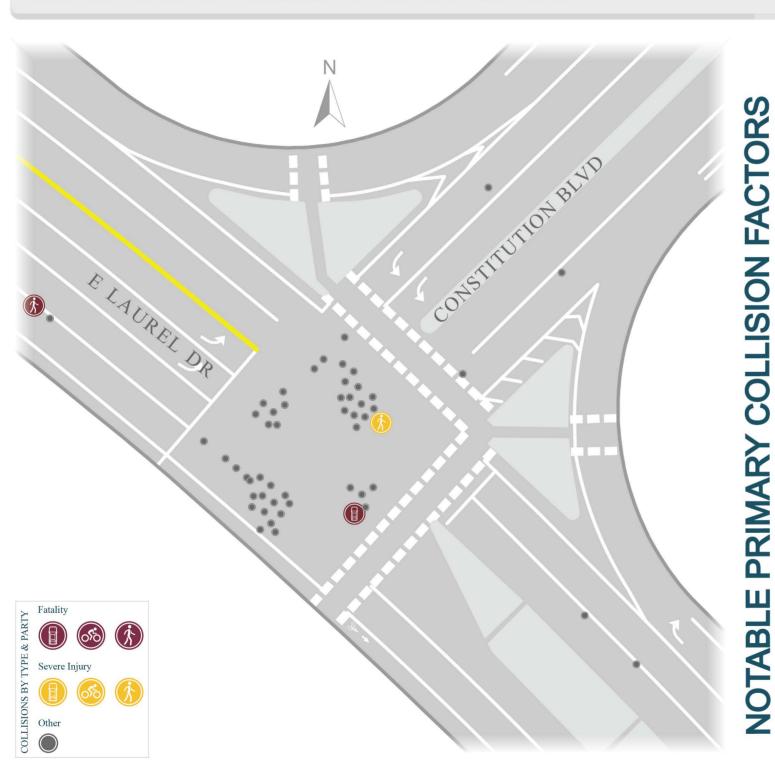
Signal Timing and Phasing





East Laurel Drive at Constitution Boulevard: 2009-2018

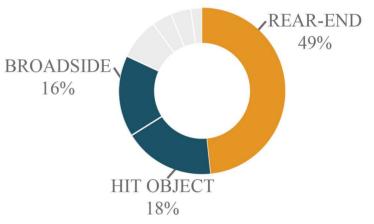


















East Laurel Drive at Constitution Boulevard: 2009-2018

East Laurel Drive at Constitution Boulevard recommended countermeasures include advance warning signs, increase intersection lighting, improved signal timing and coordination. Increased traffic enforcement or automated red-light enforcement is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED

Enforcement

Section 1872
POLICE

UNSAFE SPEED

Enforcement

DUI

Traffic Education and Outreach

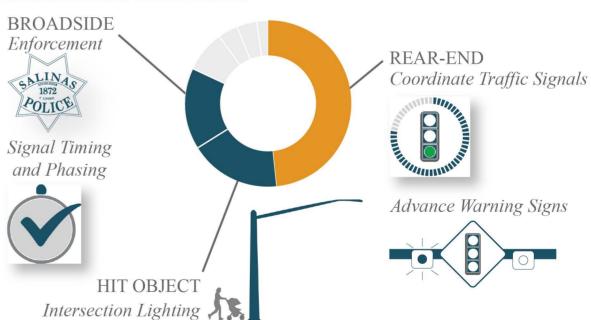


IMPROPER TURNING
Signal Timing and Phasing



NOTABLE COLLISION TYPES

RECOMMENDATIONS

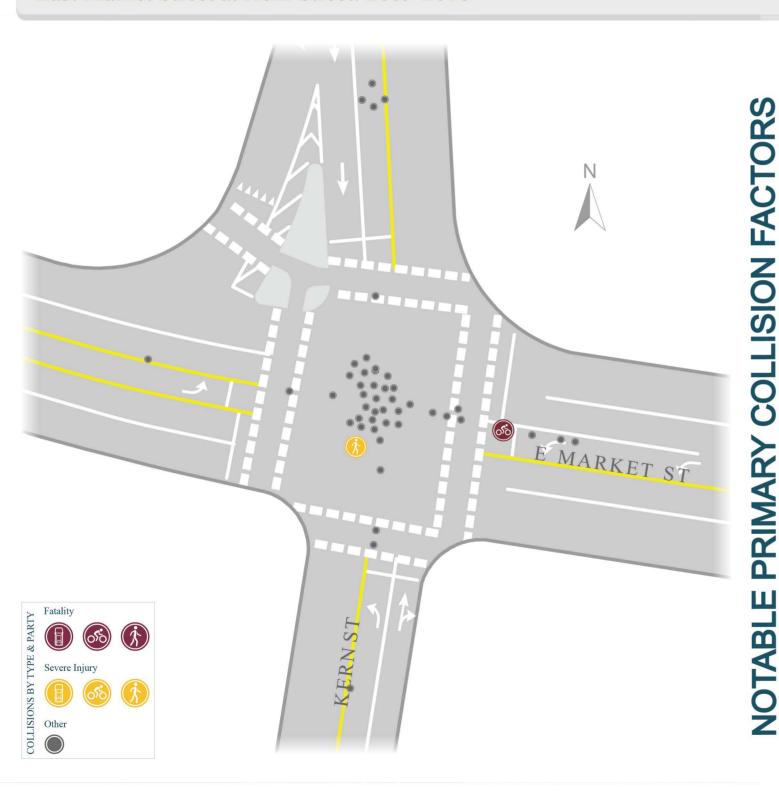


D39

INTERSECTION COLLISIONS

East Market Street at Kern Street: 2009-2018



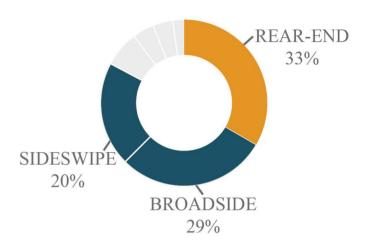








NOTABLE COLLISION TYPES





INTERSECTION COLLISIONS RECOMMENDATIONS

East Market Street at Kern Street: 2009-2018



East Market Street at Kern Street recommended countermeasures include a raised median with street trees and a lane reduction that is part of the corridor recommendations in this action plan. No turn on red is recommended on the Kern St slip lane. Additionally, signal timing and phasing improvements and coordination with other traffic signals is recommended. Guide signs and channelization is recommended to improve access onto US 101. Retroreflective backplate on the traffic signal heads are recommended to provide more visibility at night. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED Enforcement



Raised Median and Street Trees



AUTO R/W VIOLATION Signal Timing and Phasing

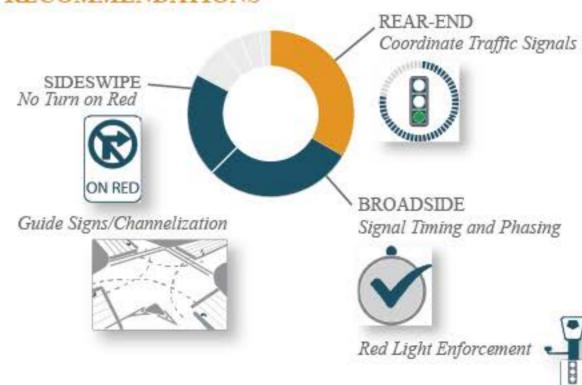


TRAFFIC SIGNALS & SIGNS Retroreflective Backplate



NOTABLE COLLISION TYPES

RECOMMENDATIONS



PEDESTRIAN INVOLVED COLLISIONS

North Sanborn Road at Garner Avenue: 2009-2018



PRIMARY COLLISION FACTORS





PEDESTRIAN INVOLVED COLLISIONS RECOMMENDATIONS

North Sanborn Road at Garner Avenue

North Sanborn Road at Garner Avenue recommended countermeasures include accessible pedestrian signal, protected pedestrian phase, reflective backplates for visibility at night, coordination of traffic signals and pedestrian refuge island. Increased traffic enforcement or automated red-light enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS

PEDESTRIAN R/W VIOLATION Accessible Pedestrian Signal



PEDESTRIAN VIOLATION Traffic Education and Outreach



TRAFFIC SIGNALS AND SIGNS Retroreflective Backplate







OTHER

RECOMMENDATIONS

Leading Pedestrian Phase



Evaluate Pedestrian Refuge



Protected Left Turns



Coordinate Traffic Signals

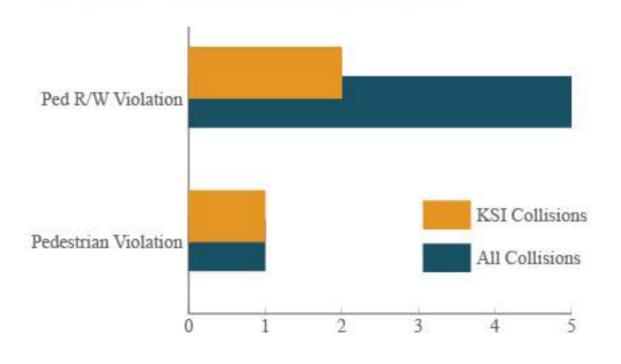


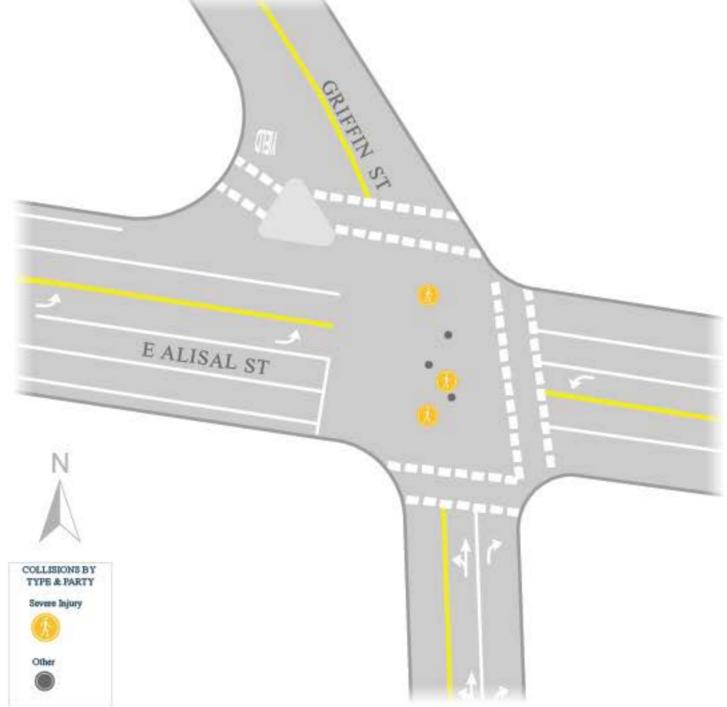
PEDESTRIAN INVOLVED COLLISIONS

East Alisal Street at Griffin Street: 2009-2018



PRIMARY COLLISION FACTORS





PEDESTRIAN INVOLVED COLLISIONS RECOMMENDATIONS

East Alisal Street at Griffin Street

East Alisal Street at Griffin Street recommended countermeasures include protected left turn phasing and coordination for an improved traffic flow. Retroreflective backplate are recommended on traffic signal heads for more visibility at night. It is also recommended to remove the slip lane and add sidewalk where none exist. Furthermore, a pedestrian refuge island and median is recommended to provide a two-stage crossing. The traffic signal is recommended to include accessible pedestrian signals. Increased traffic enforcement or automated red-light enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS

PEDESTRIAN R/W VIOLATION Accessible Pedestrian Signal

Traffic Education

and Outreach

PEDESTRIAN VIOLATION









OTHER

RECOMMENDATIONS

Pedestrian Refuge



 $Retroreflective\ Backplate$



Eliminate Slip Lane



Signal Timing and Phasing



Leading Pedestrian Phase

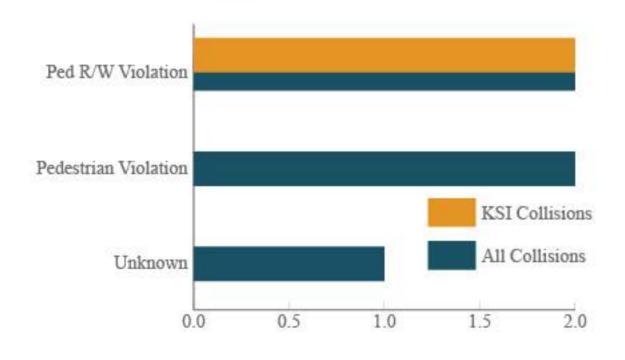


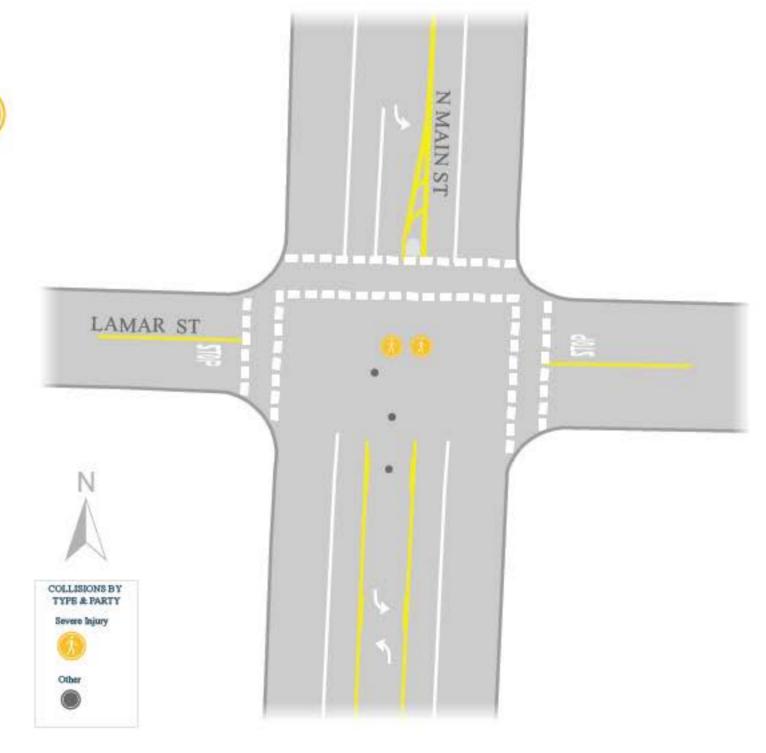
PEDESTRIAN INVOLVED COLLISIONS

North Main Street at Lamar Street: 2009-2018



PRIMARY COLLISION FACTORS





PEDESTRIAN INVOLVED COLLISIONS RECOMMENDATIONS

North Main Street at Lamar Street

North Main Street at Lamar Street recommended countermeasures include pedestrian refuge island and median to provide a two-stage crossing. It is recommended to evaluate a pedestrian hybrid beacon or traffic signal at the intersection to stop traffic. A new signal or hybrid beacon would require coordination. Traffic education and outreach as well as increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS



High Visibility Crosswalk



OTHER

RECOMMENDATIONS



Pedestrian Hybrid Beacon



UNKNOWN

Enforcement

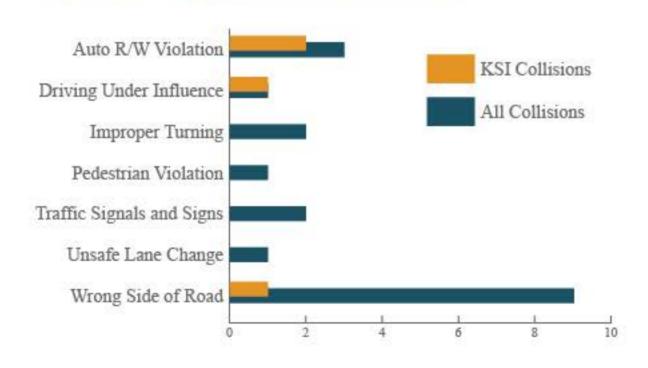


BICYCLE INVOLVED COLLISIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018



PRIMARY COLLISION FACTORS





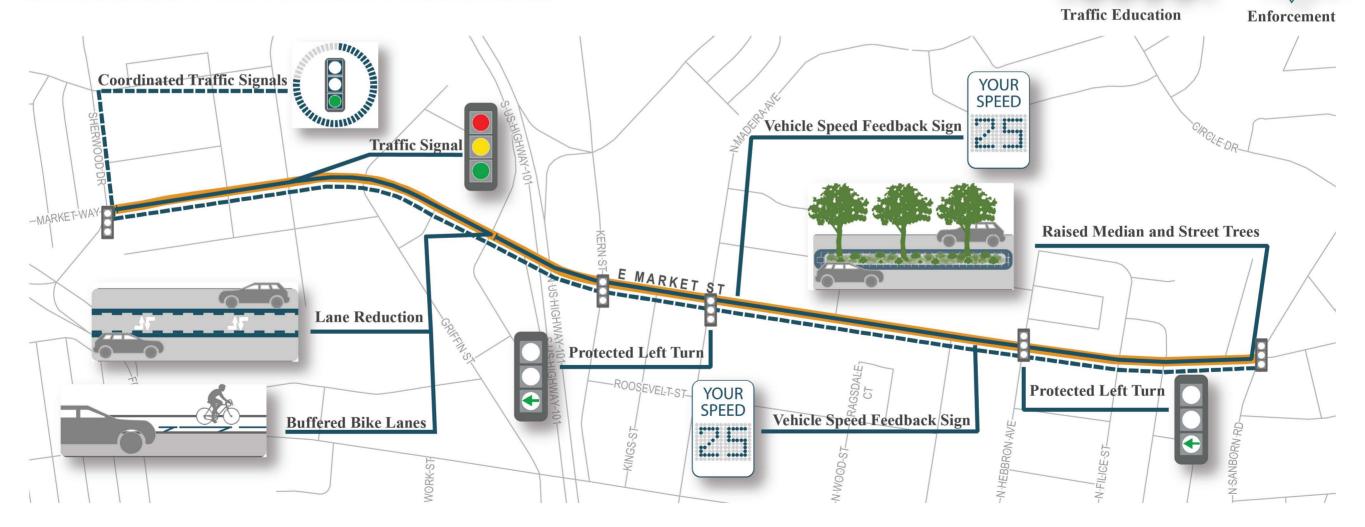
BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision

potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.



BICYCLE INVOLVED COLLISIONS

West Laurel Drive, from North Davis Road to North Main Street: 2009-2018



BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS

West Laurel Drive, from North Davis Road to North Main Street

West Laurel Drive between North Davis Road and North Main Street recommended countermeasures include a raised median and street trees to limit left turn at minor roads and driveways, buffered bike lanes, reduced speed limit for school zone, and vehicle speed feedback signs. All traffic signals are recommended to be coordinated. Increased traffic enforcement is recommended.



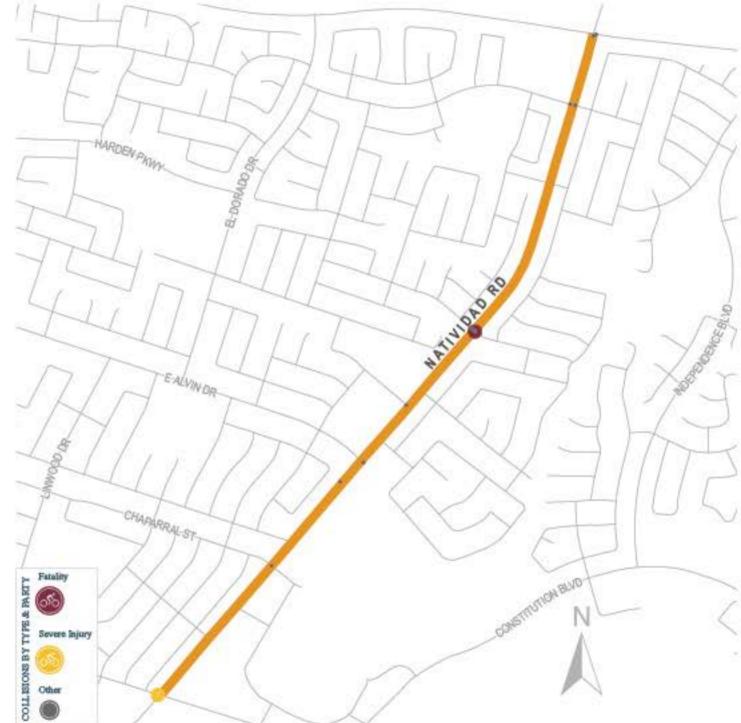
BICYCLE INVOLVED COLLISIONS

Natividad Road, from Boronda Road to East Laurel Drive: 2009- 2018



PRIMARY COLLISION FACTORS



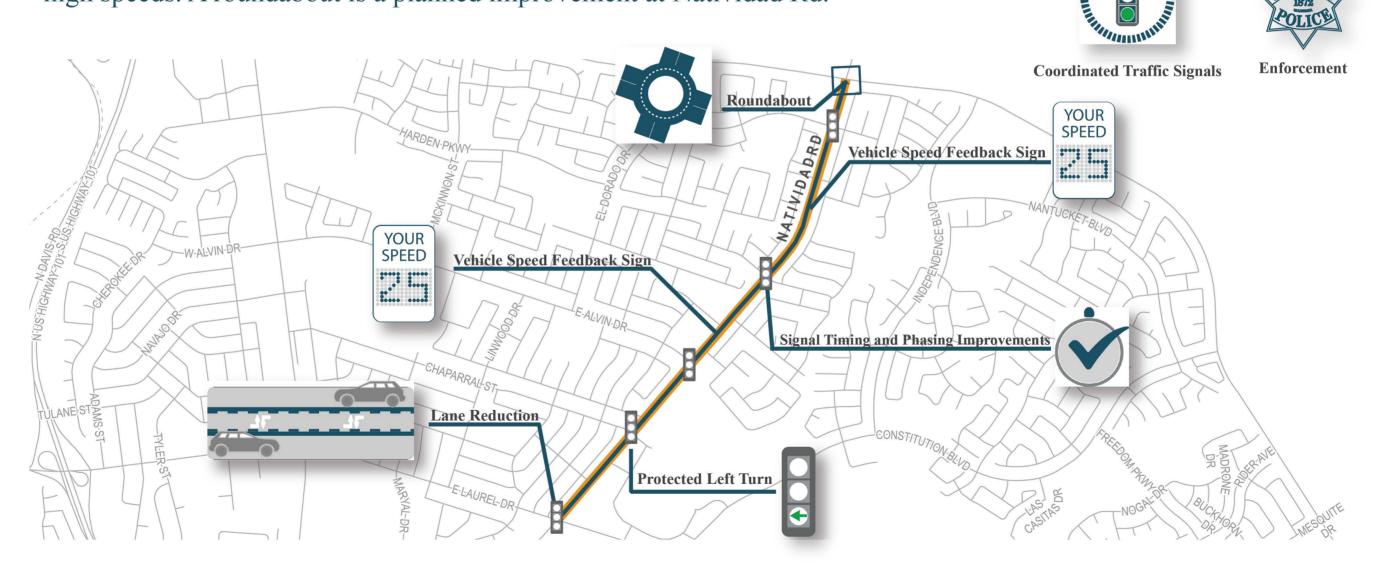


BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS

Natividad Road, from Boronda Road to East Laurel Drive

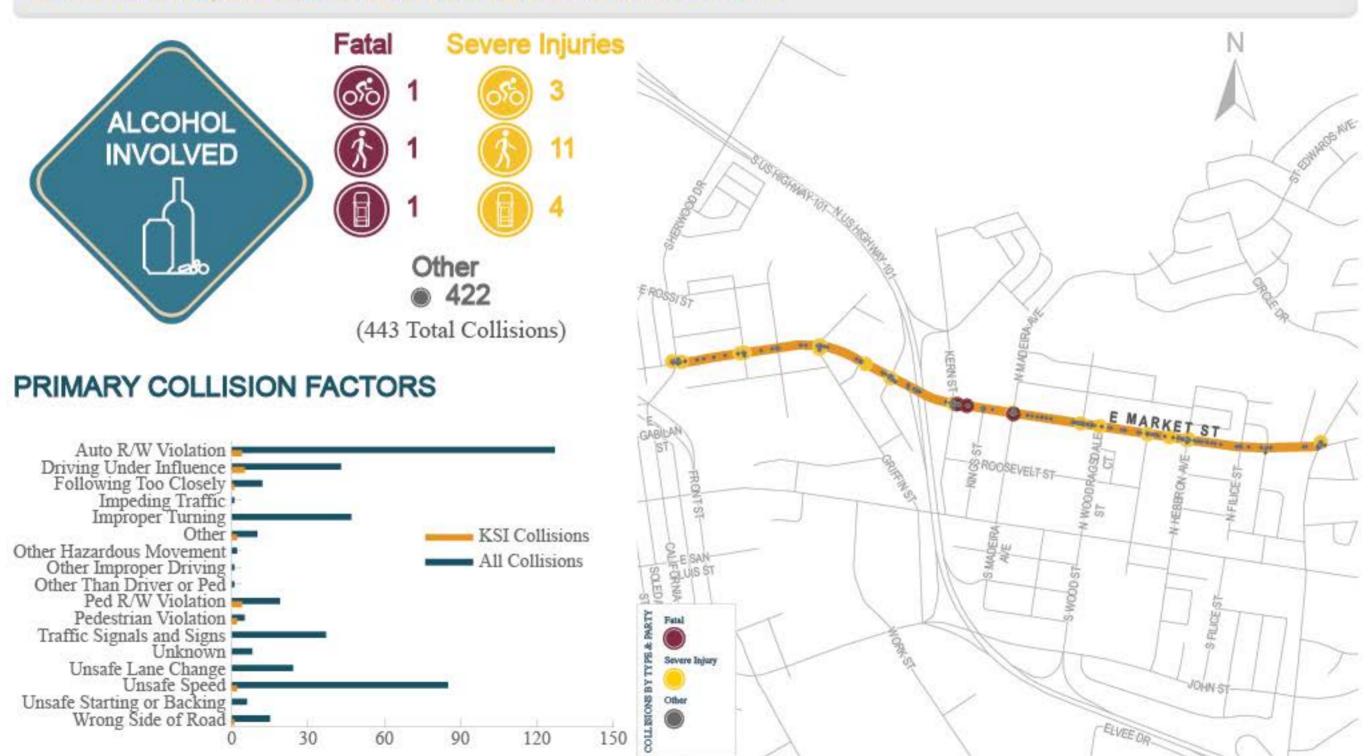
Natividad Road between East Laurel Drive and Boronda Road recommended countermeasures include consideration of a 6 to 4 lane reduction with protected bike lanes to provide connection to existing bike facilities. It is recommended to reduce the number of median crossing and limit access on minor roads. Signals are recommended to include bicycle detection and improved timing, coordination of traffic signals, and protected left turn phasing.

The corridor is recommended to include vehicle speed feedback sign to warn motorists of high speeds. A roundabout is a planned improvement at Natividad Rd.



ALCOHOL INVOLVED COLLISIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018



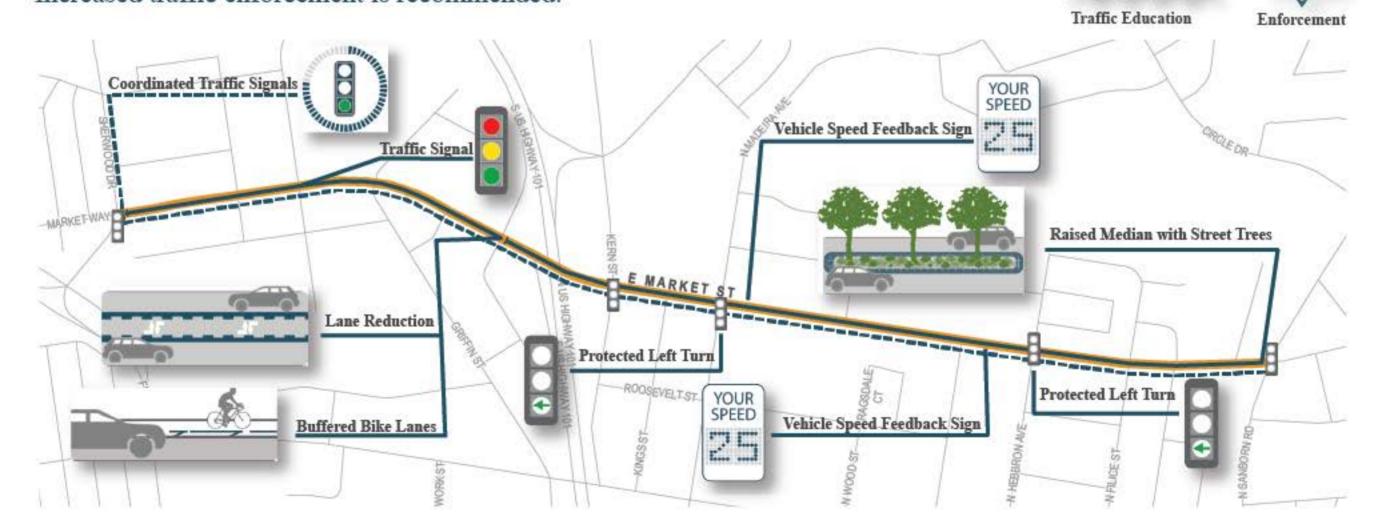
ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

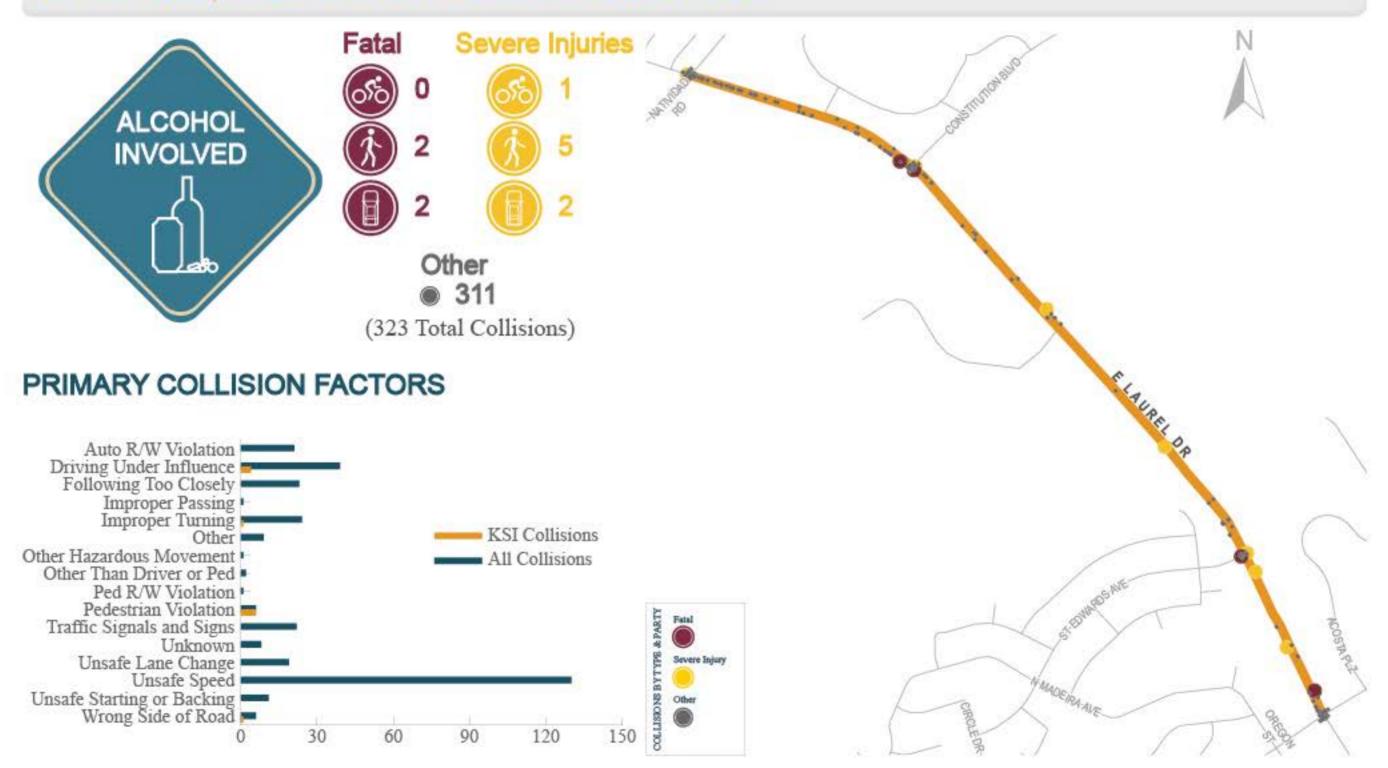
East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision

potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.



ALCOHOL INVOLVED COLLISIONS

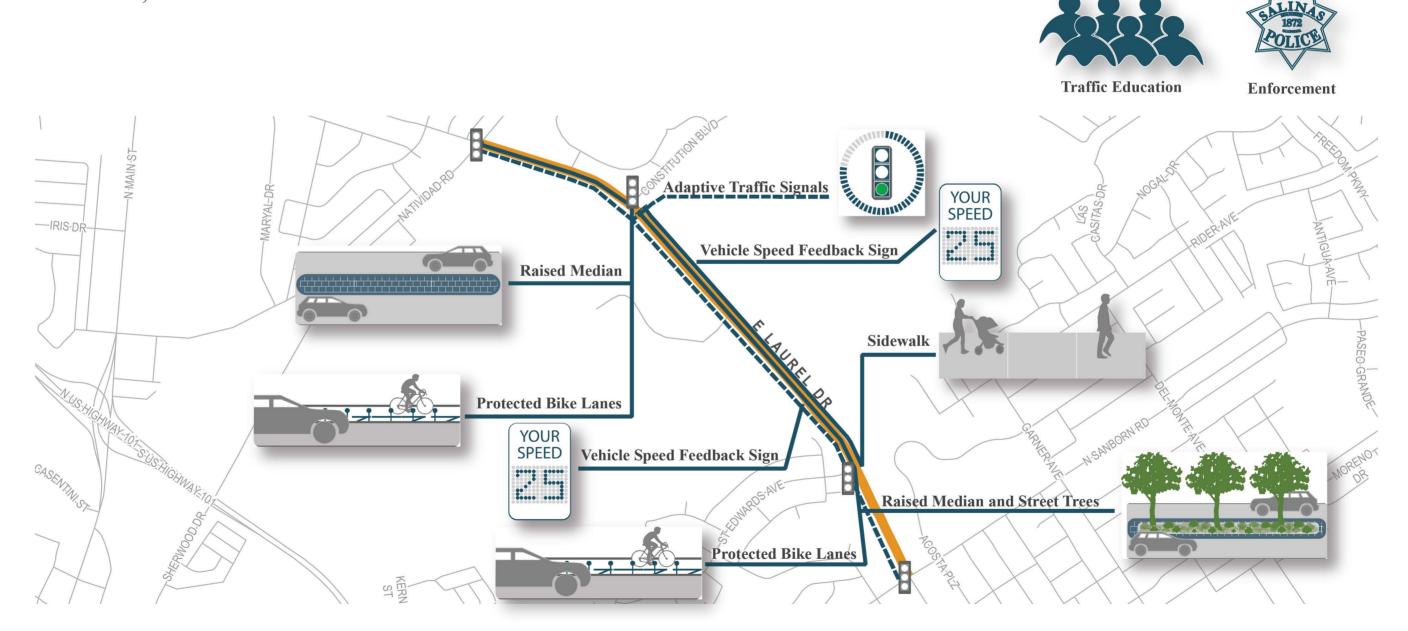
East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018



ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

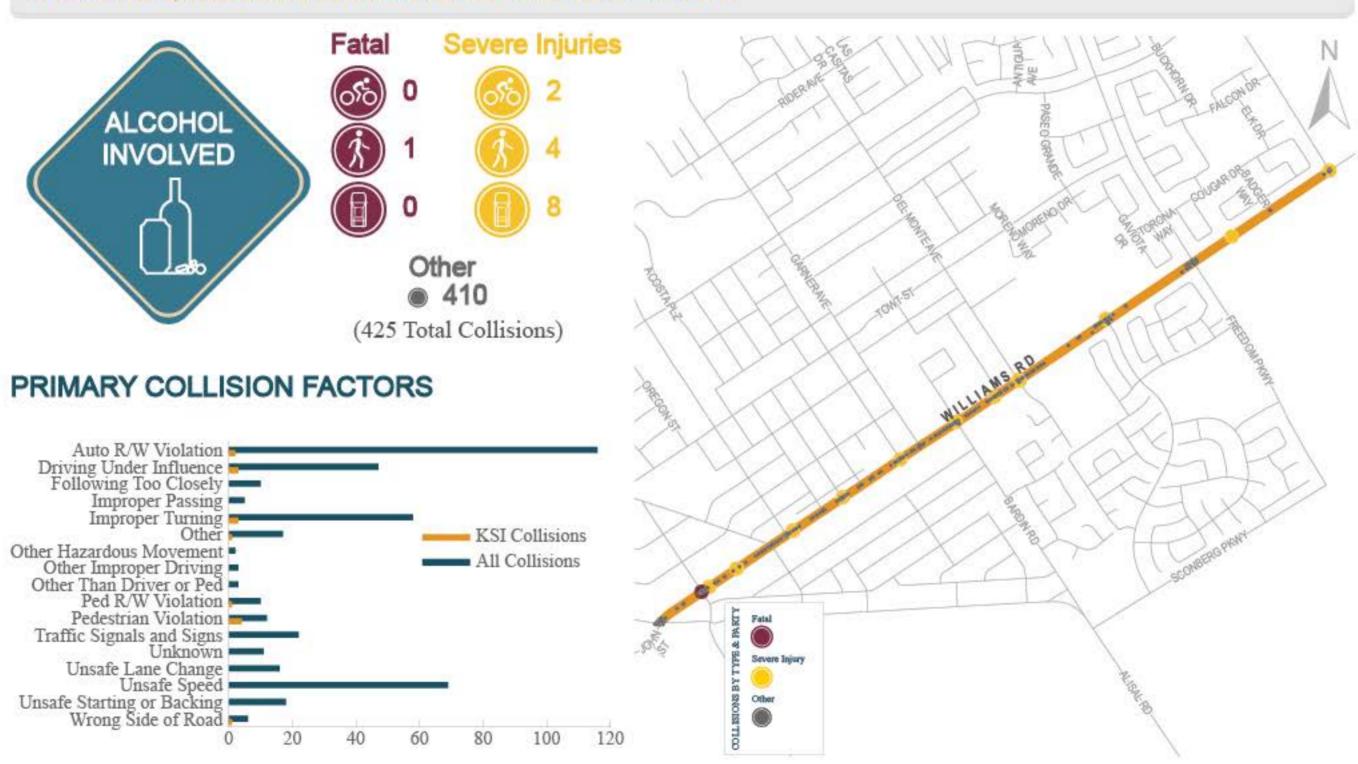
East Laurel Drive between Natividad Road and Constitution Boulevard recommended countermeasures include a raised median with street trees and protected bike lanes. An adaptive traffic signal system is recommended to reduce collision potential. To reduce speed throughout the corridor radar feedback signs are recommended to slow down vehicles, and increased traffic enforcement is recommended



D57

ALCOHOL INVOLVED COLLISIONS

Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

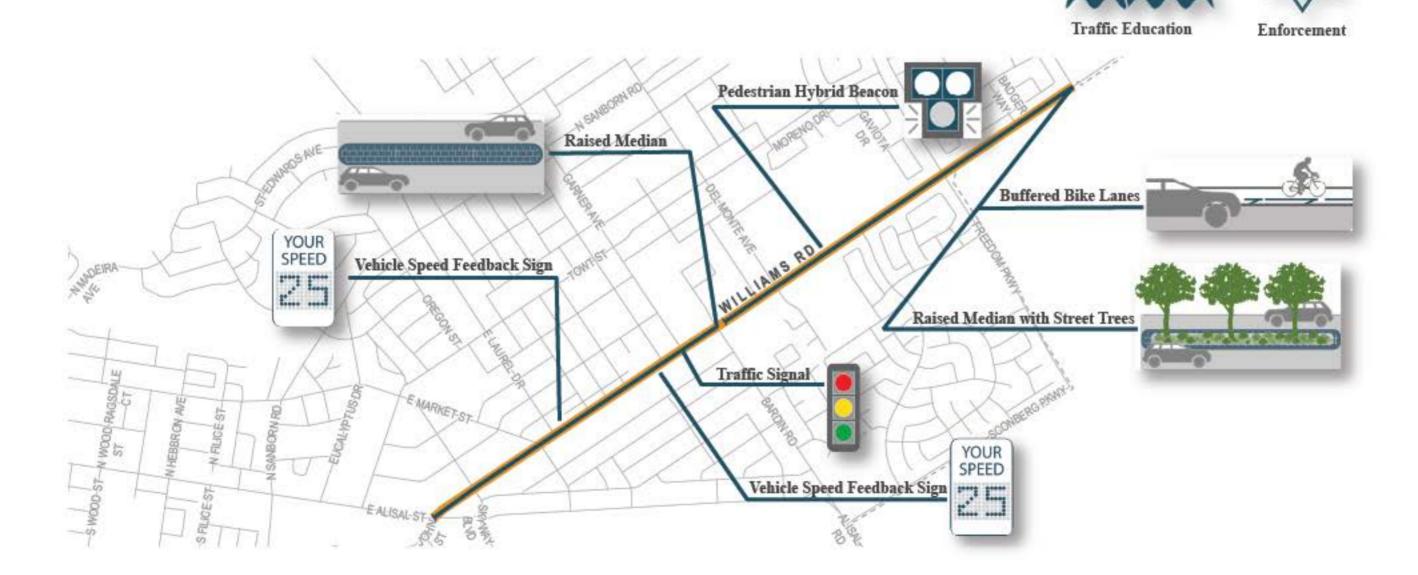


ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

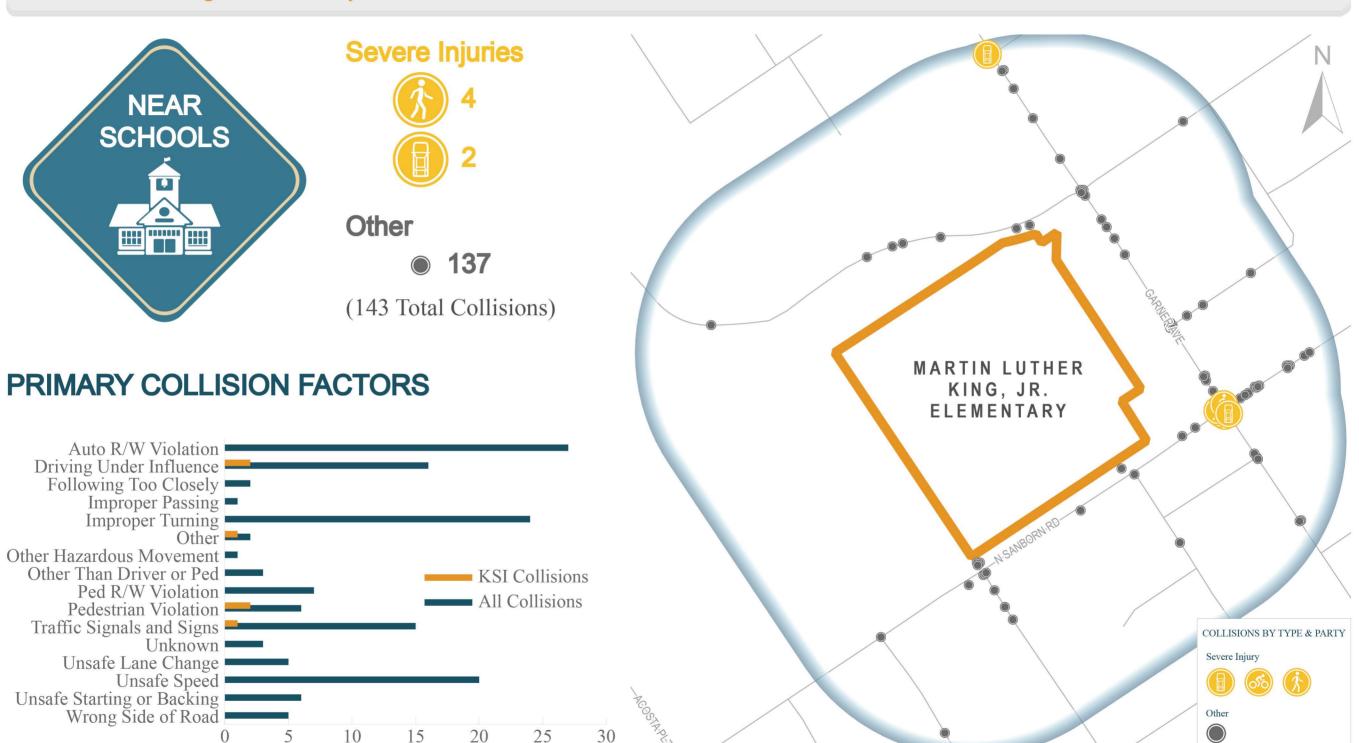
Williams Road between East Alisal Street to Bardin Road recommended countermeasures include a raised median and a new traffic signal at Williams Rd and Garner Ave. Williams Road between Bardin Road and Boronda Road recommended countermeasures include a raised median and street trees, and adding buffered bike lanes. A pedestrian hybrid beacon is recommended to provide driver visibility of crosswalk location.

Increased traffic enforcement is recommended.



NEAR SCHOOLS COLLISIONS

Martin Luther King Jr. Elementary School



NEAR SCHOOLS COLLISIONS RECOMMENDATIONS

Martin Luther King Jr. Elementary School

Recommended countermeasures near Martin Luther King Jr. Elementary School include traffic education and traffic safety outreach. Recommended infrastructure improvements include improved signal phasing, coordination and leading pedestrian interval. A pedestrian refuge island and median to provide a two-stage crossing. Curb extensions are recommended where feasible. Bike lanes and bike facilities are recommended on N Sanborn Rd. Increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS



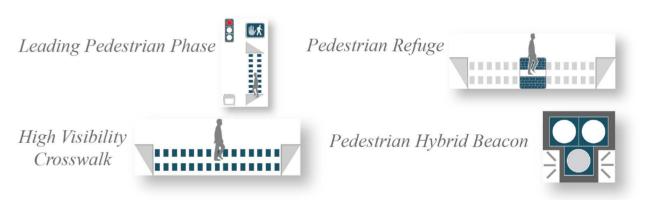






OTHER

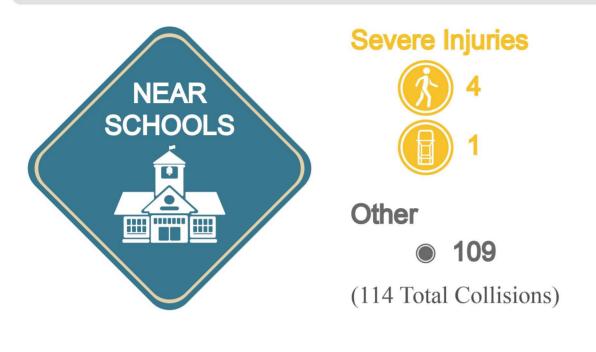
RECOMMENDATIONS



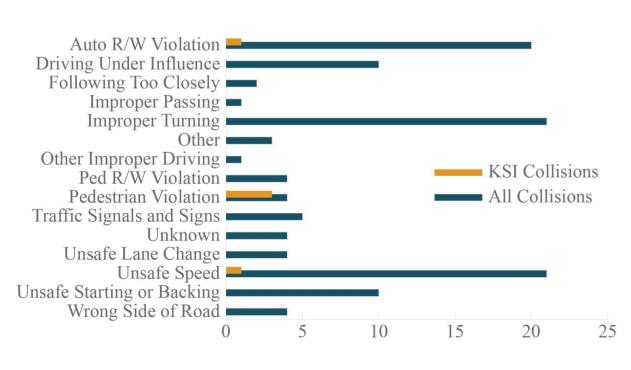


NEAR SCHOOLS COLLISIONS

Sacred Heart School



PRIMARY COLLISION FACTORS





NEAR SCHOOLS COLLISIONS RECOMMENDATIONS

Sacred Heart School

Recommended countermeasures near Sacred Heart School include traffic education and traffic safety outreach. It is also recommended to eliminate on-street parking and to install buffered bike lanes on W Market St. Additionally, it is recommended to restrict left turn access on W Market St with a raised median. The raised median should include a pedestrian refuge island to provide a two-stage crossing. Increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

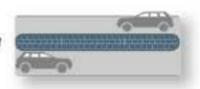
RECOMMENDATIONS







Raised Median



OTHER

RECOMMENDATIONS



Pedestrian Hybrid Beacon 🎈



Bulb Outs and Curb Extensions







Vehicle Speed Feedback Sign

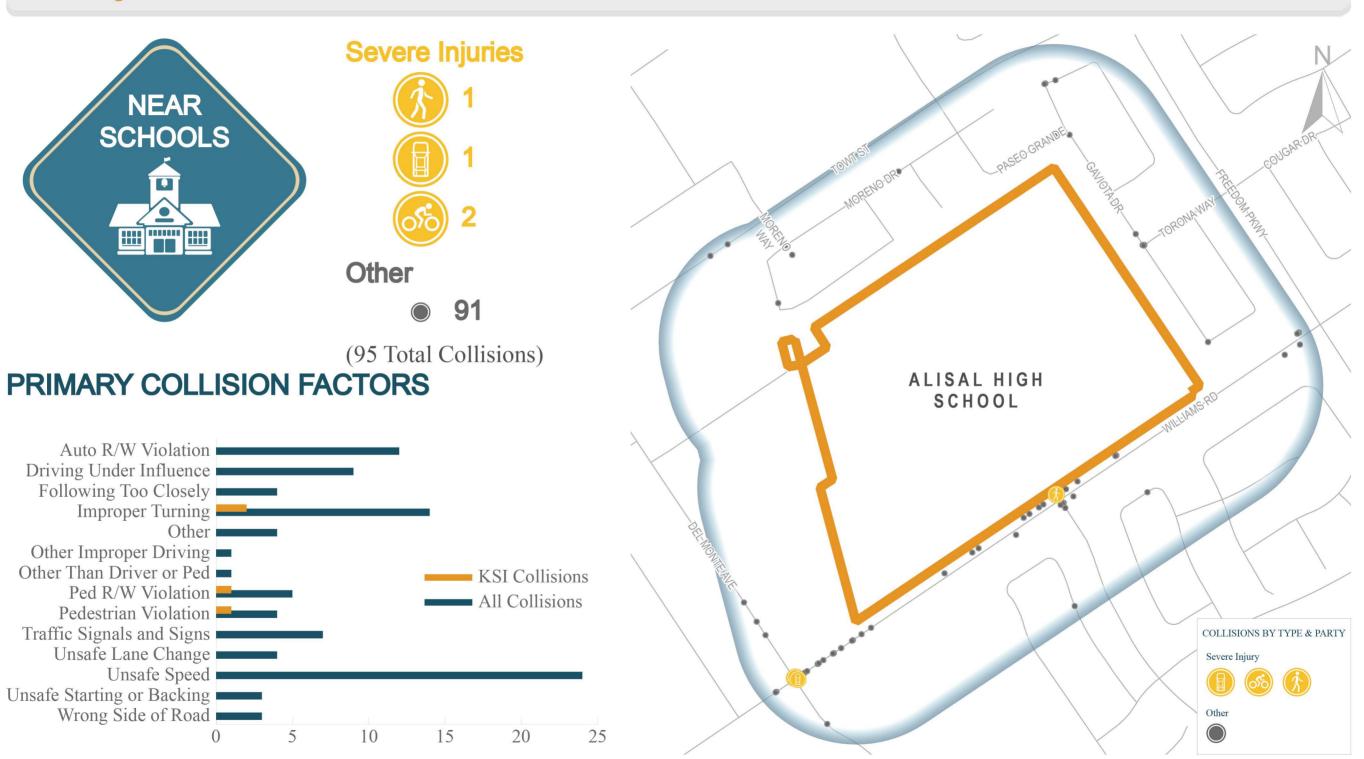


Reduced Speed School Zone



NEAR SCHOOLS COLLISIONS

Alisal High School



NEAR SCHOOLS COLLISIONS RECOMMENDATIONS

Alisal High School

Recommended countermeasures near Alisal High School include traffic education and traffic safety outreach. It is recommended to evaluate a lane reduction on Williams Road, street trees, and vehicle speed feedback signs are recommended to reduce speeds. Protected bike lanes are recommended on Williams Road. Increased traffic enforcement is recommended.

PRIMARY COLLISION FACTORS

RECOMMENDATIONS

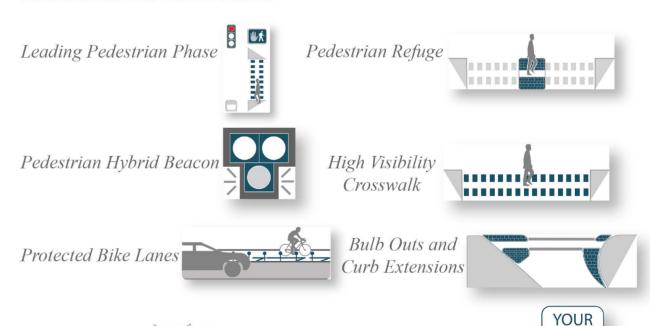






OTHER

RECOMMENDATIONS



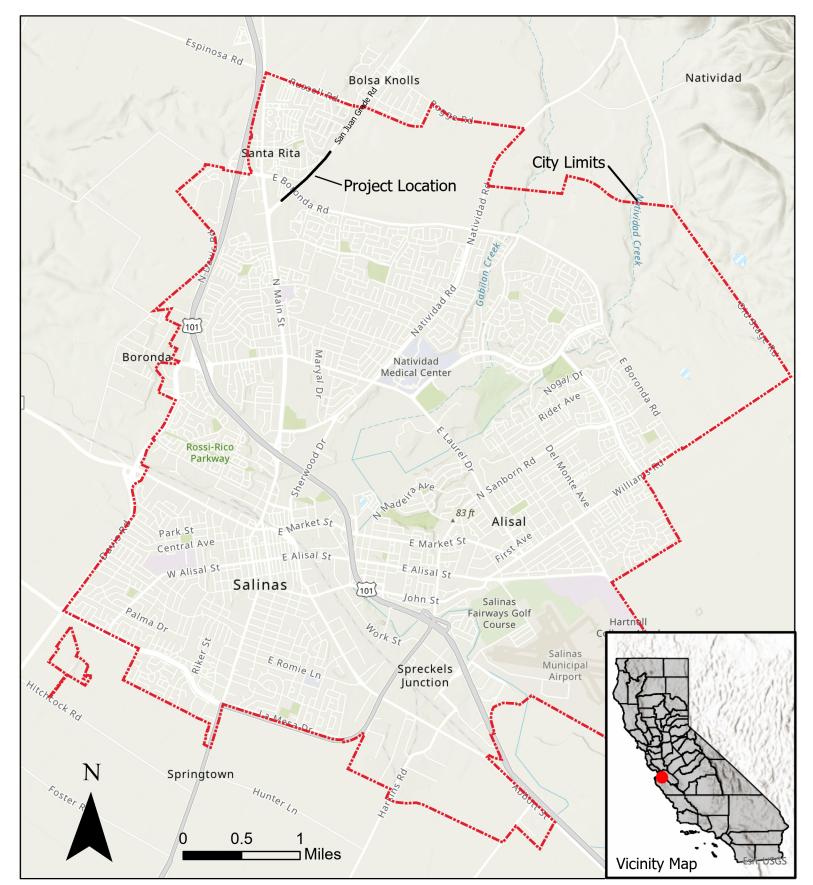
Enforcement



Vehicle Speed Feedback Sign

SPEED





San Juan Grade Road
Sidewalk and Street Light Improvement Project



Project Location Map



City of Salinas

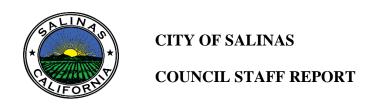
200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-301, Version: 1

FY 22-23 Workforce Allocation Adjustment and Reclassification

Approve a Resolution adjusting the workforce allocation for the Community Development Department and Police Department to include a total of three limited term Community Outreach Assistants and the reclassification of one Community Development Analyst to Management Analyst.



DATE: May 2, 2023

Department: HUMAN RESOURCES

FROM: Marina Horta-Gallegos, Human Resources Director

SUBJECT: FY 22-23 WORKFORCE ALLOCATION ADJUSTMENT AND

RECLASSIFICATION

RECOMMENDED MOTION:

It is recommended that the City Council approve a Resolution adjusting the workforce allocation for the Community Development Department and Police Department to include a total of three limited term Community Outreach Assistants and the reclassification of one Community Development Analyst to Management Analyst.

RECOMMENDATION:

Staff recommends that the City Council adopt a Resolution adjusting the workforce for the Community Development Department to include one limited term Community Outreach Assistant and two limited term Community Outreach Assistants in the Police Department. Additionally, staff request that the City Council approve the reclassification of one incumbent Community Development Analyst in the Housing Division of the Community Development Department.

BACKGROUND:

The Community Development Department Advanced Planning and Project Implementation division requests an adjustment to the FY 22-23 workforce to include the addition of one limited term Community Outreach Assistant. This position will support increased outreach and engagement on the General Plan update, including the Climate Action Plan, Public Safety, Environmental Justice, and Housing elements.

The Police Department requests an adjustment to its FY 22-23 workforce to include two limited term, grant funded Community Outreach Assistants. These positions will support community outreach and youth diversion programs through a California Violence Intervention and Prevention (Cal VIP) grant. The goal of these new programs is to reduce violence, prevent crime, improve community safety, and support intervention activities and services, among other things.

Lastly, staff recommend that the City Council approve the reclassification of one incumbent Community Development Analyst in the Housing and Community Development division of the Community Development Department. The City engaged the services of Regional Government Services to conduct a classification study of an incumbent in the position of Community Development Analyst. The findings indicate that the duties and complexity of the assigned work are above the level of the current classification and indicate that reclassification to Management Analyst is warranted.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (SEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The proposed action meets the Effective and Culturally Responsive Government Council goal.

DEPARTMENTAL COORDINATION:

The Human Resources Department coordinated this effort with the Community Development and the Police Department.

FISCAL AND SUSTAINABILITY IMPACT:

Grant funding will be used to fund the three limited term Community Outreach Assistants. The Police Department will use funds from the California Violence Intervention and Prevention (CalVIP) grant and the Community Development will use the General Plan CIP account. There are no significant budget impacts in the FY 22-23. The Department will not require new money for this reclassification.

ATTACHMENTS:

Resolution

RESOLUTION NO.	(N.C.S.)

RESOLUTION APPROVING FY 22-23 WORKFORCE ALLOCATION ADJUSTMENT AND RECLASSIFICATION

BE IT RESOLVED BY THE CITY COUNCIL OF SALINAS that the workforce for the Community Development Department will reflect the addition of one limited term Community Outreach Assistant and the workforce for the Police Department will reflect the addition of two limited term grant funded Community Outreach Assistants. The reclassification of the incumbent Community Development Analyst is approved.

	PASSED AND APPROVED this 2 nd of	day of May 2023, by the following vote:
AYES):	
NOES	:	
ABSE	NT:	
ABST		APPROVED:
	5	Kimbley Craig, Mayor
ATTE	ST:	
Patrici	ia M. Barajas, City Clerk	



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-306, Version: 1

Purchase of Network Systems Equipment

Approve a resolution authorizing the purchase and installation of network firewalls from Cadence Inc., in an amount not to exceed \$189,000.



DATE: MAY 2, 2023

DEPARTMENT: ADMINISTRATION

FROM: JIM PIA, ASSISTANT CITY MANAGER

BY: ERIC SANDOVAL, GIS ADMINISTRATOR

TITLE: PURCHASE OF NETWORK SYSTEMS EQUIPMENT

RECOMMENDED MOTION:

A motion to approve a resolution authorizing the purchase and installation of network firewalls from Cadence Inc., in an amount not to exceed \$189,000.

EXECUTIVE SUMMARY:

The City of Salinas is updating its network security systems as recommended in the 2022 IT Master Plan. This is required considering the age and performance shown by the current equipment on the system. Cadence Inc. is the City's current network support contractor. The City's other certified vendors are unable to do the work.

BACKGROUND:

The aging of technology equipment can cause outages, slowness and consume resources unnecessarily. The 2022 IT Master identified and recommended the upgrade of the current system components to improve security and access. To address these issues, the City Council approved and established an additional appropriation of \$125,000 to the budget as part of the mid-year budget process for fiscal year 2022-23.

The current resolution is the first step in improving secure access for Staff using technology resources onsite and remotely. The purchase and installation of this equipment will allow Information Systems staff to improve digital access for all staff, matching industry standards and meet minimum security needs for the next 5 to 7 years.

Even though funding has already been budgeted and approved, City Council approval is required to continue the procurement process due to the cost of the equipment exceeding Department authority. Detailed information related to the actual services are sensitive. Report details are limited to ensure the integrity of our technology systems.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

This request supports City Council's Strategic Goals and Strategies of Effective and Culturally Responsive Government, by ensuring that the information systems can support City programs, projects, and City services for the community.

DEPARTMENTAL COORDINATION:

The Finance department will continue to work with all affected departments to minimize downtime during the equipment replacement.

FISCAL AND SUSTAINABILITY IMPACT:

Funding for this purchase was approved by Council at mid-year and will be purchased from the Non-Departmental account of up to \$189,000. There is no recommended action pertaining to the transfer of monies between accounts or for new appropriations.

ATTACHMENTS:

1. Resolution

RESOLUTION NO. _____(N.C.S.)

A RESOLUTION TO APPROVE THE PURCHASE OF NETWORK SYSTEMS EQUIPMENT

WHEREAS, the City Council accepted and established in the 2022-2023 budget an appropriation of \$125,000 further supplement the updating of network systems; and

WHEREAS, this expenditure will greatly improve the performance, access and security of computers used by the staff and allow for a much-improved service to the community; and

WHEREAS, this expenditure Information Systems staff to improve digital access and security for all staff, matching industry standards and meeting minimum needs for the next 5 to 7 years; and

NOW, THEREFORE, BE IT RESOLVED that pursuant to Salinas Municipal Code section 12-27 the Salinas City Council hereby authorizes the purchase and the installation of network firewalls in an amount not to exceed \$189,000.

PASSED AND APPROVED this 2nd day of May, 2023, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	APPROVED:
	Kimbley Craig, Mayor
ATTEST:	
Patricia M. Barajas, City Clerk	



City of Salinas

200 Lincoln Ave., Salinas, CA 93901 www.cityofsalinas.org

Legislation Text

File #: ID#23-313, Version: 1

- a. Labor Negotiations California Government Code Section 54957.6, with its designated labor representatives Steven S. Carrigan, City Manager; Jim Pia, Assistant City Manager; Christopher A. Callihan, City Attorney; Katherine Hogan, Assistant City Attorney; Mark Roberts, Finance Director; Marina Horta-Gallegos, Human Resources Director; Sylvia Enriquez, Senior Human Resources Analyst; Che Johnson, Liebert Cassidy Whitmore, regarding labor relations with Service Employees International Union (SEIU), SEIU Supervisors, Salinas Municipal Employees Association/SEIU, Association of Management Personnel, Police Officers Association, Police Management Association, International Association of Firefighters, Fire Supervisors Association, Confidential Management Employees, Confidential Non-Management Employees, and Department Directors.
- b. Labor Negotiations California Government Code Section 54957.6, with its designated labor representatives Steven S. Carrigan, City Manager; Jim Pia, Assistant City Manager; Christopher A. Callihan, City Attorney; Katherine Hogan, Assistant City Attorney; Mark Roberts, Finance Director; Marina Horta-Gallegos, Human Resources Director; Sylvia Enriquez, Senior Human Resources Analyst; and Matt Weatherly, President, Public Sector Personnel Consultants, regarding labor relations with Service Employees International Union (SEIU), SEIU Supervisors, Salinas Municipal Employees Association/SEIU, Association of Management Personnel, Police Officers Association, Police Management Association, International Association of Firefighters, Fire Supervisors Association, Confidential Non-Management Employees, Confidential Management Employees, and Department Directors.