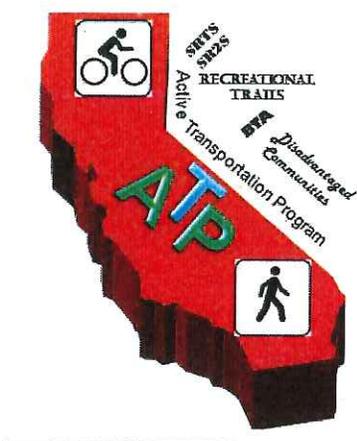


City of Redding - Placer Street Improvement Project  
Active Transportation Program - Cycle 1  
May 20, 2014

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# ACTIVE TRANSPORTATION PROGRAM CYCLE 1

## APPLICATION Part 1 (Includes Sections I, V, VI, VII, VIII & XI)

Please read the Application Instructions at  
<http://www.dot.ca.gov/hq/LocalPrograms/atp/index.html>  
 prior to filling out this application

<b>Project name:</b>	City of Redding - Placer Street Improvement Project
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For Caltrans use only: <input type="checkbox"/> TAP <input type="checkbox"/> STP <input type="checkbox"/> RTP <input type="checkbox"/> SRTS <input type="checkbox"/> SRTS-NI <input type="checkbox"/> SHA <input type="checkbox"/> DAC <input type="checkbox"/> Non-DAC <input type="checkbox"/> Plan
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## I. GENERAL INFORMATION

**Project name:** City of Redding - Placer Street Improvement Project

(fill out all of the fields below)

1. APPLICANT (Agency name, address and zip code) City of Redding, 777 Cypress Avenue, Redding CA 96001	2. PROJECT FUNDING ATP funds Requested      \$ _____ 2,295,157.00 Matching Funds                \$ _____ 297,362.00 (If Applicable) Other Project funds            \$ _____ 2,411,103.00 TOTAL PROJECT COST      \$ _____ 5,003,622.00
3. APPLICANT CONTACT (Name, title, e-mail, phone #) John Abshier, Traffic Operations Manager, jabshier@ci.redding.ca.us, (530) 245-7159	5. PROJECT COUNTY(IES): <p style="text-align: center;">Shasta</p>
4. APPLICANT CONTACT (Address & zip code) 777 Cypress Avenue, Redding CA 96001	7. Application # <u>1</u> of <u>3</u> (in order of agency priority)
6. CALTRANS DISTRICT #- Click Drop down menu below District 2	

**Area Description:**

8. Large Metropolitan Planning Organization (MPO)- Select your "MPO" or "Other" from the drop down menu>	Other
9. If "Other" was selected for #8- select your MPO or RTPA from the drop down menu>	SCRTPA
10. Urbanized Area (UZA) population (pop.)- Select your UZA pop. from drop down menu>	Small Urban (Pop =or<200,000 but > than 5,000)

**Master Agreements (MAs):**

11.  Yes, the applicant has a FEDERAL MA with Caltrans.      02-5068R

12.  Yes, the applicant has a STATE MA with Caltrans.      00074S

13. If the applicant does not have an MA. Do you meet the Master Agreement requirements? Yes  No   
 The Applicant MUST be able to enter into MAs with Caltrans

**Partner Information:**

14. Partner Name*:	15. Partner Type
16. Contact Information (Name, phone # & e-mail)	17. Contact Address & zip code

Click here if the project has more than one partner; attach the remaining partner information on a separate page

\*If another entity agrees to assume responsibility for the ongoing operations and maintenance of the facility, documentation of the agreement must be submitted with the application, and a copy of the Memorandum of Understanding or Interagency Agreement between the parties must be submitted with the request for allocation.

**Project Type:** (Select only one)

18. Infrastructure (IF)       19. Non-Infrastructure (NI)       20. Combined (IF & NI)

**Project name:** City of Redding - Placer Street Improvement Project

**I. GENERAL INFORMATION-continued**

**Sub-Project Type** (Select all that apply)

21.  Develop a Plan in a Disadvantaged Community (select the type(s) of plan(s) to be developed)  
 Bicycle Plan     Safe Routes to School Plan     Pedestrian Plan  
 Active Transportation Plan

(If applying for an Active Transportation Plan- check any of the following plans that your agency already has):

- Bike plan     Pedestrian plan     Safe Routes to School plan     ATP plan

22.  Bicycle and/or Pedestrian infrastructure  
 Bicycle only:     Class I     Class II     Class III  
 Ped/Other:     Sidewalk     Crossing Improvement     Multi-use facility

Other:

23.  Non-Infrastructure (Non SRTS)

24.  Recreational Trails\*-     Trail     Acquisition

**\*Please see additional Recreational Trails instructions before proceeding**

25.  Safe routes to school-     Infrastructure     Non-Infrastructure

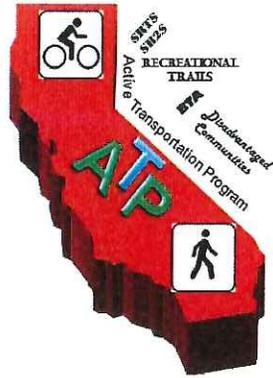
If SRTS is selected, provide the following information

26. SCHOOL NAME & ADDRESS: Manzanita Elementary School
27. SCHOOL DISTRICT NAME & ADDRESS: Redding School District

28. County-District-School Code (CDS) 45-70110-6050512	29. Total Student Enrollment 557	30. Percentage of students eligible for free or reduced meal programs ** 43.80
31. Percentage of students that currently walk or bike to school 8% walk & 0% bike	32. Approximate # of students living along school route proposed for improvement 150	33. Project distance from primary or middle school 1/3 mile from Placer/Pleasant St.

\*\*Refer to the California Department of Education website: <http://www.cde.ca.gov/ds/sh/cw/filesafdc.asp>

- Click here if the project involves more than one school; attach the remaining school information including school official signature and person to contact, if different, on a separate page



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# ACTIVE TRANSPORTATION PROGRAM CYCLE 1

## APPLICATION Part 2

**(Includes Narrative Sections II, III & IV)**

## II. PROJECT INFORMATION

### 1. Project Location

In the City of Redding, Placer Street corridor from the westerly City limit (approximately Thompson Lane) to Pleasant Street, including tie-ins at various cross streets and Buenaventura south of the Placer Street/Buenaventura intersection.

### 2. Project Coordinates

Latitude

40.572908

(Decimal degrees)

Longitude

-122.423916

(Decimal degrees)

### 3. Project Description

Project will improve a 2 mile stretch of the Placer Street Corridor from the City limits (Thompson Avenue) to east of Pleasant Street. Approximately 2,300 lineal feet of roadway will be widened to establish the ultimate street width to include bicycle lanes and sidewalks. Safety improvements & amenities include:

- 8,150 lineal feet of sidewalk including curbs and gutters (sidewalks will vary 6'-10' wide whenever possible)
- Extension of the Blue Gravel Mine Trail multipurpose paved path to Cumberland
- 315 feet curb, gutter and sidewalk on south eastern edge of Buenaventura Blvd to Placer Street intersection
- 17 new luminaires for pedestrian safety lighting spanning 6,950 linear feet of walkways
- 117 new trees for pedestrian shading
- Improvements to 34 ADA ramps on Placer including reduction in curb radii
- Rectangular Rapid Flashing Beacons (RRFBs) at Wisconsin, Cumberland and midblock crossing between Buenaventura and to San Francisco Street
- Pedestrian refuge medians at Cumberland and the mid-block crossing
- Intersection standardization at San Francisco Street from a skewed intersection to perpendicular
- Bicycle lanes from City Limits to Pleasant Street (varying from 6' to 14' in effective width) 6,300 lineal feet of buffered bike lanes and 12,500 of conventional bike lanes will be complete
- New Redding Area Bus Authority turnout at San Francisco Street will complete pedestrian and bicycle activity
- Conduit for future intersection signal at Wisconsin Avenue
- Upgrades to water, sewer and storm drains
- 1.8 inch asphalt concrete overlay and re-striping to create consistent lane widths, bicycle lanes and high visibility crosswalks at improved crossings.

### 4. Project Status

The Placer Street Improvement project Mitigated Negative Declaration (MND) was adopted by the city of Redding City Council on January 17<sup>th</sup> 2012 pursuant to CEQA. A CEQA Notice of Determination was subsequently filed on January 20<sup>th</sup> 2012 with the State Clearinghouse. Since that time, regulatory permits have been obtained and the project entered the final design phase. The Project reviewed by CEQA spans from City limits to beyond the current scope for this Grant application to Pleasant Street, the entire CEQA reviewed project extends an additional .5 miles east to Olive Avenue.

The project length was reduced to Pleasant Street for this grant due to limited local funds to complete the project in its entirety this funding cycle. The last half mile from Pleasant Street eastbound to Olive Avenue requires extensive road reconstruction and will be funded with development impact fees as growth occurs.

If the project is successful in securing Federal ATP funds, the City will complete the NEPA review process for the project.

The City has acquired the necessary right of way for the project and PG&E gas relocation work is complete. Three electric power poles will be relocated, concurrent with construction. Design is currently at 90% for the Project. The remaining design work is funded locally and will easily be completed within the ATP project delivery timelines and include the pedestrian, bicycle and transit enhancements noted in this project. Preliminary Plans are included in the attachments.

### **III. SCREENING CRITERIA**

#### **1. Demonstrated Needs of the Applicant**

Describe the need for the project and/or funding

Placer is a gateway into Redding from the unincorporated area of Shasta County and the City's west side, the heart of downtown and other desired destinations for employment, shopping and school. In the last decade there has been a boom of development on the Westside of Redding with increasing traffic volumes. With increasing population and traffic there is a need for safe, complete streets that include walking and bicycling facilities to connect rural (County) and the City's suburban neighborhoods along Placer Street to destinations, activity centers and services.

For over 10 years Placer has been identified by the community and Council as a priority corridor and has prioritized it on the City's Capital Project list. The project has been in design for several years and has had many opportunities for civic input and discussion described later in this grant. The Council has prioritized this project as its number one priority for the Transportation Impact Fee (TIF) Program and has collected fees from land development projects. Due to the economic recession and limited development, the City does not have the required funding to complete the entire project corridor which would extend an additional half mile east to Olive Avenue. This last half mile requires extensive road reconstruction to accommodate traffic, bicycle lanes and sidewalks. Funding for this portion will not be available for this grant cycle, but is anticipated will be funded in future years as TIF funds continue to accumulate.

**2. Consistency with Regional Transportation Plan (100 words or less)**

Explain how this project is consistent with your Regional Transportation Plan (if applicable). Include adoption date of the plan.

The Project is consistent with the Shasta County Regional Transportation plan adopted in 2010. In Chapter 9 of the RTP calls out the primary goal of the non-motorized transportation program is to create a transportation environment that encourages non-motorized alternatives. Completion of attractive sidewalks with shade trees, pedestrian lighting, including the .3 mile Blue Gravel Trail Mine Spur (extension of the Blue Gravel Trail) and designated bicycle lanes is consistent with the RTP. See attachments for RTP page 9-10 indicating Placer's bicycle lanes.

#### **IV. NARRATIVE QUESTIONS**

**1. POTENTIAL FOR INCREASED WALKING AND BICYCLING, ESPECIALLY AMONG STUDENTS, INCLUDING THE IDENTIFICATION OF WALKING AND BICYCLING ROUTES TO AND FROM SCHOOLS, TRANSIT FACILITIES, COMMUNITY CENTERS, EMPLOYMENT CENTERS, AND OTHER DESTINATIONS; AND INCLUDING INCREASING AND IMPROVING CONNECTIVITY AND MOBILITY OF NON-MOTORIZED USERS. (0-30 POINTS)**

***A. Describe how your project encourages increased walking and bicycling, especially among students.***

Manzanita Elementary is a large K-5 school that draws more than 400 students from within its school boundaries. Its catchment area includes neighborhoods off of Placer (see school boundary map). The School is located closest to the Placer/ Pleasant intersection (1/3 mile or 6 minute walk). From the neighborhoods west of Buenaventura the school is approximately a half hour walk or 10 minute bike ride. These neighborhoods' primary access to the school is Placer, due to the suburban nature of the street layout. Cumberland is first major neighborhood access point west of Buenaventura about, 1 mile from the school.

Data collected from the parents indicate that walking to school drops dramatically to 0% beyond 1 mile. Similarly, the number of students asking permission to walk to school drops to only 18% if they live 1 mile or more from the school from a high of 56% that live ¼ to ½ mile away. One can infer that due to lack of facilities, especially west of Buenaventura, parents are most likely to drive their children to school. Data indicates that no students from any neighborhood regularly bike to Manzanita School. With bicycle lanes, buffered bicycle lanes, multipurpose path extension, sidewalks, shade trees and crossing safety improvements, more students and families will have a safer, more attractive option to walk and bike to school. Several survey answers from parents indicate that lack of bikeways and sidewalks contribute to the decision to drive to school. See school data below and attachments. Also see

Redding School District Director of Facilities letter of support. Shasta Family YMCA also runs a small preschool on the Manzanita campus.

Not only will the improvements benefit students but also encourage more recreational and utilitarian trips. Placer is currently a popular route for recreational bicyclists. More attractive facilities (buffered and conventional bicycle lanes & multipurpose path extension) has potential to increase recreational riding and entice more bicycle commuters from Placer neighborhoods to shopping and employment centers including Manzanita School, the retail shopping center at Placer/Buenaventura, and further destinations such as downtown, Buenaventura/299 shopping center, Sacramento River Trail and Mount Shasta Mall. The project will effectively extend the Blue Gravel Mine Trail 1/3 of a mile from Cumberland to the current termination at Buenaventura. The extension of the Blue Gravel Trail Mine multi-use path to/from Cumberland will provide an attractive off road option. The Blue Gravel Mine Trail, runs parallel to Buenaventura southbound for 2 miles to Canyon Creek Drive to southern neighborhoods. The path provides a safe an attractive way to bicycle, walk or jog on a separated path from a roadway with 45 MPH traffic and no bicycle lanes and narrow shoulders.

The crossing improvement at Cumberland includes a refuge island and pedestrian activated RRFBs will provide a safer and more attractive access for pedestrians. The crossing would connect the northern neighborhood (Mary Lake) with the southern, making good use of the existing pedestrian walkway to Oro Street. Additionally, the crossing will provide access for bicyclists to/from the multi-use path to/from the buffered bicycle lanes. See the Strava heatmap in attachments for current usage of the paths and segments of proposed improvements by cyclists, joggers and walkers. This data only includes usage by residents that record their trips using a GPS device or smartphone app and upload the information to Strava.com. Actual use is more than indicated with this tool.

The project will provide 6'-10' sidewalks where reasonably feasible with 117 new shade trees and fill in gaps in pedestrian safety lighting to increase pedestrian comfort and attractiveness day and night. The pedestrian crossing safety improvements at Wisconsin and Cumberland will make inter-neighborhood travel more accessible and provide a safer crossing for the neighborhoods located on the south side of Placer to access Mary Lake Park and trail around the lake located only .5 miles from the intersections (10 minute walk). See attachment for Mary Lake walking routes.

The transit stop located westerly of San Francisco street is the western most transit stop in the Redding Area Bus Authority (RABA) fixed route service area. This stop is served by RABA Line 2 to the downtown transit center with connections throughout the city and Shasta County region including employment, services and Shasta College. Improving safe access to this transit stop is critical to mobility populations west of Buenaventura. These infrastructure improvements may increase ridership

by providing access that is currently inadequate. The enhanced mid-block crossing near San Francisco street includes RRFBs and median island to increase pedestrian comfort & safety crossing to/from the shopping center and transit stop.

From the City limits to Pleasant Street a mix of conventional bicycle lanes and buffered bicycle lanes will be completed where there is extra right of way. Conventional bicycle lane increases bicyclists comfortable and confidence on busy roads. The striping, legends and signs reminds other road users of bicyclists' rights to use the roadway. Buffered bicycle lanes further appeals to a wider range of bicyclists and encourages bicycling by increasing the perception of safety among users of the road.

***B. Describe the number and type of possible users and their destinations, and the anticipated percentage increase in users upon completion of your project. Data collection methods should be described.***

Since September of 2008 Healthy Shasta, a program of Shasta County, has coordinated bicycle and pedestrian counts at key intersections throughout Redding. Data is collected at each location for 1.5 hours during the morning commute (7-8:30 am) and 2 hours in the evening commute (4-6 pm). Citywide, the annual bike/ped counts indicated a 6% increase among bicyclists and a 22% increase among pedestrians from 2012 to 2013. The general trend has been for increased bicycle and pedestrian activity since the counts began in 2008, which coincides with the time period that the City of Redding has taken steps to greatly improve bicycle and pedestrian infrastructure. Data collectors use a standard ped/bike intersection count form. They also collected data in 2012 at Manzanita School from parents as a part of the Safe Routes to School program. See below.

September 2013 Pedestrian Intersection counts Placer/ Buenaventura:

7-8:30 AM- 15 pedestrians (all traveling to or from the Blue Gravel Trail) & 9 bicycles  
4-6 PM- 19 pedestrians, 5 bicycles

Manzanita Elementary School Safe Routes to School participation

Walk to School Day: 2010 – 75, 2011- 60, 2012- 100, 2013 – 50 students

Bike to School Day 2012 – 25 students, 15 parents

2012 Parent survey indicates:

- 30% live 1 mile or less from the school
- 26% live 1 - 2 miles away.
- 8% walking mode share (typical day)
- 0% bicycle mode share (typical day)

Students living...

- ¼ mile or less 47%-60% walk on a typical day, 53% have asked permission to walk
- ¼ to ½ mile up to 22% walk on a typical day, 56% have asked permission to walk
- ½ to 1 mile: 12-15% walk on a typical day, 18 % have asked permission to walk
- more than 1 mile typically do not walk or bike to school, 18% asked permission to walk

Reasons for not walking or biking to school include:

- 75% traffic volumes
- 73% speed of traffic
- 65% safety of crossings
- 44% lack of sidewalks and pathways

If funding is received through the Active Transportation Program, the City will work with community partners to collect more extensive data and surveys on pedestrian and bicycle activity in the corridor before the project and upon completion, as necessary. At this time, the City has limited resources to do ongoing data collection. Ideally data would collect pedestrian bicycle activity at all crossing improvements as well as survey data from neighbors and the school.

With these improvements for people to walk and bike from, to and through the Placer corridor it is anticipated that there will be a significant increase in general activity potentially up to 100% for both active modes and that children walking to school from 1 mile or more to increase from 0% to 5-10% on a typical day.

*C. Describe how this project improves walking and bicycling routes to and from, connects to, or is part of a school or school facility, transit facility, community center, employment center, state or national trail system, points of interest, and/or park.*

Placer is the main spine from the County and the Westside into Redding. Improvements on this 2 mile stretch of Placer Street have significant potential for increase connectivity for walking and bicycling. The Project will complete continuous sidewalks, pedestrian safety lighting and bicycle lanes on Placer. Walking, jogging, and bicycling from neighborhoods will be more attractive and accessible to get to utilitarian and recreational destinations and activity centers along the Corridor which include:

- Mary Lake Park and recreational trail,
- Blue Gravel Mine Trail (2 mile paved multi-purpose path),
- Shopping & employment center at Placer/Buenaventura,
- Manzanita Elementary School (near Pleasant Street intersection),
- Bus stops (Redding Area Bus Authority Line 2) near San Francisco Street
- Facilitate inter-neighborhood travel

- Connections via Buenaventura Drive (north, one mile) to the Sacramento River Trail that has become a major corridor for active modes across the River and 1-5 to Mt. Shasta Mall, a major employment and retail area
- D. Describe how this project increases and/or improves connectivity, removes a barrier to mobility and/or closes a gap in a non-motorized facility.

It is anticipated that with the completion of facilities that there would be a significant increase pedestrian and bicycle activity in the corridor to various destinations described above. There is likely to be an increase in pedestrian activity due to addition of curb, gutter and sidewalks as well as increase in crossings at Wisconsin, Cumberland and appropriate street crossings by pedestrians at the new mid-block crossing near San Francisco Street. It is expected that there will be an increase in recreational and utilitarian bicycling with the addition of buffered and conventional bicycle lanes. It is very good possibility there will be an increase in students walking and bicycling to/from school in the corridor. Parents have identified lack of sidewalks and safe crossings as a barrier to walking to school. Finally, the multiple crossings incorporated and the reduction in lane widths from 20' or more in some sections, to 10.5 and 11 feet will reduce the roadway speeds thereby removing a barrier listed in the parent survey.

**2. POTENTIAL FOR REDUCING THE NUMBER AND/OR RATE OF PEDESTRIAN AND BICYCLIST FATALITIES AND INJURIES, INCLUDING THE IDENTIFICATION OF SAFETY HAZARDS FOR PEDESTRIANS AND BICYCLISTS. (0-25 POINTS)**

- A. Describe the potential of the project to reduce pedestrian and/or bicycle injuries or fatalities.

In the Project area, Placer has inadequate bicycle facilities, intermittent sidewalks and inadequate pedestrian crossings. The improvements have significant potential to improve the conditions in which drivers will comply with the laws and reduce behaviors that can lead to collisions. See Part B below for more detail on the potential to reduce injuries/fatalities.

- B. Describe if/how your project will achieve any or all of the following:

- Reduces speed or volume of motor vehicles
- Improves sight distance and visibility
- Improves compliance with local traffic laws
- Eliminates behaviors that lead to collisions
- Addresses inadequate traffic control devices
- Addresses inadequate bicycle facilities, crosswalks or sidewalks

Placer west of Buenaventura currently features travel lane widths vary to as large as 18'-24'. Current illegal behaviors observed are cars passing on the right and high speeds. Some bicyclists observe that vehicles use the signed bicycle lane to pass slower vehicles. Clarity of signs and stripes to

define the travel way on Placer will improve driver compliance with laws and safe passing. Striping will include bicycle lanes installed to MUTCD standards and will include a buffer from traffic where width permits. Lanes will be narrowed along entire Project length to 10.5'-11' travel lanes potentially reducing vehicular speeds. The FHWA notes that lane widths reduced to 10'-11' feet results in a range of 6.6-1.9 MPH speed reduction according to Chapter 3 of Mitigation Strategies for Design Exceptions.

Bicycle safety improvements include 7' bicycle lanes eastbound from Boston to Cumberland with a 7' buffer from vehicular traffic. Westbound bicycles will have a 7' bicycle lane a 7' buffer from Pleasant to Boston and the "right hook" trap at Buenaventura will be eliminated with appropriate striping. From Wisconsin/Cumberland to Pleasant 6' conventional bicycle lanes will be completed. According to the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide Buffered Bike Lane benefits include:

- Provides greater shy distance between motor vehicles and bicyclists.
- Provides space for bicyclists to pass another bicyclist without encroaching into the adjacent motor vehicle travel lane.
- Provides a greater space for bicycling without making the bike lane appear so wide that it might be mistaken for a travel lane or a parking lane.
- Appeals to a wider cross-section of bicycle users.
- Encourages bicycling by contributing to the perception of safety among users of the bicycle network

Pedestrian safety improvements include the reduction in the curb radii from 40' to a maximum of 25' at 7 intersections along the corridor will reduce vehicular turning speeds and reduce the pedestrian exposure. The FHWA Safety Program published a series of countermeasures for safety improvements in 2009. They recommend radii of 15' to 25' for arterial streets to accommodate buses and emergency vehicles, while still providing adequate facilities for bicycles and pedestrians. The benefits include slower right turning vehicles, reduced crossing times and distances, and improved visibility for pedestrians and drivers. With these improvements pedestrian crossing distance will be reduced by 10 feet at each intersection crossing. The intersection standardization at San Francisco Street from a skewed intersection to perpendicular will reduce the pedestrian crossing distance by 35 feet and improve sightlines and increase safety for all users

Seventeen new luminaires for pedestrian safety lighting spanning 6,950 linear feet of walkways will increase comfort and safety. Pedestrians often assume that motorists can see them at night; they are deceived by their own ability to see the oncoming headlights. Without sufficient lighting, motorists may not be able to see pedestrians in time to stop. FHWA cites that of fatal pedestrian crashes, 58.6 percent

occur at night on unlighted roads and 25.3 percent occur at night on lighted roads as cited in “Informational Report on Lighting Design for Midblock Crosswalks” Report No. FHWA-HRT-08-053, 2008. On Placer in the Project area, from 2007-2012 there have been 3 reported pedestrian injuries. Two injuries occurred in the dark (one crossing at Cumberland and one crossing at Pleasant) and one injury at Placer/Walnut intersection in the afternoon. Completing pedestrian safety lighting will improve safety at night.

Currently, pedestrian crossings are inadequate along Placer. The pedestrian crossing safety improvements of rapid flashing beacons at Wisconsin Avenue provide a safer crossing for the neighborhoods located on the south side of Placer to Access Mary Lake park and multi-use trail around the lake located only .5 miles from the intersection (or a 10 minute walk). Conduits for a future signal will be included in the Project for future protected phasing of travel movements.

The crossing improvements at Cumberland includes a refuge island and pedestrian activated RRFBs will provide a safer access for pedestrians to the neighborhoods north of Placer, including Mary Lake park and recreational trail via the pedestrian walkway to Oro. The average speed here is 46 MPH and prevailing is 49. The posted speed is 45 MPH, which may go down after this project due to the improvements. FHWA crosswalk guidance calls for an enhanced pedestrian crossing. The 10’ separated multipurpose path extension of the Blue Gravel Trail will terminate at Cumberland providing off road option for both pedestrians and bicyclists to/from Buenaventura. At Cumberland, westbound bicyclists can access the buffered bicycle lanes or choose to travel through the neighborhoods. The refuge island, high visibility markings and RRFBs will facilitate a safer crossing.

East of Buenaventura, improvements include an enhanced mid-block crossing between Buenaventura and San Francisco Street for transit users to access the shopping center and will discourage the current jaywalking behavior. The crossing will include pedestrian refuge island and pedestrian activated rapid flashing beacons.

The Federal Highway Administration (FHWA) and CalTrans have both published documents that list the safety benefits associated with pedestrian median refuge islands. These benefits include:

- A 46% reduction in pedestrian involved crashes at marked, uncontrolled crosswalks.
- Reducing the risk of pedestrian exposure to traffic. Pedestrians cross fewer lanes of traffic at a time, and can judge conflicts from either direction separately.
- Reducing delay to pedestrians. Pedestrians need a smaller gap in traffic when dealing with each approaching direction separately, as opposed to a large gap needed to cross the entire road.
- May reduce vehicle speeds.

- Providing an additional visual queue to drivers of the crossing location.

All three improved crossings on Placer will have high visibility crosswalks, pedestrian safety lighting, pedestrian crossing signs per the MUTCD standard and Rectangular Rapid Flashing Beacons (RRFBs). These are a relatively new tool for significantly increasing drivers yielding behavior at crosswalks. These lights will be pedestrian activated lights that pulse rapid flashing light that are irregular in pulse length on the pedestrian sign to draw driver's attention to the immediate area where the pedestrian will be located. The FHWA notes the RRFB's has the following potential benefits:

- RRFBs are a lower cost alternative to traffic signals and hybrid signals that are shown to increase driver yielding behavior at crosswalks significantly when supplementing standard pedestrian crossing warning signs and markings.
- An official FHWA-sponsored experimental implementation and evaluation conducted in St. Petersburg, Florida found that RRFBs at pedestrian crosswalks are dramatically more effective at increasing driver yielding rates to pedestrians than traditional overhead beacons.
- The novelty and unique nature of the stutter flash may elicit a greater response from drivers than traditional methods.
- The addition of RRFB may also increase the safety effectiveness of other treatments, such as the use of advance yield markings with YIELD (or STOP) HERE FOR PEDESTRIANS signs. These signs and markings are used to reduce the incidence of multiple-threat crashes at crosswalks on multi-lane roads (i.e., crashes where a vehicle in one lane stops to allow a pedestrian to cross the street while a vehicle in an adjacent lane, traveling in the same direction, strikes the pedestrian), but alone they only have a small effect on overall driver yielding rates.

FHWA experience notes: "An Analysis of the Effects of Stutter Flash LED Beacons to Increase Yielding to Pedestrians Using Multilane Crosswalks," along with "The Use of Stutter Flash LED Beacons to Increase Yielding to Pedestrians at Crosswalks," presented at the Transportation Research Board Annual Meeting in 2008, summarized the results of two studies on the effects of RRFBs when used to supplement standard pedestrian crossing warning signs at crosswalks.

The former found that going from a no-beacon arrangement to a two-beacon system, mounted on the supplementary warning sign on the right side of the crossing, increased yielding dramatically from 18 percent to 81 percent. There was a further increase in yielding behavior, with a four-beacon system (with two beacons on both the right and left side of the crossing) to 88 percent. "An Analysis of the Effects of Stutter Flash LED Beacons to Increase Yielding to Pedestrians Using Multilane Crosswalks" also evaluated the sites over a 1-year period, and found that there was little to no decrease in yielding behavior over time.

Since this corridor has no signalized crossings west of Buenaventura vehicles tend to gain speed, making crossing uncomfortable and sometimes increasing the risk for pedestrians. By implementing these tools to promote pedestrian safety, the City expects to see similar increases in safety as the communities that also have implemented refuge islands and RRFBs by increasing yield rates, thus making crossings safer and more comfortable for pedestrians.

- C. Describe the location's history of events and the source(s) of data used (e.g. collision reports, community observation, surveys, audits) if data is not available include a description of safety hazard(s) and photos.

Collision reports are included in the attachments. Below is a summary:

2008-2012 5-year report from the City's Crossroads collision database indicates 78 total collisions, 1 fatal, 20 injuries (1 pedestrian injury)

When 2007 is added to the 2008-2012 report pedestrian/bicycle injuries and fatalities in the Project area from Crossroads:

- 2007 Pedestrian Injury –Placer @ Pleasant Street – dark
- 2007 Pedestrian Injury –Placer @ Cumberland – dark
- Pedestrian Injury – Placer/ Walnut – afternoon

The collision rate for Placer's roadway designation is below average for the State but is high for similar roadways in Redding. Though this stretch may not have many pedestrian bicycle injuries or fatalities it should be noted that due to lack of facilities and perception of safety some people may avoid walking and biking when possible. The 2012 Healthy Shasta Safe Routes to School parent survey at Manzanita indicates that some parents cite lack of infrastructure as a reason why they do not let their child walk or bike to school. See attachment.

Also see photos, Crossroads data reports from the Redding Police Department and TIMS collision map in attachment as well video of Placer included on the portable drive.

### **3. PUBLIC PARTICIPATION and PLANNING (0-15 POINTS)**

- A. Describe the community based public participation process that culminated in the project proposal or plan, such as noticed meetings/public hearings, consultation with stakeholders, etc.

The City's Transportation Impact fee program (TIF) was first developed in 2004, with a list of Council approved priority projects. In 2008 Staff conducted an update utilizing the Shasta County regional travel Demand Model to develop a list of candidate projects based on 2015 transportation operational and capacity needs. 22 project needs, descriptions and fact sheets were presented to a citizen's advisory

committee. A matrix was used to prioritize projects including overall benefit to the transportation system, community impact, relative cost, and committee members subjective priority. An overall ranking was developed and agreed upon by staff and committee. Placer from Boston Ave. to Buenaventura ranked as number one priority. The updated priority list was approved by Council on December 16<sup>th</sup> 2008. Staff report and meeting minutes are included in attachments.

The Placer Improvement Project has been in design for more than 5 years as it has been a priority for the community and City Council to improve circulation. Most recent public engagement efforts include a public meeting in March 2011 at City Hall. Mailers that included a letter and postcard were mailed to 500 residents that lived within 300' of Placer from the City Limits to Olive Avenue. The City also attended several community events in 2010, 2011 and 2012 to solicit input. See attachments for letters, mailer map, postcards and display materials. See Part B below for more information on culmination of the project via various public efforts.

B. Describe the local participation process that resulted in the identification and prioritization of the project:

The project is included in the 2004 Parks Trails and Open Space Master Plan, which is the result of a two-year effort by the City and its citizens to create such a long-range plan for recreational sites and community open spaces. It looks at every aspect of the current system and offers strategies to continue the successes, and anticipate future needs. Bike travel is also included in this Plan. The proposed bikeway system has been coordinated with the off-road trails, and with the bikeway plans of adjacent jurisdictions, which in turn connect to larger statewide and national bike and trail systems. The Plan proposed 154 miles of trails and bikeways are proposed within the planning area, including off-road trails, on-street bike lanes, and posted bike routes. This plan proposes the extension of the Blue Gravel Trail Mine Trail via Placer, It also notes that at the time Placer was an existing Class 3 bike route.

Building off the work done in the Parks Trails and Open Space Plan, the City adopted Redding's Bike Plan in April 2010. A citizens committee was used to prepare the Plan. The Plan was a result of extensive public involvement and input. An advisory committee made up of bicycling club participants, Shasta County Public Health, community organizations, City staff from various departments, and interested community members, was formed to develop the plan. The committee rated roadways, developed goals and proposed projects for inclusion in the Bikeway Action Plan. The Plan flags Placer for an upgrade from Class 3 bikeway to Class 2 bikeway.

As part of the Bicycle Plan a Bicycle Advisory Committee was formed in partnership with local advocacy groups. The committee meets regularly to discuss projects, opportunities and prioritize. Placer

has been identified as a top priority for bicycle and pedestrian improvements in the City with important connections for residents. Prior to 2002, Placer was partially upgraded with bike lane signage. This Project funded by the grant will bring further enhance the bike lane with large buffered bicycle lanes on the majority of the roadway improvements and appropriate legends & signs.

In March 2011, an informational meeting was held in the Community Room at City Hall to review the Placer project proposal to solicit public comments. As a result of the meeting, comments were incorporated into project scope including adding more than 100 trees were added to enhance the pedestrian experience from Olive to the City limits. 2010-2012 the City went to several local events with displays to solicit comments. Public notices regarding the project were mailed to residents and property owners living within the vicinity. Photos from 2010 Energy fair are included in attachments.

C. Is the project cost over \$1 Million? Y/N  YES

If Yes- is the project Prioritized in an adopted city or county bicycle transportation plan, pedestrian plan, safe routes to school plan, active transportation plan, trail plan, circulation element of a general plan, or other publicly approved plan that incorporated elements of an active transportation plan? Y/N  YES

Placer has been identified by the community and Council as a priority corridor and has prioritized it on the City's Capital Project list. The Council has prioritized this project as the number one priority for the Transportation Impact Fee (TIF) Program and has collected fees from land development projects. The City collects these funds from land development projects which are then used for capital projects to improve the roadways. These projects implement the City's Complete Streets Policy to include facilities for walking and biking. Placer Improvements are a top priority for the City's TIF program.

The project is consistent with several Plans and Policy documents adopted by City Council including:

- City of Redding's General Plan Transportation Element
- Redding Bicycle Action Plan, 2010
- City of Redding Complete Streets Policy, adopted 2012
- Redding Parks, Trails and Open Space Master Plan, 2004
- Transportation Impact Fee Program Update, 2008

See Attachments for documentation.

#### 4. COST EFFECTIVENESS (0-10 POINTS)

- A. Describe the alternatives that were considered. Discuss the relative costs and benefits of all the alternatives and explain why the nominated one was chosen.

In 2008 Staff conducted an update utilizing the Shasta County Regional Travel Demand Model to develop a list of candidate projects based on 2015 transportation operational and capacity needs for the Transportation Impact Fee (TIF) program. 22 project needs, descriptions and fact sheets were presented to a citizen's advisory committee. A matrix was used to prioritize all TIF projects including:

1. overall benefit to the transportation system;
2. community impact;
3. relative cost; and
4. committee members subjective priority.

An overall ranking was developed and agreed upon by staff and committee. Placer from Boston Ave. to Buenaventura ranked as number one priority. The updated priority list was approved by Council on December 16th 2008. Staff report and meeting minutes are included in attachments. All TIF projects are subject to Complete Streets Policy, hence bicycle lanes, sidewalks, pedestrian enhancements and safe crossings are included. Not including these improvements to a street enhancement project is not an option.

B. Calculate the ratio of the benefits of the project relative to both the total project cost and funds requested (i.e.,

$$\frac{\textit{Benefit*}}{\textit{Total Project Cost}} \textit{ and } \frac{\textit{Benefit*}}{\textit{Program Funds Requested}}).$$

Walking and cycling play unique and important roles in an efficient and equitable transport system. They provide basic mobility, affordable transportation, physical fitness and enjoyment. Improving active transport conditions benefits users directly, and benefits the community overall, including people who do not currently use walking and cycling facilities. Conventional transportation projects evaluation methods tend to overlook and undervalue active transport that can have significant impact. Through the City's Transportation Impact Fee Program, roadway improvements (including the Placer Project) always consider walking and bicycling infrastructure improvements and are reinforced by the City's recently adopted Complete Streets Policy.

Transport systems tend to have network effects: their impacts and benefits increase as they expand. Transportation improvement strategies also have synergistic effects, that is, their total impacts are greater than the sum of their individual impacts. Improving the Placer roadway to support all modes of transportation including efficiency & safety for people that drive, safe, connected facilities for people who walk and dedicated facilities for people who bicycle is a balanced mobility approach to complete streets. The Placer Improvement Project considers all modes and increased comfort and safety for all users.

Placer Project benefits for active modes:

Improved Active travel conditions

1. User convenience and comfort
2. Improved accessibility for non-drivers, which supports equity objectives
3. Option to choose mode of travel
4. Supports retail
5. Increased security

Increased Active modes activity

1. User enjoyment
2. Improved public fitness and health
3. Increased community cohesion (positive interactions among neighbors due to more people walking on local streets) which tends to increase local security

Reduced Automobile Travel

1. Consumer savings 15-30 cents/mile
2. Reduced chauffeuring burdens \$4.25/trip
3. Increased traffic safety
4. Energy conservation
5. Pollution reductions

Community

1. Improved accessibility, particularly for non-drivers
2. Transport cost savings
3. Open space preservation and enjoyment of trails
4. More livable community
5. Higher property values

Using Todd Litman's paper on "Evaluating Active Transport Benefits and Costs" published by the Victoria Transport Policy Institute in 2014 the Place Project impact. Daily impact of estimated walking and bicycling trips are quantified at a Cost/Benefit Ratio of \$1.81, meaning that for every dollar invested the community receives a benefit of \$1.81 in benefits such as some of the ones listed above.

See attached Cost/Benefit Analysis for Active Modes based on Litman's paper cited above.

Additionally, to develop the cost effectiveness of this project as it relates to collision avoidance, the City used the Transportation Injury Mapping System (TIMS) to develop a benefit/cost ratio that meets the goal of safety and mobility for non-motorized users. The proposed countermeasures improvements included for this project are 1) install sidewalk; 2) install bike lanes and 3) install raised medians/pedestrian refuge islands. The City assumed the project improvements will reduce the potential

of pedestrian or bicyclist conflicts which may result in fatalities over the 20 year life of the project. With this assumption and the project cost, the TIMS calculated a benefit/cost ratio of 10.02.

Please see attached calculation summary.

#### 5. IMPROVED PUBLIC HEALTH (0-10 points)

- A. Describe how the project will improve public health, i.e. through the targeting of populations who have a high risk factor for obesity, physical inactivity, asthma, or other health issues.

The public health statistics for Shasta County are believed to be fairly representative of the general populations served by this project. In collaboration with Shasta County Public Health, we have identified the following issues in our community that would benefit from increased physical activity levels, and better infrastructure to support active transportation:

- Residents in Shasta County and Redding have low physical activity levels and high rates of obesity and chronic disease
- Shasta County has an age-adjusted heart disease mortality rate of 229 deaths per 10,000 population, higher than California (189) and the nation (200).
- Less than half of Shasta County adults meet physical activity recommendations like brisk walking for 30 minutes at a time, five times per week (2010 Mercy Medical Center Community Health Assessment)
- 65% of Shasta County residents are overweight or obese (2010 Mercy Medical Center Community Health Assessment), including over one-quarter of the adult population being obese.
- 29% of Shasta County seventh and ninth graders are overweight or obese (2006-07 California Healthy Kids Survey)
- Nearly one in five Shasta County children ages 5-11 are overweight or obese (2005 and 2007 California Healthy Kids Survey)
- 36.6% of low-income school age children and teens (5-19 years) in Shasta County are overweight or obese (2010 Pediatric Nutrition Surveillance System)

Our community has a lower proportion of residents utilizing active transportation choices than other communities. Improved bicycle and pedestrian infrastructure will increase active transportation. For example:

- Only 69% of Shasta County respondents currently walk for transportation, fun, and exercise, compared to 77% statewide (2009 California Health Interview Survey, CHIS)

- Only 36% of Shasta County children report walking or biking to school in the past week, compared to 43% statewide (2009 CHIS)
- More Shasta County residents report driving to work alone (80%) compared to 73% statewide (American Community Survey, 2008-2012). Only 2.4% in Shasta County report walking to work.
- In the City of Redding these numbers are similar for the 2000 Census Journey to Work category: 80% drive alone, 2.4% walk and .5% bicycle

Increased levels of physical activity would contribute greatly to improving the health of Redding residents. Walking or bicycling to common destinations such as work, school, or the store provide a cost-effective way for people to meet the Surgeon General’s guidelines for physical activity to improve health and prevent chronic disease. In fact, individuals who walk and bicycle at least 15 minutes each way to work (5 days a week) meet the physical activity guidelines without having to set aside extra time to “go workout”. Physical activity is known to prevent, and help control heart disease, diabetes, obesity, depression, and other chronic illnesses.

With these pedestrian and bicycle infrastructure improvements households west of Buenaventura could easily meet these health guidelines by walking or bicycling to school, the shopping center or to Mark Lake park just a few times a week.

6. **BENEFIT TO DISADVANTAGED COMMUNITIES (0-10 points)**

A. I. Is the project located in a disadvantaged community? Y/N

**YES**

II. Does the project significantly benefit a disadvantaged community? Y/N

**YES**

a. Which criteria does the project meet? (Answer all that apply)

- **Median household income for the community benefited by the project: \$ 43,667**
- California Communities Environmental Health Screen Tool (CalEnvironScreen) score for the community benefited by the project: 24.29 66%-70% percentile (does not meet grant criteria)
- For projects that benefit public school students, percentage of students eligible for the Free or Reduced Price Meals Programs: 43.8% (does not apply)

b. Should the community benefitting from the project be considered disadvantaged based on criteria not specified in the program guidelines? If so, provide data for all criteria above and a quantitative assessment of why the community should be considered disadvantaged.

B. Describe how the project demonstrates a clear benefit to a disadvantaged community and what percentage of the project funding will benefit that community, for projects using the school based criteria describe specifically the school students and community will benefit.

The City of Redding is in a disadvantaged community. The Project clearly addresses safety and infrastructure challenges for pedestrians and bicyclists on the Placer Corridor. Mobility is a great

challenge for some households especially due to the suburban and rural characteristics of its urban form factors that compound this are income, age and ability.

The City of Redding's median income is \$43,667/year which is 71.1% of California's median income of \$61,400 which qualifies this community as disadvantaged per the grant guidelines. In addition to above, 41% of households in Redding with children and a single female adult live in poverty (compared to 32% in California).

Mobility is a challenge for households of low income due to high costs of vehicle ownership. Providing safe and attractive options to walk or bicycle can reduce the trips and miles on a household vehicle, provide options for families to reduce vehicle ownership and options for households that cannot afford a vehicle. The average cost of vehicle ownership varies depending on vehicle type, but can cost .55-.60 cents per mile including depreciation, maintenance, insurance, financing, fees, and fuel. For low income families, money not spent on transportation costs can be spent toward other important expenditures including housing, food and higher education.

According to the 2000 Census, 91% Redding residents choose to drive to work, 80% drive alone. Walking is the next most popular mode, with 2.4% of workers. Although often overlooked as a significant mode of transportation, walking is more common than both transit (1.3%) and bicycling (.5%) in Redding. The City has an overall walk score of 26. The address at Placer and Cumberland has WalkScore of 29 meaning that "almost all errands require a car." Certainly this is true without completed sidewalks and bicycle lanes especially for persons with disability, elderly or school aged children. At Placer and Pleasant Street the walk score is 54 meaning "somewhat walkable, some errands can be accomplished by foot." See attached WalkScore results. By providing continuous, dedicated and attractive walking and bicycling facilities the City is providing access for persons without mobility options or for household that wish to reduce vehicular trips and costs associated.

In addition to low-income, age can also be a contributing factor for mobility options, especially the elderly and young. As many seniors age many lose the ability to drive. Seniors aged 65 and over in the Project area range in census blocks groups from 12-24% of the population. See attachments for documentation. For school aged children attending a public school in the Project area, Manzanita is the Elementary school these children would attend. Due to the suburban nature of the urban layout students living in neighborhoods west of Buenaventura must walk on Placer at some point to access the school.

The Project will provide walking access where currently there are huge gaps in clearly defined designated bicycle lanes, curb, gutter, sidewalk, shade, safe crossings and pedestrian lighting that can serve disadvantaged residents living on the corridor. Though distances may be great, a person could

access stores, schools and transit stops without having to walk in the gravel or shoulder, crossings will be safer and shade will be provided from the summer heat. Bicycles will have a dedicated bicycle lane instead of an edge line and shoulder.

100% of the project supports the disadvantaged populations.

**7. USE OF CALIFORNIA CONSERVATION CORPS (CCC) OR A CERTIFIED COMMUNITY CONSERVATION CORPS (0 to -5 points)**

- A. The applicant has coordinated  with the CCC to identify how a state conservation corps can be a partner of the project. Y/N **YES**
  - a. Name, e-mail, and phone # of the person contacted and the date the information was submitted to them: **Virginia Clark, [Virginia.clark@ccc.ca.gov](mailto:Virginia.clark@ccc.ca.gov), (919) 341-3147, 5/7/14**
  
- B. The applicant has coordinated with a representative from the California Association of Local Conservation Corps (CALCC) to identify how a certified community conservation corps can be a partner of the project. Y/N  **YES**
  - a. Name, e-mail, and phone # of the person contacted and the date the information was submitted to them: **Cynthia Vitale, [calocalcorps@gmail.com](mailto:calocalcorps@gmail.com), (919) 558-1616, 5/7/14**
  
- C. The applicant intends to utilize the CCC or a certified community conservation corps on all items where participation is indicated? Y/N  **Yes**

I have coordinated with a representative of the CCC; and the following are project items that they are qualified to partner on:

CCC is interested in partnering with your office in the landscaping, irrigation and planting portions of the Placer project. See attached email from CCC

I have coordinated with a representative of the CALCC; and the following are project items that they are qualified to partner on:

From CALCC: "Unfortunately, no local corps will be able to participate due to the geographic location of the Placer project." See attached email from CALCC.

**8. APPLICANT'S PERFORMANCE ON PAST GRANTS (0 to -10 points)**

- A. Describe any of your agency's ATP type grant failures during the past 5 years, and what changes your agency will take in order to deliver this project.

The City of Redding has not failed to deliver any ATP type projects.

Project name: City of Redding - Placer Street Improvement Project

## V. PROJECT PROGRAMMING REQUEST

Applicant must complete a Project Programming Request (PPR) and attach it as part of this application. The PPR and can be found at [http://www.dot.ca.gov/hq/transprog/allocation/ppr\\_new\\_projects\\_9-12-13.xls](http://www.dot.ca.gov/hq/transprog/allocation/ppr_new_projects_9-12-13.xls)

PPR Instructions can be found at <http://www.dot.ca.gov/hq/transprog/ocip/2012stip.htm>

**Notes:**

- Fund No. 1 must represent ATP funding being requested for program years 2014/2015 and 2015/2016 only.
- Non-infrastructure project funding must be identified as Con and indicated as "Non-infrastructure" in the Notes box of the Proposed Cost and Proposed Funding tables.
- Match funds must be identified as such in the Proposed Funding tables.

## PROJECT PROGRAMMING REQUEST

DTP-0001 (Revised July 2013)

General Instructions

<input checked="" type="checkbox"/> New Project					<b>Date:</b> 5/20/14						
<b>District</b>		<b>EA</b>		<b>Project ID</b>		<b>PPNO</b>		<b>MPO ID</b>		<b>TCRP No.</b>	
02								SRTA			
<b>County</b>		<b>Route/Corridor</b>		<b>PM Bk</b>		<b>PM Ahd</b>		<b>Project Sponsor/Lead Agency</b>			
SHA		0		0		0		City of Redding			
					<b>MPO</b>			<b>Element</b>			
					Shasta			Local Assistance			
<b>Project Manager/Contact</b>				<b>Phone</b>			<b>E-mail Address</b>				
John Abshier				(530) 245-7159			<a href="mailto:jabshier@ci.redding.ca.us">jabshier@ci.redding.ca.us</a>				
<b>Project Title</b>											
Placer Street Improvements.											
<b>Location, Project Limits, Description, Scope of Work</b>										<input checked="" type="checkbox"/> See page 2	
In the City of Redding, on Placer Street from the Western City Limit to east of Olive Avenue, including tie-in on various cross streets. Project will improve 2 miles of Placer Street, including approximately 2,300 linear feet of roadway widening to establish a uniform 3 lane or 5 lane roadway, approximately 15,100 linear feet of bicycle lanes, approximately 6,300 linear feet of buffered bicycle lanes, and approximately 8,150 linear feet of sidewalks. Safety improvements include enhanced pedestrian crossings near San Francisco Street, Cumberland Drive, and Wisconsin Avenue, pedestrian safety lighting spanning 8,600 linear feet,											
<input checked="" type="checkbox"/> Includes ADA Improvements						<input checked="" type="checkbox"/> Includes Bike/Ped Improvements					
<b>Component</b>		<b>Implementing Agency</b>									
PA&ED		City of Redding									
PS&E		City of Redding									
Right of Way		City of Redding									
Construction		City of Redding									
<b>Purpose and Need</b>										<input checked="" type="checkbox"/> See page 2	
The City of Redding is proposing substantial improvements to the Placer Street corridor from the City Limits to East of Pleasant Street. Placer Street continues to experience increasing traffic volumes, with utilization by commuter and recreational cyclists, as well as pedestrian demand for schools, parks, trails, and shopping attractions.											
The purpose of the Placer Street Improvement project is to provide improved mobility, accessibility, and safety along the existing Placer Street corridor.											
<b>Project Benefits</b>										<input type="checkbox"/> See page 2	
The project will provide benefits to pedestrians, cyclists, transit users and drivers. Improvements will benefit students walking and biking to school and encourage more recreational and utilitarian trips to trails, shopping and to work. Safe and attractive facilities for alternative modes of transportation along the Placer Street corridor will reduce traffic congestion and associated greenhouse gas emissions.											
<input checked="" type="checkbox"/> Supports Sustainable Communities Strategy (SCS) Goals						<input checked="" type="checkbox"/> Reduces Greenhouse Gas Emissions					
<b>Project Milestone</b>										<b>Proposed</b>	
Project Study Report Approved										n/a	
Begin Environmental (PA&ED) Phase										10/30/14	
Circulate Draft Environmental Document					<b>Document Type</b>			ND		05/01/15	
Draft Project Report										n/a	
End Environmental Phase (PA&ED Milestone)										09/30/15	
Begin Design (PS&E) Phase										09/30/15	
End Design Phase (Ready to List for Advertisement Milestone)										10/31/15	
Begin Right of Way Phase										n/a	
End Right of Way Phase (Right of Way Certification Milestone)										n/a	
Begin Construction Phase (Contract Award Milestone)										02/16/16	
End Construction Phase (Construction Contract Acceptance Milestone)										11/01/17	
Begin Closeout Phase										11/01/17	
End Closeout Phase (Closeout Report)										05/01/18	

## ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**PROJECT PROGRAMMING REQUEST**

DTP-0001 (Revised May 2013)

General Instructions

<input checked="" type="checkbox"/> New Project					<b>Date:</b>	5/20/14
District	EA	Project ID	PPNO	MPO ID	TCRP No.	
02				SRTA		
Project Title						
Placer Street Improvements						
Additional Information						
<p>Project Description continued...</p> <p>completion of curb, gutter, sidewalk and ADA improvements at 34 wheelchair ramps, 117 new trees to provide shade for pedestrians, New RABA bus turn out at San Francisco Street, Conduit for future signalised intersection at Wisconsin Avenue, Upgrades to water and storm drains, 1.8 inch asphalt concrete overlay and re-striping.</p> <p>Purpose and Need continued...</p> <p>Mobility along Placer Street is considered deficient based on the available travel lanes and substantially incomplete or missing bicycle lanes and sidewalk segments. The vast majority of wheelchair ramps are nonexistent or out of compliance with current standards.</p> <p>While the overall safety performance of the corridor is within the range of similar facilities for total collisions, pedestrian safety, in particular, needs to be improved. Between 2007 and 2012, there have been three reported pedestrian injury collisions.</p> <p>Sustainable Communities Strategy Goals supported:</p> <p>The Shasta Regional Transportation Agency is currently updating its Regional Transportation Plan to include a Sustainable Communities Strategy. Goals supported in the current RTP include:</p> <p>Public transportation- Prioritize transportation services with an emphasis on the transportation needs of the transit-dependent.</p> <p>Streets and Highways- Maintain a safe and efficient road system within the limits of existing and projected funding constraints.</p> <p>Goods movement- maintain an efficient goods movement industry with the least impact on the transportation system.</p> <p>Non-motorized transportation- Create a transportation environment that encourages walking and bicycling.</p>						

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-8410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**PROJECT PROGRAMMING REQUEST**

DTP-0001 (Revised July 2013)

Date: 5/20/14

District	County	Route	EA	Project ID	PPNO	TCRP No.
02	SHA					
<b>Project Title:</b> Placer Street Improvements						

Proposed Total Project Cost (\$1,000s)									Notes
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	
E&P (PA&ED)									
PS&E	639							639	
R/W SUP (CT)									
CON SUP (CT)									
R/W	96							96	
CON			4,268					4,268	
<b>TOTAL</b>	<b>735</b>		<b>4,268</b>					<b>5,003</b>	

Fund No. 1:	ATP Funds								Program Code
Proposed Funding (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			2,295					2,295	
<b>TOTAL</b>			<b>2,295</b>					<b>2,295</b>	

Fund No. 2:	Traffic Impact Fee funds								Program Code
Proposed Funding (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	
E&P (PA&ED)									
PS&E	639							639	
R/W SUP (CT)									
CON SUP (CT)									
R/W	96							96	
CON									
<b>TOTAL</b>	<b>735</b>							<b>735</b>	

Fund No. 3:	11.47% Matching Funds- Traffic Impact Fee funds								Program Code
Proposed Funding (\$1,000s)									Funding Agency
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			297					297	
<b>TOTAL</b>			<b>297</b>					<b>297</b>	

**PROJECT PROGRAMMING REQUEST**

DTP-0001 (Revised July 2013)

Date: 5/20/14

District	County	Route	EA	Project ID	PPNO	TCRP No.
02	SHA					
<b>Project Title:</b> Placer Street Improvements						

<b>Fund No. 4:</b>	Streets, Water Utility & Traffic Impact Fee funds								Program Code
Proposed Funding (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			1,676					1,676	
<b>TOTAL</b>			1,676					1,676	

<b>Fund No. 5:</b>									Program Code
Proposed Funding (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
<b>TOTAL</b>									

<b>Fund No. 6:</b>									Program Code
Proposed Funding (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
<b>TOTAL</b>									

<b>Fund No. 7:</b>									Program Code
Proposed Funding (\$1,000s)									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
<b>TOTAL</b>									

**PROJECT PROGRAMMING REQUEST**

DTP-0001 (Revised July 2013)

Date: 5/20/14

District	County	Route	EA	Project ID	PPNO	TCRP No.
02	SHA					
<b>Project Title:</b> Placer Street Improvements						

<b>Fund No. 8:</b>									<b>Program Code</b>
<b>Proposed Funding (\$1,000s)</b>									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
<b>TOTAL</b>									

<b>Fund No. 9:</b>									<b>Program Code</b>
<b>Proposed Funding (\$1,000s)</b>									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
<b>TOTAL</b>									

<b>Fund No. 10:</b>									<b>Program Code</b>
<b>Proposed Funding (\$1,000s)</b>									
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
<b>TOTAL</b>									

Project name: City of Redding - Placer Street Improvement Project

**VI. ADDITIONAL INFORMATION**

Only fill in those fields that are applicable to your project

**FUNDING SUMMARY**

ATP Funds being requested by Phase (to the nearest \$1000)	Amount
PE Phase (includes PA&ED and PS&E)	\$
Right-of-Way Phase	\$
Construction Phase-Infrastructure	\$ 2,295,000
Construction Phase-Non-infrastructure	\$
<b>Total for ALL Phases</b>	<b>\$ 2,295,000</b>

All Non-ATP fund types on this project* (to the nearest \$1000)	Amount
PE in house design	\$ 639,000
Right-of-Way	\$ 96,000
11.47% Matching Funds- Traffic Impact Fee funds	\$ 297,000
CON- Streets, Water Utility & Traffic Impact Fee funds	\$ 1,676,000
	\$
	\$

\*Must indicate which funds are matching

Total Project Cost	\$ 5,003,000
Project is Fully Funded	Yes

ATP Work Specific Funding Breakdown (to the nearest \$1000)	Amount
Request for funding a Plan	\$
Request for Safe Routes to Schools Infrastructure work	\$
Request for Safe Routes to Schools Non-Infrastructure work	\$
Request for other Non-Infrastructure work (non-SRTS)	\$
Request for Recreational Trails work	\$

**ALLOCATION/AUTHORIZATION REQUESTS SCHEDULE**

	Proposed Allocation Date	Proposed Authorization (E-76) Date
PA&ED or E&P		
PS&E		
Right-of-Way		
Construction	09/30/2015	11/30/2015

All project costs MUST be accounted for on this form, including elements of the overall project that will be, or have been funded by other sources.



Project name: City of Redding - Placer Street Improvement Project

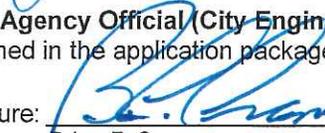
**VIII. APPLICATION SIGNATURES**

**Applicant:** The undersigned affirms that the statements contained in the application package are true and complete to the best of their knowledge.

Signature:   
Name: John C. Abshier  
Title: Traffic Operations Manager

Date: 5/20/2014  
Phone: (530) 245-7159  
e-mail: jabshier@ci.redding.ca.us

**Local Agency Official (City Engineer or Public Works Director):** The undersigned affirms that the statements contained in the application package are true and complete to the best of their knowledge.

Signature:   
Name: Brian F. Crane  
Title: Public Works Director

Date: 5/20/2014  
Phone: (530) 245-7159  
e-mail: bcrane@ci.redding.ca.us

**School Official:** The undersigned affirms that the school(s) benefited by this application is not on a school closure list.

Signature:   
Name: Dr. Rick Fauss  
Title: Redding School District Superintendent

Date: 5/20/2014  
Phone: (530) 225-0011  
e-mail: rfauss@redding.echalk.com

**Person to contact for questions:**

Name: John Abshier  
Title: Traffic Operations Manager

Phone: (530) 245-7159  
e-mail: jabshier@ci.redding.ca.us

**Caltrans District Traffic Operations Office Approval\***

If the application's project proposes improvements on a freeway or state highway that affects the safety or operations of the facility, it is required that the proposed improvements be reviewed by the district traffic operations office and either a letter of support or acknowledgement from the traffic operations office be attached ( ) or the signature of the traffic personnel be secured below.

Signature: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Date: \_\_\_\_\_  
Phone: \_\_\_\_\_  
e-mail: \_\_\_\_\_

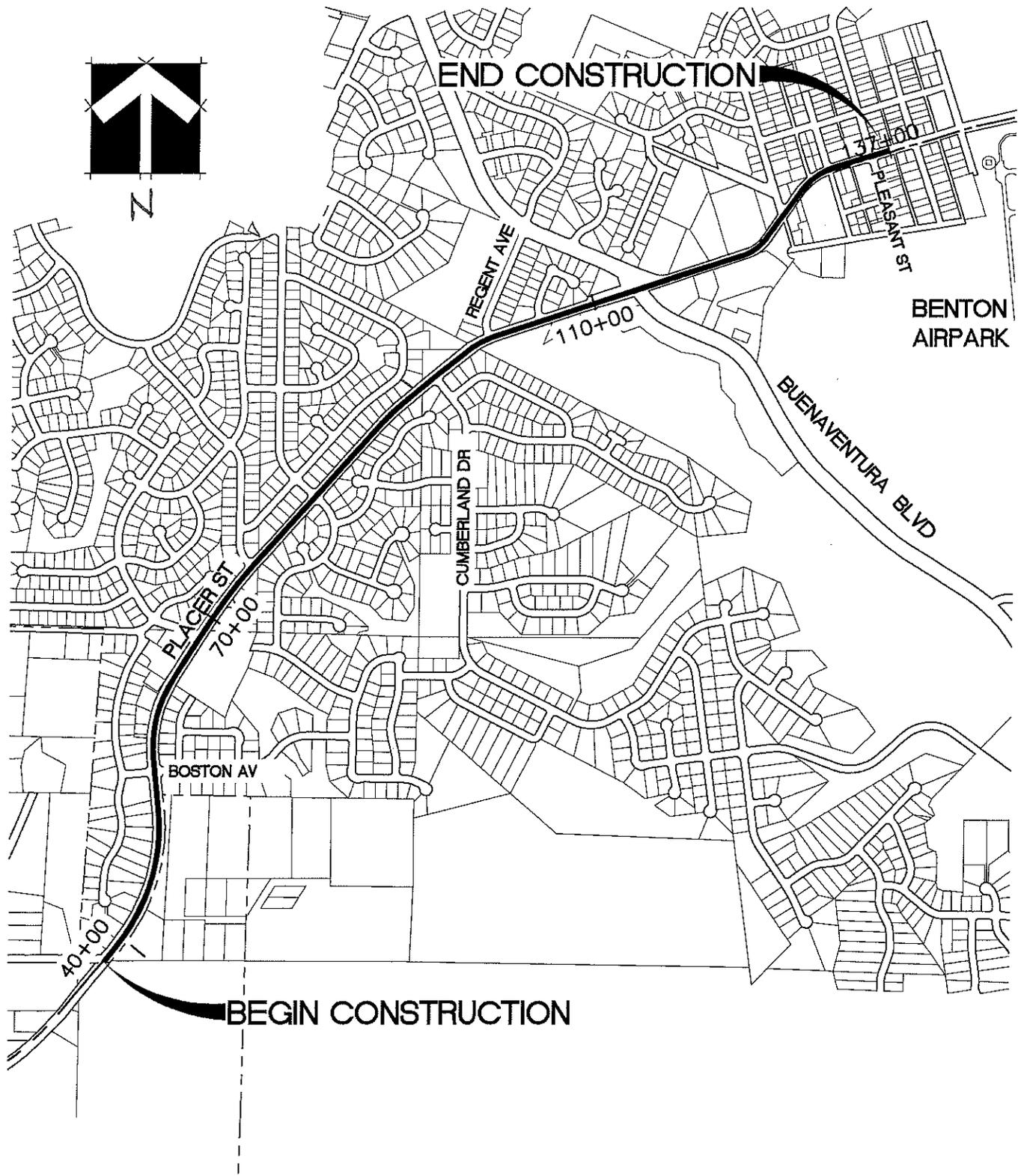
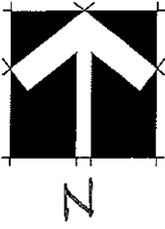
\*Contact the District Local Assistance Engineer (DLAE) for the project to get Caltrans Traffic Ops contact information. DLAE contact information can be found at <http://www.dot.ca.gov/hq/LocalPrograms/dlae.htm>

Project name:  
City of Redding - Placer Street Improvement Project

### VIII. ADDITIONAL APPLICATION ATTACHMENTS

Check all attachments included with this application.

- Vicinity/Location Map- **REQUIRED for all IF Projects**
  - North Arrow
  - Label street names and highway route numbers
  - Scale
  
- Photos and/or Video of Existing Location- **REQUIRED for all IF Projects**
  - Minimum of one labeled color photo of the existing project location
  - Minimum photo size 3 x 5 inches
  - Optional video and/or time-lapse
  
- Preliminary Plans- **REQUIRED for Construction phase only**
  - Must include a north arrow
  - Label the scale of the drawing
  - Typical Cross sections where applicable with property or right-of-way lines
  - Label street names, highway route numbers and easements
  
- Detailed Engineer's Estimate- **REQUIRED for Construction phase only**
  - Estimate must be true and accurate. Applicant is responsible for verifying costs prior to submittal
  - Must show a breakdown of all bid items by unit and cost. Lump Sum may only be used per industry standards
  - Must identify all items that ATP will be funding
  - Contingency is limited to 10% of funds being requested
  - Evaluation required under the ATP guidelines is not a reimbursable item
  
- Documentation of the partnering maintenance agreement- Required with the application if an entity, other than the applicant, is going to assume responsibility for the operation and maintenance of the facility
  
- Documentation of the partnering implementation agreement-Required with the application if an entity, other than the applicant, is going to implement the project.
  
- Letters of Support from Caltrans (Required for projects on the State Highway System(SHS))
  
- Digital copy of or an online link to an approved plan (bicycle, pedestrian, safe routes to school, active transportation, general, recreation, trails, city/county or regional master plan(s), technical studies, and/or environmental studies (with environmental commitment record or list of mitigation measures), if applicable. Include/highlight portions that are applicable to the proposed project.
  
- Documentation of the public participation process (required)
  
- Letter of Support from impacted school- when the school isn't the applicant or partner on the application (required)
  
- Additional documentation, letters of support, etc (optional)



CITY OF REDDING  
PUBLIC WORKS  
DEPARTMENT

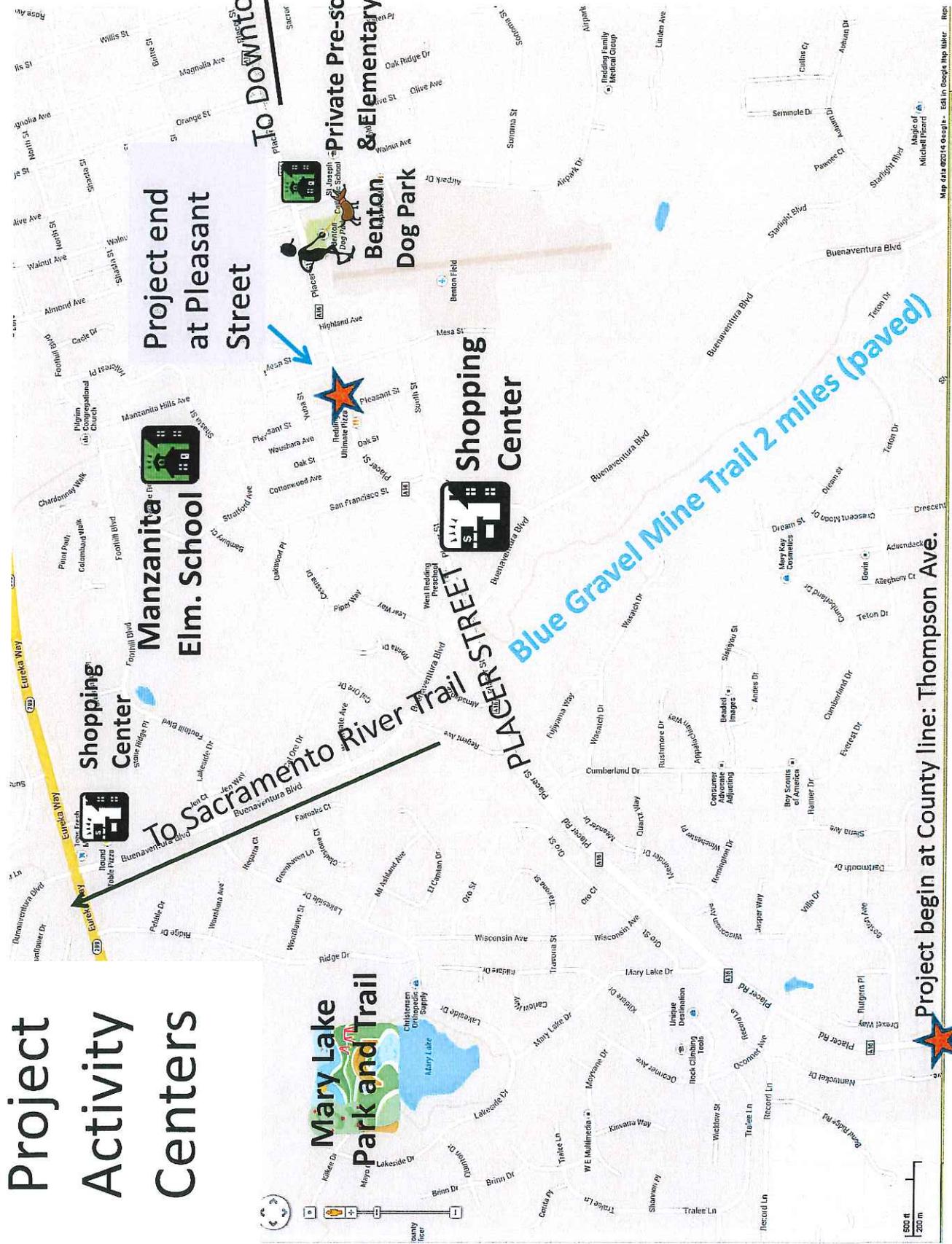
PLACER STREET IMPROVEMENTS  
LOCATION MAP

# Project Map- Satellite View



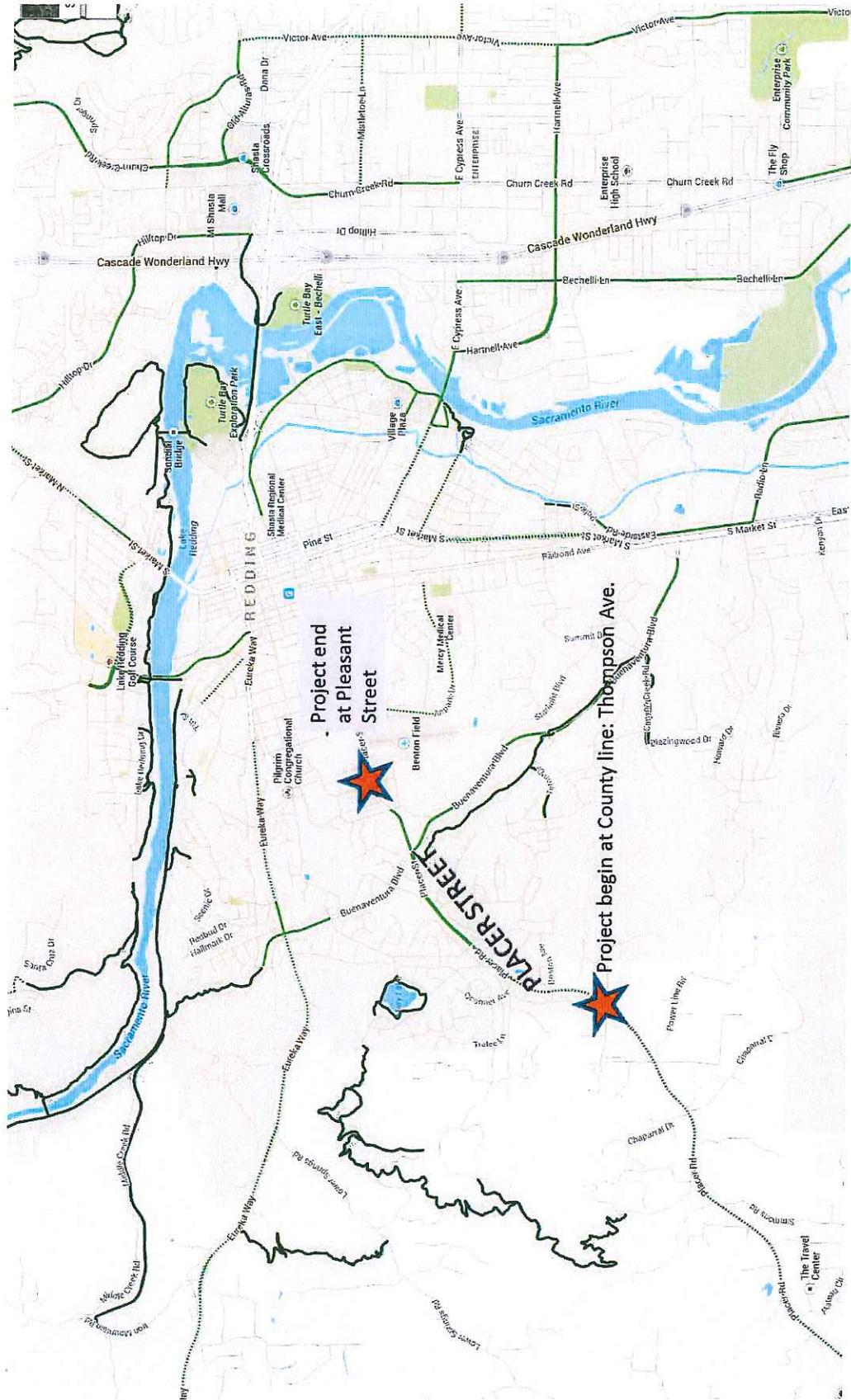
Project begin at County line: Thompson Ave.  
Project length: 1.8 miles

# Project Activity Centers



Project length: 1.8 miles

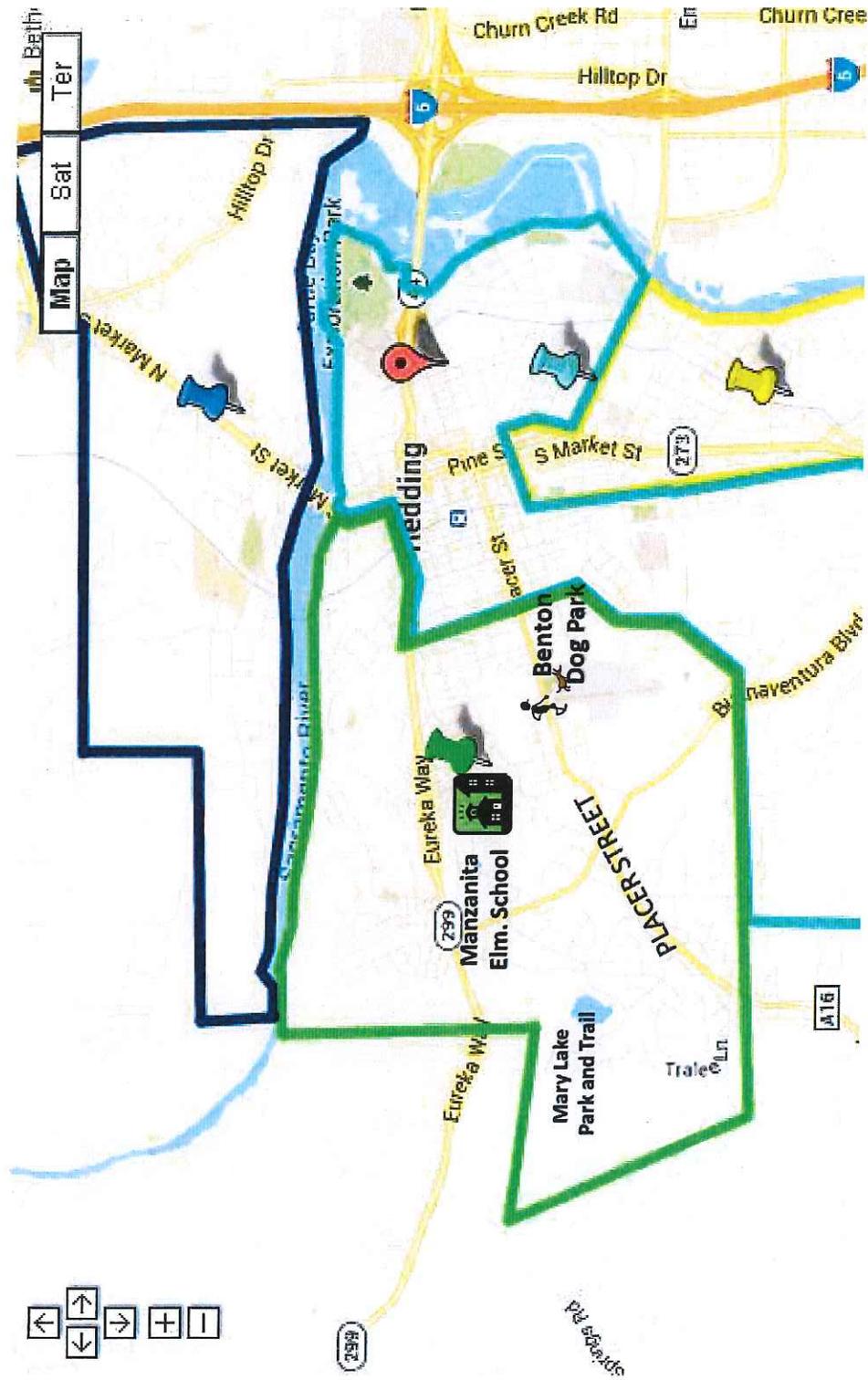
# Google Bikeway/Trail Network



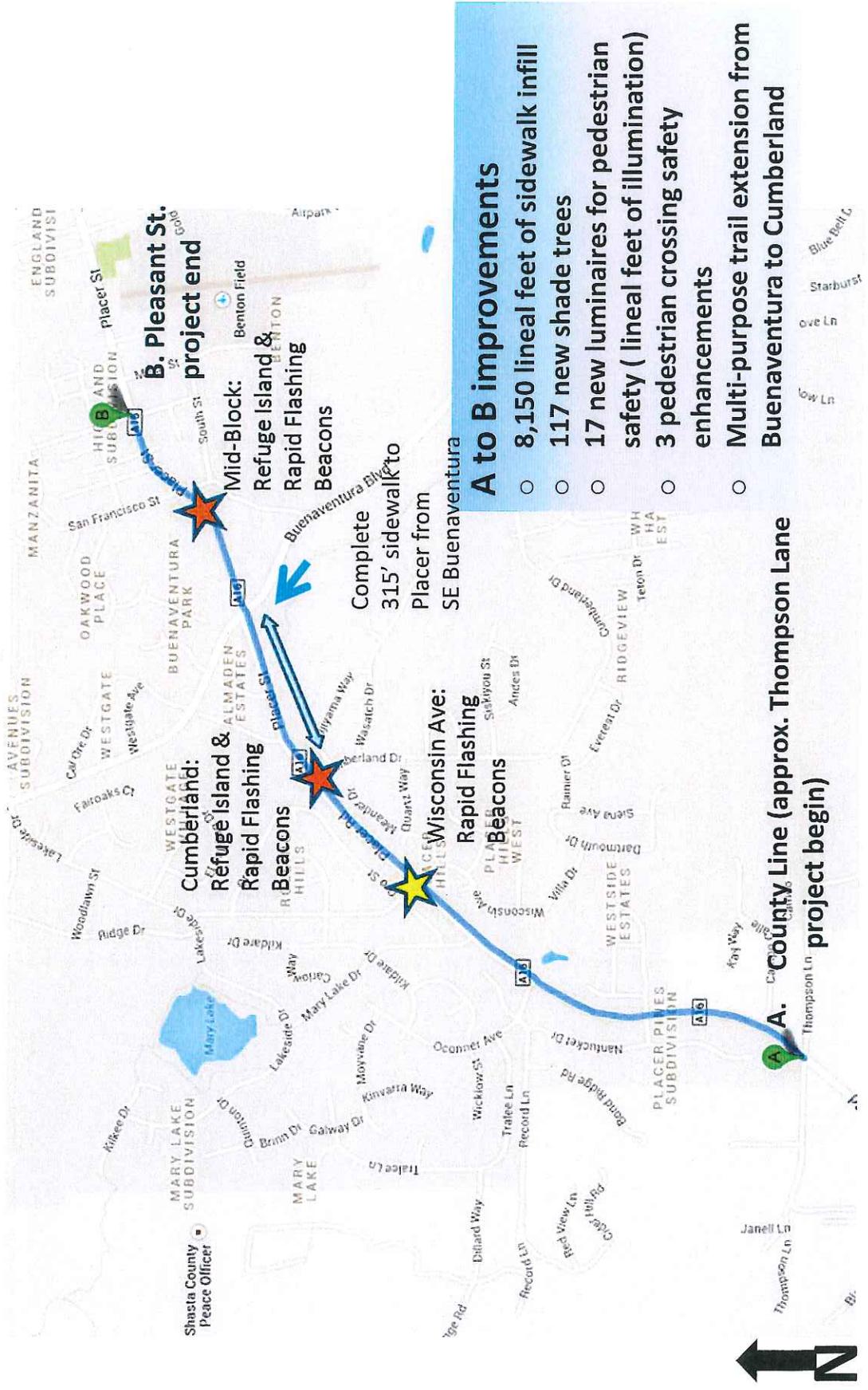
# Manzanita School Boundary

highlighted in lime green

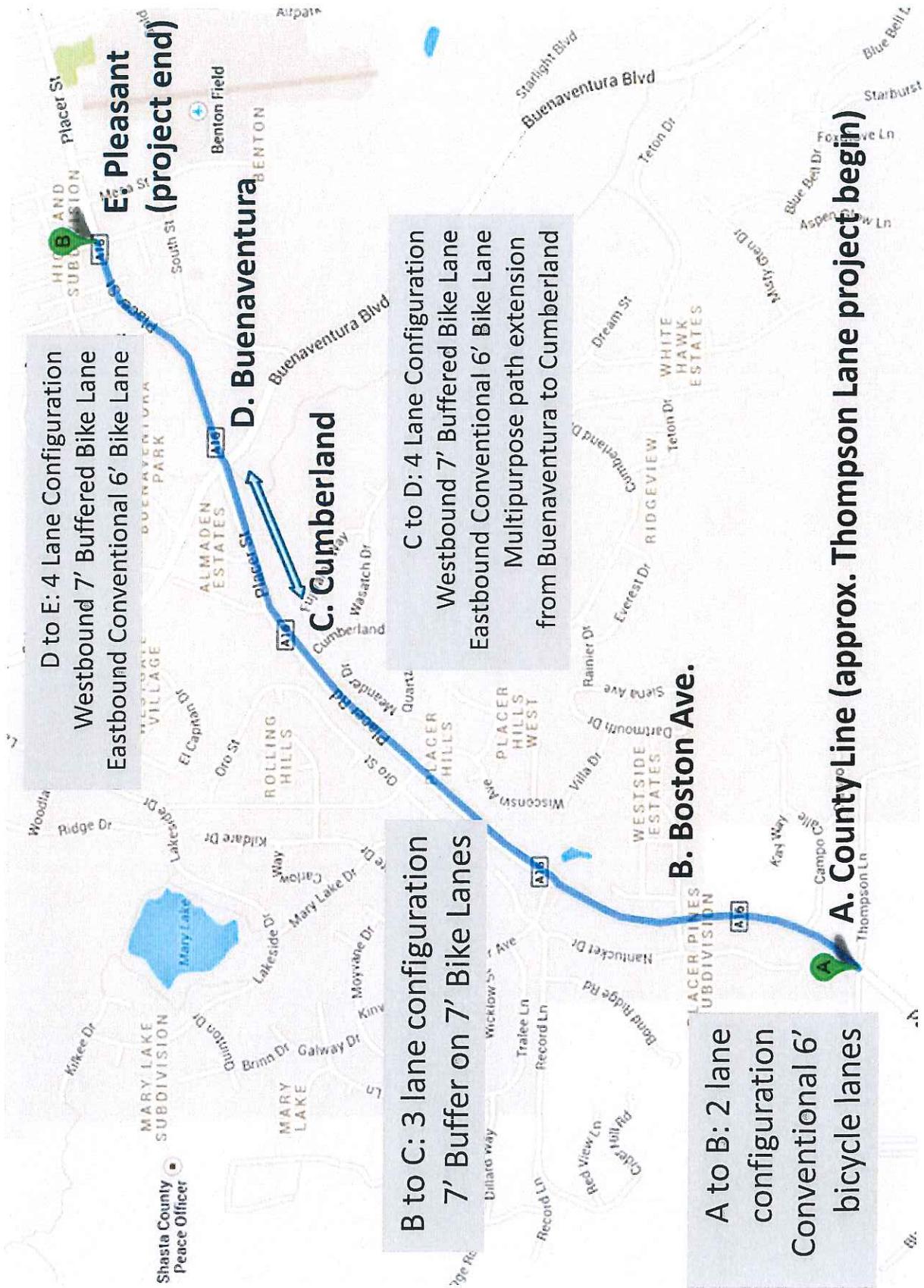
SCHOOL BOUNDARY MAP



# Pedestrian Improvements



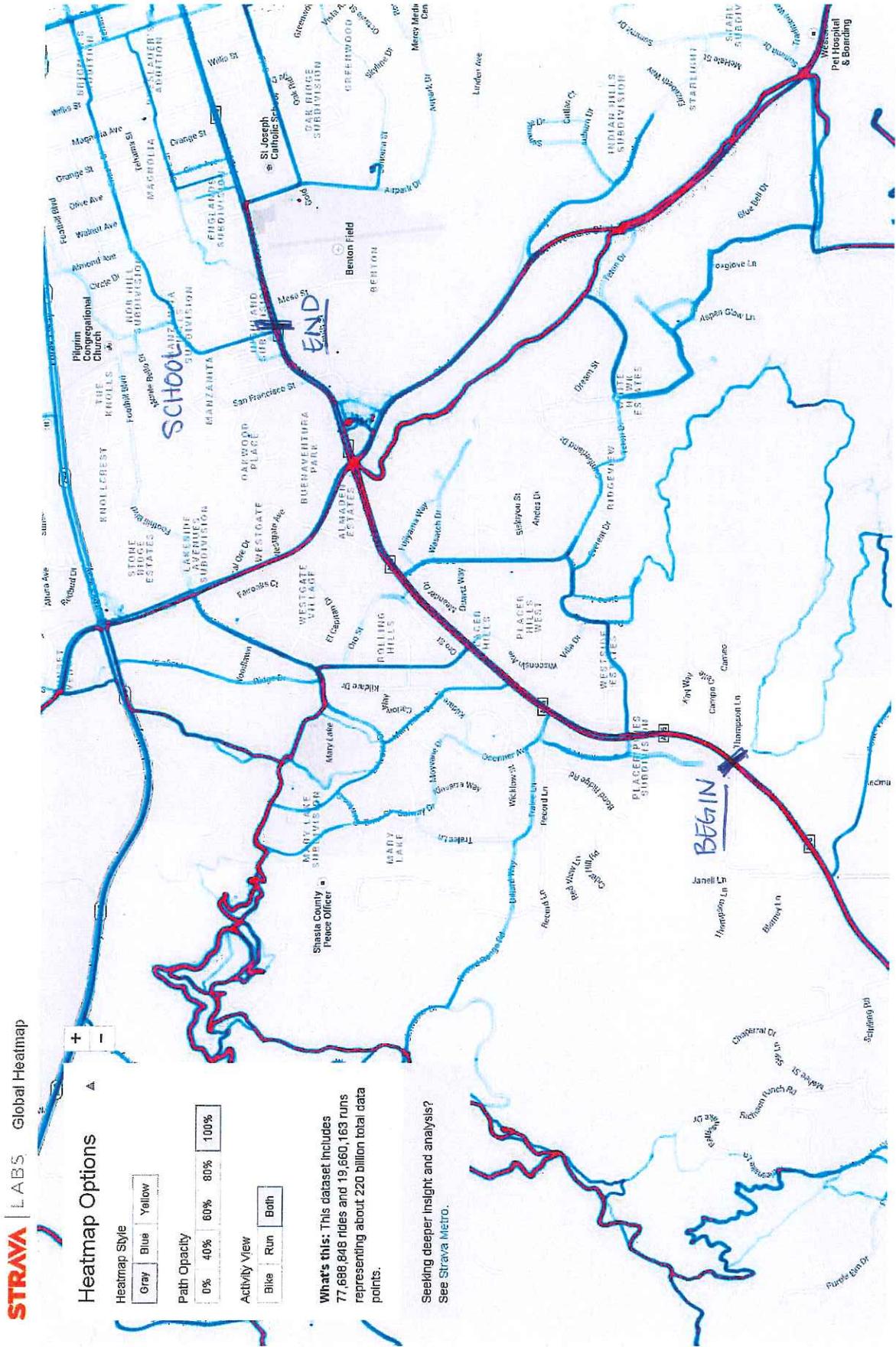
# Bicycle Improvements



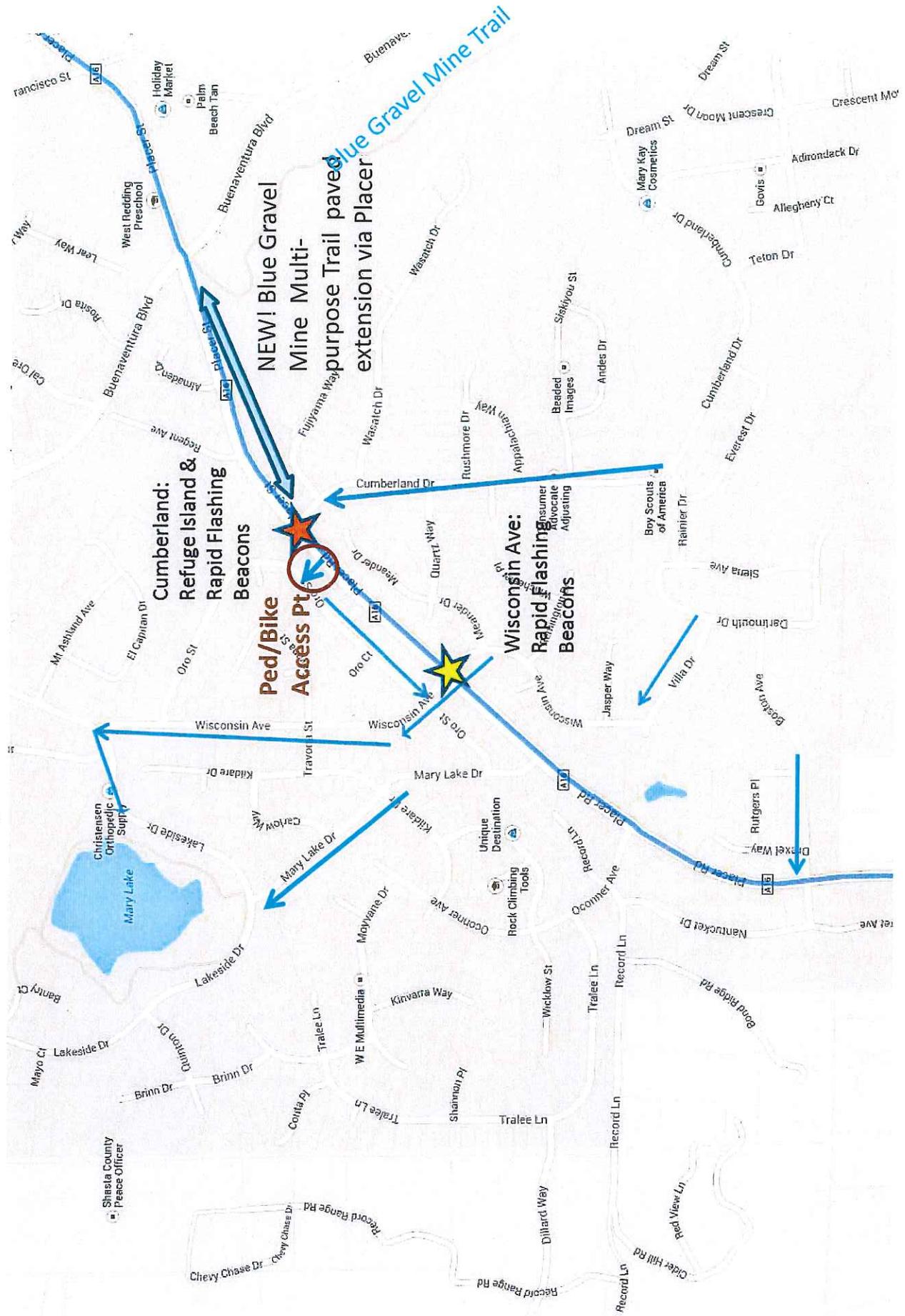




# Strava Heat Map – Bicycle & Run/Walk

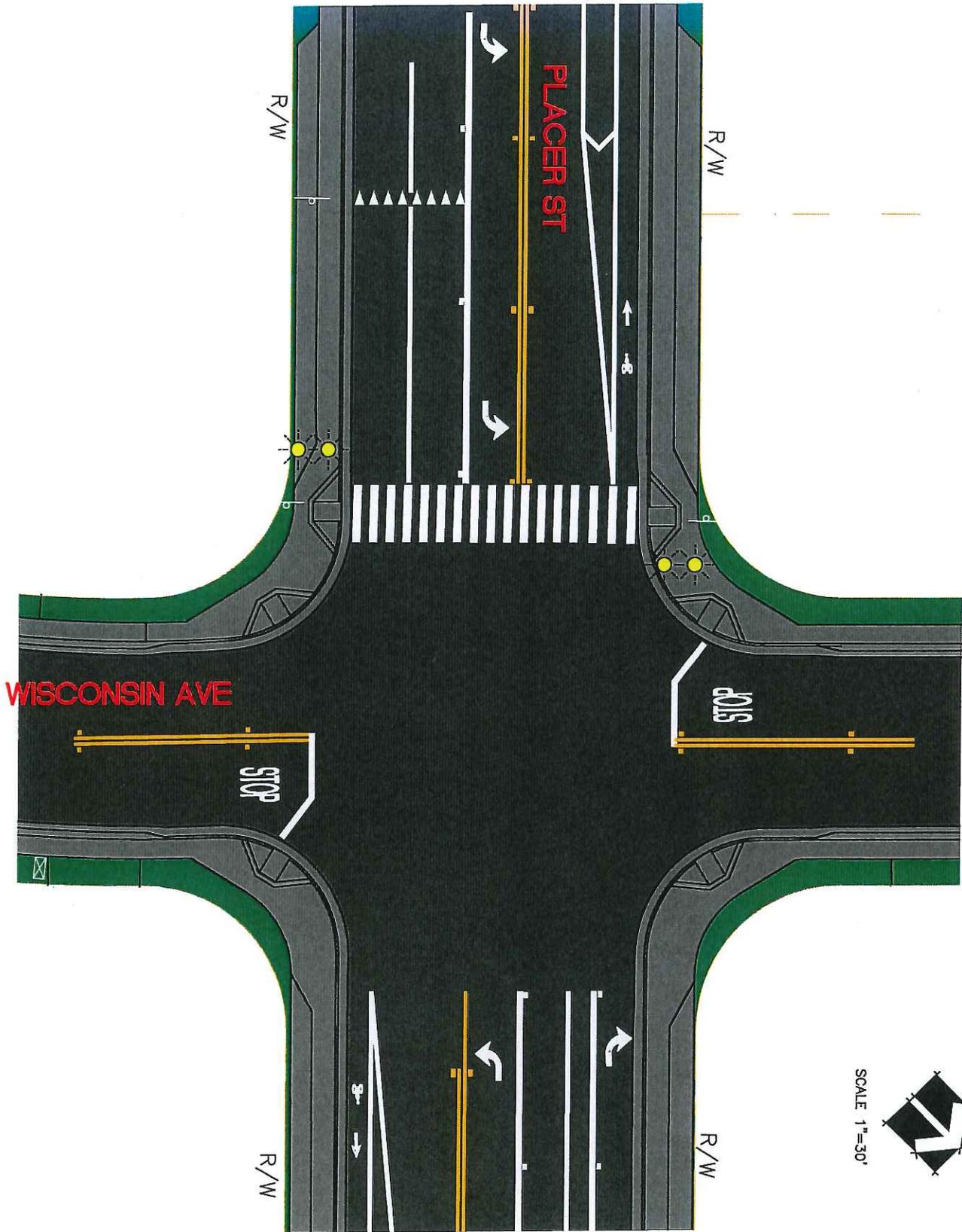


# Mary Lake - Access



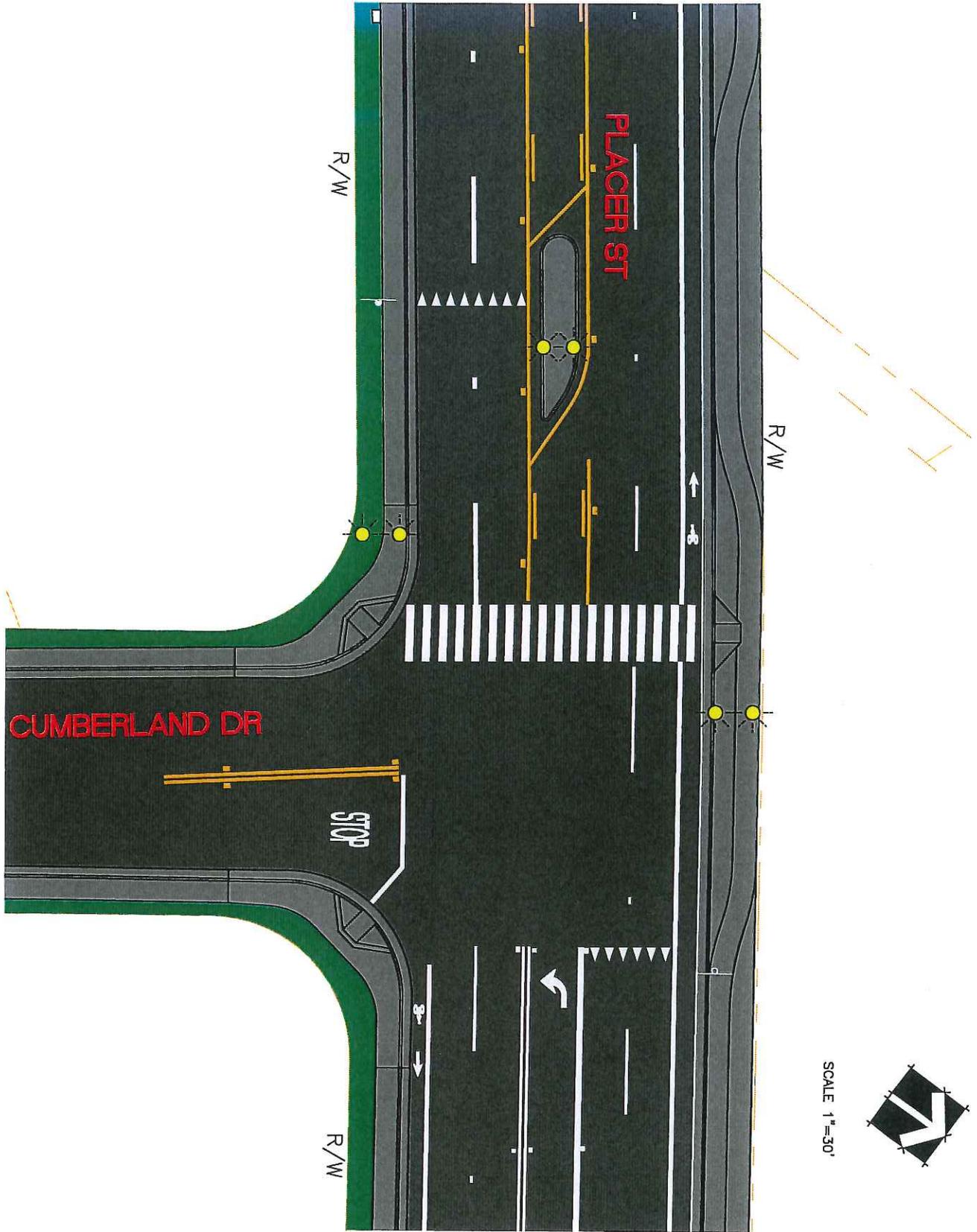
# Cumberland to Mary Lake Access





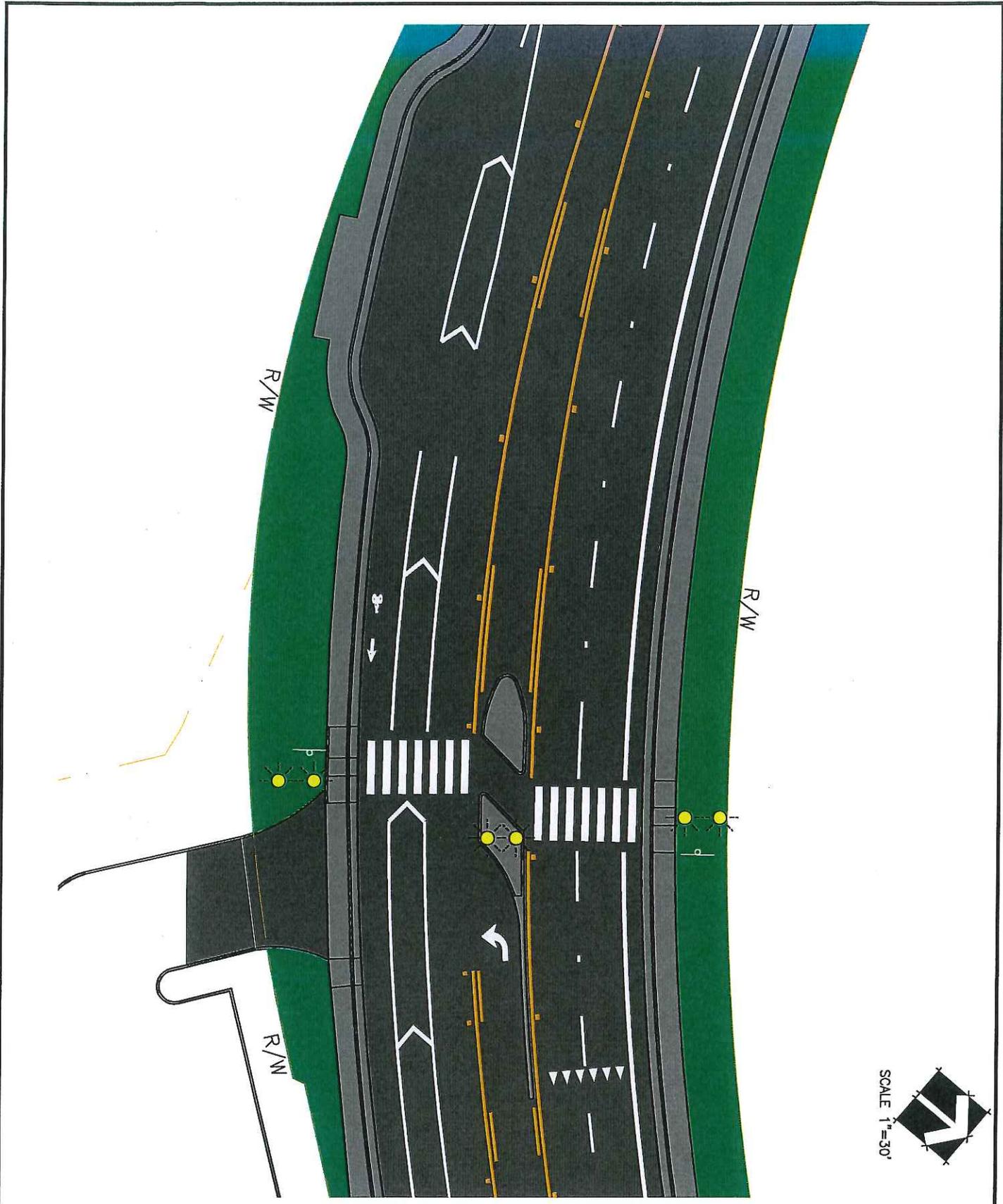
CITY OF REDDING  
PUBLIC WORKS  
DEPARTMENT

PLACER STREET IMPROVEMENT PROJECT  
PRELIMINARY ENHANCED  
PEDESTRIAN CROSSING  
NEAR WISCONSIN AVE



**CITY OF REDDING**  
**PUBLIC WORKS**  
**DEPARTMENT**

**PLACER STREET IMPROVEMENT PROJECT**  
**PRELIMINARY ENHANCED**  
**PEDESTRIAN CROSSING**  
**NEAR CUMBERLAND DRIVE**



**CITY OF REDDING**  
**PUBLIC WORKS**  
**DEPARTMENT**

**PLACER STREET IMPROVEMENT PROJECT**  
**PRELIMINARY ENHANCED**  
**PEDESTRIAN CROSSING**  
**NEAR SAN FRANCISCO STREET**

Type an address, neighborhood or city

Go

## 7000 Placer Street

Redding

Walk Score

29

Car-Dependent

Most errands require a car.

Transit Score

0

Minimal Transit

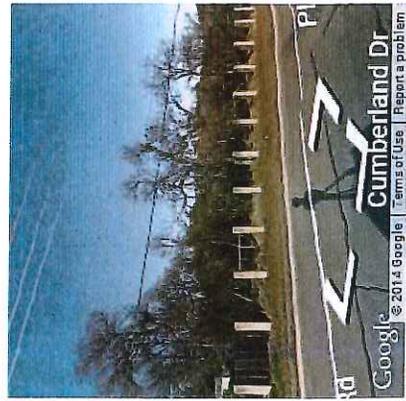
It is possible to get on a bus.



Nearby Apartments Nearby Homes Favorite

View your latest Credit Scores from All 3 Bureaus in 60 secs: \$0

### About this Location



7000 Placer Street has a Walk Score of 29 out of 100. This location is a Car-Dependent neighborhood so most errands require a car.

This location is in Redding. Nearby parks include Woods Memorial Park, Benton Dog Park and Woods Memorial Park.

Nearby schools include West Redding Preschool, Manzanita Elementary School and Manzanita Elementary School.

More ▾

Type an address, neighborhood or city

Go

## 3000 Placer Street

Redding

Walk Score

54

Somewhat Walkable

Some errands can be accomplished on foot.

Transit Score

16

Minimal Transit

It is possible to get on a bus.



Nearby Apartments Nearby Homes Favorite

View your latest Credit Scores from All 3 Bureaus in 60 secs: \$0

### About this Location



3000 Placer Street has a Walk Score of 54 out of 100. This location is Somewhat Walkable so some errands can be accomplished on foot.

This location is in Redding. Nearby parks include Benton Dog Park, Woods Memorial Park and Woods Memorial Park.

Nearby schools include Manzanita Elementary School, Manzanita Elementary School and West Redding Preschool.

More ▾



Looking East at O'Conner Ave



Looking West at Wisconsin Ave



Looking East near Cumberland Dr



Looking West near Cumberland Dr



Looking East near Regent Ave



Looking East near Buenaventura Blvd



Looking West near San Francisco St

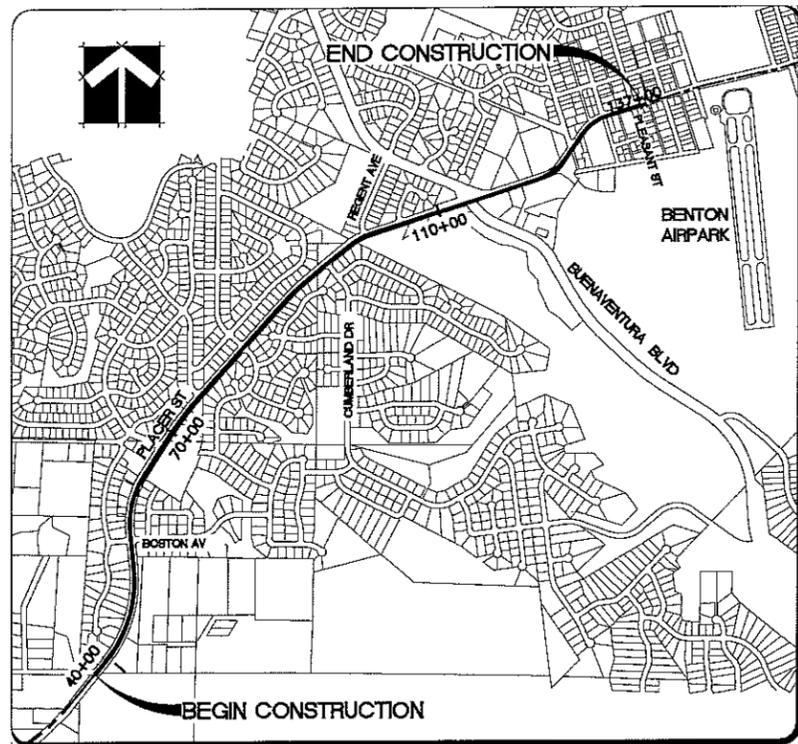


Looking West near Oak St

# CITY OF REDDING

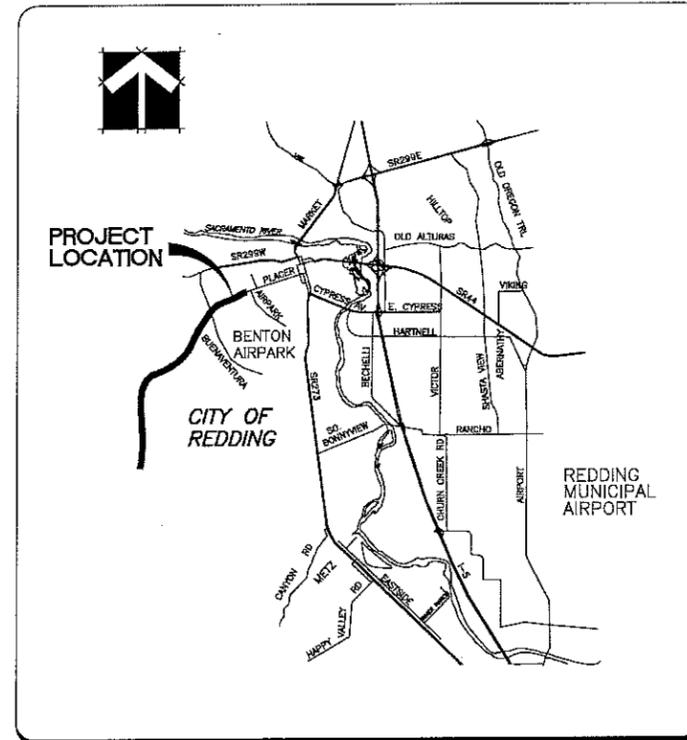
## PROJECT PLANS FOR THE CONSTRUCTION OF PLACER STREET IMPROVEMENTS

JOB NO 2336 CONTRACTOR SHALL POSSESS A CLASS "A" OR "C34" LICENSE AT THE TIME OF THE BID OPENING. BID SCHEDULE NO XXXX



**PROJECT LOCATION**  
NO SCALE

SHEET NO.	SHEET DESIGNATION	SHEET TITLE	DRAWING NO.
1	T-1	TITLE SHEET	A-1
2	A-1	LEGEND AND ABBREVIATIONS	A-2
3	N-1	NOTES	A-3
4	PC-1	PROJECT CONTROL	A-4
5	Q-1	QUANTITIES	A-5
6 thru 8	K-1 thru K-3	KEY MAP	A-6 thru 8
9 thru 10	X-1 thru X-2	TYPICAL SECTIONS	A-9 thru 10
11 thru 20	L-1 thru L-10	LAYOUT	A-11 thru 20
21 thru 32	C-1 thru C-16	CONSTRUCTION DETAILS	A-21 thru 32
33 thru 35	D-1 thru D-3	DRAINAGE PROFILES	A-33 thru 35
36	D-5	DRAINAGE DETAILS	A-36
37	D-6	DRAINAGE QUANTITIES	A-37
38 thru 45	U-1 thru U-8	WATER	A-38 thru 45
46 thru 48	U-13 thru U-15	WATER DETAILS	A-46 thru 48
49	PL-1	LANDSCAPE AND IRRIGATION NOTES	A-49
50	PL-2	LANDSCAPE AND IRRIG. DETAILS AND QTY'S	A-50
51 thru 52	PL-3 thru PL-4	LANDSCAPE IRRIGATION	A-51 thru 52
53 thru 54	PL-6 thru PL-7	LANDSCAPE PLANTING	A-53 thru 54
55 thru 59	OL-1 thru OL-5	OVERLAY	A-55 thru 59
60 thru 69	PD-1 thru PD-10	PAVEMENT DELINEATION AND SIGNING	A-60 thru 69
70	PD-13	PAVEMENT DELINEATION DETAILS	A-70
71 thru 72	E-1 thru E-2	SIGNAL PLANS	A-71 thru 72
73 thru 78	EL-1 thru EL-6	ELECTRIC PLANS	A-73 thru 78
79	CS-1	CONSTRUCTION AREA SIGNS	A-79



**VICINITY MAP**  
NO SCALE

PLANS REVIEWED BY:

STREETS _____	SURVEY _____
SEWER _____	CDPH _____
WATER _____	PG&E _____
ELECTRIC SUPPORT _____	AT&T _____
R.E.U. _____	SPRINT _____
RABA/TRAFFIC OPS _____	C.A.T.V. _____
CENTERVILLE/CSD _____	



CALIFORNIA UNDERGROUND SERVICE ALERT  
CALL 1-800-227-2800 AT LEAST  
48 HOURS BEFORE DIGGING

NOT LESS THAN TWO WORKING DAYS NOTICE IS  
REQUIRED PRIOR TO STARTING ANY EXCAVATION  
NEAR UNDERGROUND FACILITIES BELONGING TO  
PG&E, AT&T, OR CITY OF REDDING.  
UNDERGROUND SERVICE ALERT (800) 227-2800  
FOR C.A.T.V. FACILITIES, CALL (530) 229-2221  
FOR A.C.I.D. FACILITIES, CALL (530) 385-7329

APPROVED BY:

CITY ENGINEER

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**



DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:



DESIGNED BY: PROJECT ENGINEER

**CITY OF REDDING  
PUBLIC WORKS DEPARTMENT**

**PLACER STREET  
IMPROVEMENTS**  
JOB NO. 2336  
TITLE SHEET

A-1  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
T-1  
SHEET 1 OF 79

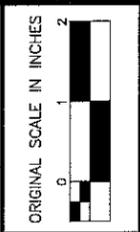
**ABBREVIATIONS**

@	AT	EF	EXHAUST FAN	MIN	MINIMUM	SW	SIDEWALK
AB	AGGREGATE BASE	EG	EDGE OF GUTTER	MISC	MISCELLANEOUS	SY	SQUARE YARD
AC	ASPHALT CONCRETE	EJ	EXPANSION JOINT	MJ	MECHANICAL JOINT	T	TELEPHONE
AD	AREA DRAIN	EL	ELEVATION	MON	MONUMENT	T&B	TOP AND BOTTOM
ACP	ASBESTOS CEMENT PIPE	ELEC	ELECTRIC, ELECTRICAL	MPOE	MAIN POINT OF ENTRY	TB	TOP OF BANK
AFF	ABOVE FINISH FLOOR	ELEV	ELEVATION	MW	MONITORING WELL	TBA	TO BE ABANDONED
AFG	ABOVE FINISH GRADE	ELB	ELBOW	MS	MOTION SENSOR	TBC	TOP BACK OF CURB
ALT	ALTERNATE	EN	EDGE NAIL	(N)	NEW	TBD	TO BE DETERMINED
ARCH	ARCHITECTURAL	EP	EDGE OF PAVEMENT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	TBR	TO BE REMOVED
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	EQ	EQUAL	NG	NATURAL GRADE	TD	TRENCH DRAIN
BC	BEGINNING OF CURVE	EQUIP	EQUIPMENT	NIC	NOT INCLUDED IN CONTRACT	TG	TOP GRATE
BD	BOARD	ESA	ENVIRONMENTAL SENSITIVE AREA	NTS	NOT TO SCALE	TOS	TOP OF STEEL
BDRY	BOUNDARY	ETW	EDGE TRAVELED WAY	OC	ON CENTER	TS	TUBE STEEL
BF	BUTTERFLY VALVE	EXC	EXCAVATION	OCC	OCCUPANCY	TW	TOP OF WALL
BLK	BLOCK	EXT	EXTERIOR	OD	OUTSIDE DIAMETER	TYP	TYPICAL
BM	BENCH MARK	F	FIRE	OG	ORIGINAL GROUND	UG	UNDERGROUND
BCC	BACK OF CURB	FACP	FIRE ALARM CONTROL PANEL	OH	OVERHEAD	UNO	UNLESS NOTED OTHERWISE
BTWN	BETWEEN	FD	FLOOR DRAIN	OSA	OUT SIDE AIR	USA	UNDERGROUND SERVICE ALERT
C	CHANNEL, CHAMBER	FEC	FIRE EXTINGUISHER CABINET	PL	PLATE (METAL), PROPERTY LINE	UTIL	UTILITY
C&G	CURB AND GUTTER	FF	FINISHED FLOOR	PA	PUBLIC ADDRESS SYSTEM	VB	VALVE BOX
CB	CATCH BASIN	FG	FINISHED GRADE	PB	PULL BOX	VCP	VITRIFIED CLAY PIPE
CCO	CONTRACT CHANGE ORDER	FH	FIRE HYDRANT	PC	PROPERTY CORNER	VERT	VERTICAL
CCR	CALIFORNIA CODE OF REGULATIONS	FL	FLOW LINE	PCC	PORTLAND CEMENT CONCRETE	W	WATER
CCS	CEMENT COATED STEEL	FLG	FLANGE	PD	PLANTER DRAIN	WD	WOOD
CF	CURB FACE, CUBIC FOOT	FMJA	FLANGE MECHANICAL JOINT ADAPTER	PE	POLYETHYLENE	WH	WATER HEATER
CHNL	CHANNEL	FND	FOUNDATION	PL	PROPERTY LINE	WL	WETLAND
CI	CAST IRON	FOB	FACE OF BLOCK, FACE OF BLDG	PP	POWER POLE	WM	WATER METER
CLF	CHAIN LINK FENCE	FOC	FACE OF CURB	PIP	PROTECT IN PLACE	WV	WATER VALVE
CL	CENTERLINE	FRP	FIBER REINFORCED PLASTIC	POC	POINT OF CONNECTION		
CJ	CONSTRUCTION JOINT	FS	FIRE SERVICE	PSI	POUNDS PER SQUARE INCH		
CL	CLEARANCE, CLASS	FT	FOOT, FEET	PTHF	PRESSURE TREATED HEM FIR		
CLR	CLEAR	FTG	FOOTING	PVC	POLYVINYL CHLORIDE		
CMU	CONCRETE MASONRY UNIT	M	GAS	QCV	QUICK COUPLING VALVE		
CO	CLEANOUT (SEWER)	GA	GAUGE	R	RADIUS		
COL	COLUMN	GALV	CALVANIZED	RC	RELATIVE COMPACTION		
CONC	CONCRETE	GL	GLUE LAM	REINF	REINFORCED OR REINFORCEMENT		
CONN	CONNECTION	GM	GAS METER	RG	RETAINER GLAND		
CONT	CONTINUOUS	GPM	GALLONS PER MINUTE	RJP	RESTRAINED JOINT PIPE		
CONTR	CONTRACTOR	GR	GRADE	RSP	ROCK SLOPE PROTECTION		
CONST	CONSTRUCTION	GV	GAS VALVE	RPP	REDUCED PRESSURE PRINCIPLE DEVICE (BACKFLOW)		
COORD	COORDINATE	GYP	GYPSPUM	RT	RIGHT		
COR	CORNER, CITY OF REDDING	HB	HOSE BIB	R/W	RIGHT OF WAY		
CORCS	CITY OF REDDING CONSTRUCTION STANDARDS	HC	HANDICAP	RW	RESILIENT WEDGE GATE VALVE		
CP	CONTROL POINT, COMPLETE PENETRATION	HDG	HOT DIPPED GALVANIZED	RWS	ROOT WATERING SYSTEM		
CPR	COPPER	HDR	HEADER	S	SLOPE		
CSP	CORRUGATED STEEL PIPE	HORIZ	HORIZONTAL	S	SLOPE		
CY	CUBIC YARD	HR	HOUR	S&P	SHELF AND POLE		
DBH	DIAMETER AT BREAST HEIGHT	HSS	HOLLOW STRUCTURAL SECTION	SD	STORM DRAIN		
DCV	DOUBLE CHECK VALVE	CH	HEIGHT	SF	SQUARE FOOT		
DF	DOUGLAS FIR	ID	INSIDE DIAMETER	SHD	SHOULDER		
DIA	DIAMETER	INT	INTERIOR	SIM	SIMILAR		
Ø	DIAMETER	IRR	IRRIGATION	SIG	SIGNAL		
DIP	DUCTILE IRON PIPE	JT	JOINT	SHT	SHEET		
DL	DEAD LOAD	L	LEFT	SJ	SAWN JOINT		
DS	DOWNSPOUT	LT	LIGHT	SS	SANITARY SEWER		
DWG	DRAWING	LB	POUND	STL	STEEL		
DWY	DRIVEWAY	LF	LINEAR FOOT	SQ	SQUARE		
(E)	EXISTING	LS	LUMP SUM, LANDSCAPE	STA	STATION		
E	ELECTRIC	LVL	LAMINATED VENEER LUMBER	STD	STANDARD		
EA	EACH	MATL	MATERIAL	STRUCT	STRUCTURAL OR STRUCTURE		
EC	END OF CURVE, EVAPORATIVE COOLER	MAX	MAXIMUM	STSMS	SELF TAPPING SHEET METAL SCREW		
		MB	MAIL BOX	SVC	SERVICE		
		MH	MANHOLE				

**LEGEND**

	EXISTING		NEW	- DRAINAGE SYSTEM
				- DRAINAGE UNIT
				- TELEPHONE POLE
				- JOINT POLE
				- POWER POLE
				- GUY WIRE
				- ELECTRIC MANHOLE
				- SANITARY SEWER MANHOLE
				- STORM DRAIN MANHOLE
				- TELEPHONE MANHOLE
				- TRANSFORMER
				- STORM DRAIN CATCH BASIN
				- MAILBOX
				- STREET NAME SIGN
				- TRAFFIC SIGN
				- STREET LIGHT
				- FIRE HYDRANT
				- VALVE
				- AIR RELIEF VALVE
				- METER
				- BLOW OFF
				- PROPERTY CORNER / SURVEY MARKER (DO NOT DISTURB)
				- CENTERLINE MONUMENT
				- CONTROL POINT
				- ELECTRIC LINE
				- GAS LINE
				- TELEPHONE LINE
				- WATER LINE
				- WATER LINE TO BE ABANDONED (TBA)
				- STORM DRAIN LINE
				- SANITARY SEWER LINE
				- OVERHEAD LINE
				- EASEMENT LINE
				- EDGE OF PAVEMENT
				- FENCE
				- RAILING (CABLE)
				- ENVIRONMENTALLY SENSITIVE AREA (ESA)
				- RIGHT-OF-WAY LINE
				- PROPERTY LINE
				- TEMPORARY CONSTRUCTION EASEMENT (TSE)
				- CATCH LINE FOR CUT AND FILL SLOPES
				- TREE (DECIDUOUS)
				- TREE (CONIFER)
				- BUSH / SHRUB
				- NEW ASPHALT PAVEMENT
				- CONC. (EXC.) EXISTING PAVING

NOTE:  
THIS IS A STANDARD LEGEND SHEET.  
THEREFORE SOME SYMBOLS & ABBREVIATIONS  
MAY BE SHOWN ON THIS SHEET BUT MAY NOT  
BE UTILIZED ON THE DRAWINGS OF THIS  
PROJECT.



DESIGNED BY  
J. ABSHIER

DRAWN BY  
W. DANIELS

REVIEWED BY



DESIGNED BY:  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS

BID. SCH. NO. XXXX

LEGEND AND ABBREVIATIONS

A-2

ORIGINAL SCALE:  
NONE

DATE: MAY 2014

A-1

SHEET 2 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF REDDING CONSTRUCTION STANDARDS (CORCS), THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, DATED 2009 (GREENBOOK), AND THE CONTRACT SPECIFICATIONS AS THEY PERTAIN TO THE WORK DEPICTED HEREIN. CORCS AS APPLIES TO THIS PROJECT SHALL BE THE CURRENT VERSION AS POSTED ON THE CITY OF REDDING WEBSITE, [www.ci.redding.ca.us/transeng/engineering/pwstdsearch.cfm](http://www.ci.redding.ca.us/transeng/engineering/pwstdsearch.cfm), AT THE TIME OF BID OPENING.
- ALL UTILITIES SHOWN ARE STRICTLY FOR THE CONVENIENCE OF THE CONTRACTOR. UTILITY LOCATIONS ARE ONLY APPROXIMATE AND THE CONTRACTOR IS ADVISED TO INVESTIGATE EACH UTILITY SHOWN AS WELL AS BE AWARE OTHER UTILITIES NOT SHOWN MAY EXIST. SEE USA NOTICE AT THE BOTTOM OF SHEET 1.
- PRIOR TO TRENCH EXCAVATION, THE CONTRACTOR SHALL POTHOLE ALL UTILITIES TO BE CROSSED TO VERIFY THAT NO GRADE CONFLICTS EXIST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING EXISTING UTILITY LINE PIPING IF GRADE CONFLICT OCCURS.
- ALL TRENCHING AND BACK FILLING SHALL BE IN ACCORDANCE WITH THE CITY OF REDDING CONSTRUCTION STANDARDS OR AS SHOWN IN THE CONSTRUCTION DETAILS ELSEWHERE IN THE PLANS. TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED. THE CONTRACTOR SHALL NOTIFY THE CITY OF REDDING ELECTRIC UTILITY PRIOR TO EXCAVATING CLOSER THAN EIGHT FEET TO AN EXISTING UTILITY POLE.
- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND TO PROVIDE FOR THE PROPER AND CONTINUOUS SAFE ROUTING OF VEHICLE AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA-MUTCD).
- FOR ALL TRENCHING EXCAVATIONS 5 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY (381 HEMSTED DRIVE, REDDING CA, 224-4743) PRIOR TO BEGINNING ANY EXCAVATION. A COPY OF THIS PERMIT SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING MAILBOXES OR PROVIDE ALTERNATE TEMPORARY MAILBOXES APPROVED BY THE U.S. POSTAL SERVICE.
- CARE SHALL BE TAKEN TO PROTECT EXISTING PLANTS, SHRUBS, TREES, LAWN, LANDSCAPE AREAS AND IRRIGATION SYSTEMS. ANY ITEMS REMOVED OR DAMAGED SHALL BE REPLACED. ALL ITEMS WHICH REQUIRE REMOVAL OR ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED TO ORIGINAL CONDITION AND TO THE APPROVAL OF THE ENGINEER.
- EXACT LIMITS OF PAVEMENT REMOVAL AND RECONSTRUCTION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE ASPHALT CONCRETE ALONG THE EDGES OF THE TRENCH SHALL BE SAWCUT AND REMOVED TO A STRAIGHT LINE PRIOR TO FINAL PAVING. EXPOSED VERTICAL EDGES WHICH WILL HAVE ASPHALT CONCRETE AGAINST THEM SHALL BE TACKED WITH EMULSION PRIOR TO PLACEMENT OF ASPHALT CONCRETE.

**WATER LINE NOTES**

- ALL WATER MAINS SHALL HAVE A MINIMUM OF 36" COVER UNLESS NOTED OTHERWISE.
- ALL THRUST BLOCKS FOR WATER PIPING SHALL BE PER DETAILS ON PLANS AND PER DETAILS ON PAGE 403.00 OF THE CITY OF REDDING CONSTRUCTION STANDARDS.
- USE PIPE JOINT DEFLECTION TO ACCOMMODATE BENDS FOR VERTICAL AND HORIZONTAL ALIGNMENT UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- ALL VALVES AND VALVE BOXES SHALL BE ADJUSTED TO FINISHED AG GRADE PER DETAILS ON PAGE 404.00 OF THE CITY OF REDDING CONSTRUCTION STANDARDS.
- CHLORINATION, TESTING, AND FLUSHING OF NEW LINES SHALL BE ACCOMPLISHED PRIOR TO TIE-IN TO EXISTING WATER SYSTEM PER CITY OF REDDING CONSTRUCTION STANDARDS PAGES 400.40 AND 400.50.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL WATER MAIN SHUTDOWNS WITH THE CITY OF REDDING WATER UTILITY A MINIMUM OF TWO WORKING DAYS IN ADVANCE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL WATER SERVICE CUSTOMERS A MINIMUM OF TWO WORKING DAYS IN ADVANCE OF ANY SHUTDOWN.
- THE CONTRACTOR SHALL MAINTAIN ALL WATER FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE NEW WATER IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.
- THE MAXIMUM LENGTH OF WATER SHUTDOWN TIME FOR ANY WATER UTILITY CUSTOMER SHALL BE LIMITED TO FOUR HOURS.

**RESTRAINED LENGTH CALCULATIONS:**

- JOINT RESTRAINT DEVICES SHALL BE USED IN LIEU OF THRUST BLOCKING FOR ALL PRESSURE MAIN AND APPURTENANCE INSTALLATIONS UNLESS PROJECT PLANS SPECIFICALLY REQUIRE THRUST BLOCKING.
- THE RESTRAINED LENGTHS SHOWN ON THE PLANS ARE VALID FOR THE FOLLOWING INSTALLATION CONDITIONS:

SOIL CLASSIFICATION: GW (ASTM STD. D2487): WELL GRADED GRAVELS AND GRAVEL-SAND MIXTURES,  
 TRENCH TYPE: TYPE 5 (ANSI/AWWA C150/A21.50 AND AWWA C605)  
 TEST PRESSURE: 150 PSI  
 SAFETY FACTOR: 2  
 DEPTH OF BURY: 36" MIN. FROM SURFACE TO TOP OF PIPE  
 PIPE TYPE: DUCTILE IRON

WHERE INSTALLATION CONDITIONS DO NOT MATCH THOSE LISTED ABOVE, THE RESTRAINED LENGTHS SHALL BE RECALCULATED TO SUIT THE ACTUAL SITE CONDITIONS. ALL REVISED CALCULATIONS SHALL BE MADE WITH A TEST PRESSURE OF 150 PSI MINIMUM AND A SAFETY FACTOR OF 2. REVISED RESTRAINED LENGTHS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PIPE INSTALLATION.

- ALL RESTRAINT FITTINGS SHALL BE FACTORY MANUFACTURED AND APPROVED FOR USE BY THE ENGINEER PRIOR TO PIPE INSTALLATION. THE FOLLOWING RESTRAINT FITTINGS HAVE BEEN PREQUALIFIED FOR USE WITH DUCTILE IRON PIPE:

MECHANICAL JOINT GLANDS: ROMAC INDUSTRIES 'ROMAGRIP' PIPE RESTRAINER (3" THRU 48")  
 EBAA IRON 'MEGALUG' SERIES 1100 (3" THRU 48")  
 SIGMA 'ONE LOK' SLD (3" THRU 48")  
 SMITH-BLAIR III SERIES  
 FLANGE / PLAIN END: ROMAC INDUSTRIES RESTRAINED FLANGED COUPLING ADAPTER (3" THRU 24")  
 EBAA SERIES 2100  
 BELL AND SPIGOT JOINTS: ROMAC MODEL 611 (4" THRU 12")  
 EBAA IRON SERIES 1700 (4" THRU 36")  
 SIGMA PVP (3" THRU 24")  
 SMITH-BLAIR 165 SERIES

- ALL MECHANICAL JOINT CONNECTIONS AT FITTINGS SHALL BE RESTRAINED.

**CITY OF REDDING CONSTRUCTION STANDARDS**

MATERIALS .....	PAGE 100.00
SIDEWALK STANDARD .....	PAGE 131.00
CURB AND GUTTER (6" VERTICAL) .....	PAGE 136.00
CURB RAMP TYPE 'A' .....	PAGE 141.10
CURB RAMP TYPE 'B' .....	PAGE 141.20
CURB RAMP TYPE 'C' .....	PAGE 141.30
DRIVEWAY (RESIDENTIAL) .....	PAGE 148.00
STREET NAME SIGN INSTALLATION .....	PAGE 152.00
STOP SIGN INSTALLATION .....	PAGE 152.01
STREET SIGN BASE DETAILS .....	PAGE 152.20
PAVEMENT MARKINGS TRAFFIC LINES .....	PAGE 171.00
PAVEMENT MARKINGS ARROWS .....	PAGE 172.00
MONUMENT COVER ASSEMBLY AND INSTALLATION .....	PAGE 184.00
DRAIN (UNDER SIDEWALK) .....	PAGE 190.00
CATCH BASIN NO. 3 .....	PAGE 230.00
CATCH BASIN FACE ANGLE DETAIL .....	PAGE 232.00
DETAIL OF BOLT SUPPORT FOR CATCH BASIN .....	PAGE 232.50
DETAIL OF REMOVABLE PROTECTION BAR FOR CATCH BASIN .....	PAGE 232.60
STANDARD OUTLET HEADWALL STRUCTURE .....	PAGE 270.00
24 INCH SEWER MANHOLE COVER ASSEMBLY .....	PAGE 364.20
WATER SYSTEM MATERIALS .....	PAGE 400.00
CHLORINATION - DISINFECTION .....	PAGE 400.40
WATER PRESSURE TEST .....	PAGE 400.50
VALVE OPERATION .....	PAGE 400.60
WATER SERVICE CONNECTION .....	PAGE 401.00
WATER VALVE DETAILS, PAVED & UNPAVED SURFACES .....	PAGE 404.00
TEMPORARY CONNECTION TO NEW WATER MAIN .....	PAGE 405.00
FIRE HYDRANT INSTALLATION .....	PAGE 421.00
REDUCED PRESSURE PRINCIPLE DEVICE (RPP) .....	PAGE 431.10
BACKFLOW DEVICE ENCLOSURE, 3/4" THRU 2" .....	PAGE 432.25
TYPICAL BLOW-OFF INSTALLATION .....	PAGE 450.00
COMBINATION AIR VALVE (CAV) AIR AND VACUUM - AIR RELEASE .....	PAGE 451.00
COMBINATION AIR VALVE (CAV) ENCLOSURE DETAIL .....	PAGE 451.10
PERMANENT COMMERCIAL UNDERGROUND SERVICE DIST. PEDESTALS.....	PAGE 507.20
LOCATING WIRE & WARNING TAPE .....	PAGE 608.00
TRENCH BACKFILL .....	PAGE 610.00
TRENCH RESURFACING DETAILS .....	PAGE 611.00
LANDSCAPE CONSTRUCTION CRITERIA .....	PAGE 760.00
SPRINKLER DETAIL (TYPE 1) .....	PAGE 765.10
QUICK COUPLING VALVE DETAIL .....	PAGE 768.00
REMOTE CONTROL VALVE (RCV) .....	PAGE 768.10
PLANTING DETAIL .....	PAGE 780.00
TREE STAKING DETAIL .....	PAGE 780.10
TREE ROOT BARRIER DETAIL .....	PAGE 776.00
SLOPE PLANTING DETAIL .....	PAGE 781.00

**CALTRANS STANDARD PLANS**

CONCRETE CURB .....	PAGE A87A
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NOTE:  
 THESE LISTS OF CITY OF REDDING CONSTRUCTION STANDARDS AND CALTRANS STANDARDS ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. OTHER CONSTRUCTION STANDARDS NOT LISTED MAY APPLY TO THIS PROJECT.

**PRELIMINARY PLANS  
 SUBJECT TO REVISION**

**REDUCED  
 PLANS**



DESIGNED BY: J. ABSHIER  
 DRAWN BY: W. DANIELS  
 REVIEWED BY:



DESIGNED BY:  
 PROJECT ENGINEER

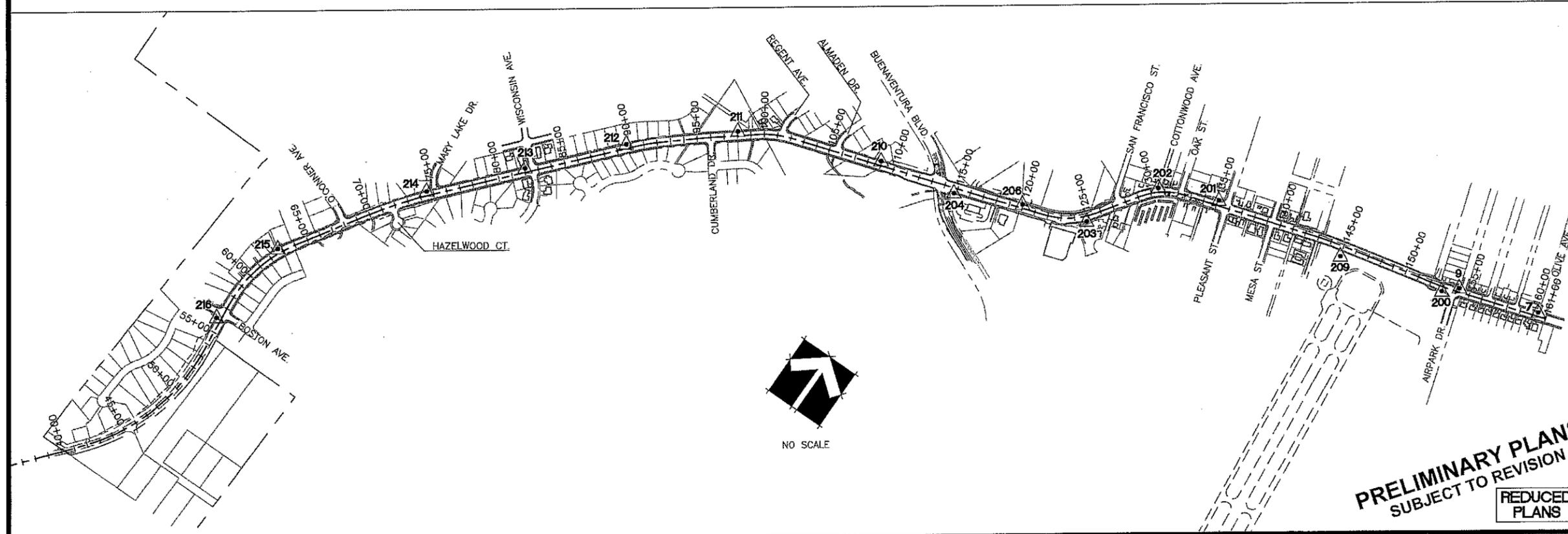
**CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT**

PLACER STREET IMPROVEMENTS  
 JOB NO. 2336  
 BID SCH. NO. XXXX  
 NOTES

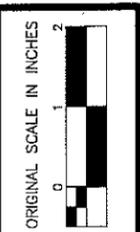
A-3  
 ORIGINAL SCALE:  
 NONE  
 DATE: MAY 2014  
 N-1  
 SHEET 3 OF 79

CONTROL POINT TABLE						
CP No.	Elevation	Northing	Easting	Description	Station	L/R
7	698.19	2094497.09	6449564.85	COR WASHER	160+33.4	28.2' L
9	708.58	2094309.29	6448976.52	COR WASHER	154+99.0	28.2' L
214	788.99	2090541.64	6442239.87	COR WASHER	74+51.7'	32.5' L
215	756.73	2089563.60	6441575.15	COR WASHER	62+76.5'	32.5' L
216	742.26	2088888.14	6441496.43	COR WASHER	56+03.9'	34.9' L
200	710.85	2094216.90	6448881.50	COR WASHER	152+99.0	32.8' R
201	725.76	2093828.87	6447132.35	COR WASHER	135+08.6	38.2' L
202	727.18	2093648.47	6446706.90	COR WASHER	130+55.9	31.4' L
203	717.67	2093142.56	6446408.94	COR WASHER	124+82.3	38.8' R
204	732.66	2092756.17	6445475.73	COR WASHER	114+81.5	36.8' R
206	718.36	2092975.18	6445943.14	COR WASHER	119+93.5	27.5' L
209	703.10	2094004.26	6448114.36	REBAR W/COR CAP	145+04.9	75.9' R
210	730.22	2092643.78	6444893.91	COR WASHER	108+93.0	32.6' L
211	724.11	2092219.60	6443890.23	COR WASHER	98+04.3	32.5' L
212	759.19	2091671.48	6443260.38	COR WASHER	89+73.6	32.5' L
213	772.60	2091100.21	6442747.39	COR WASHER	82+05.9	30.0' L

Note: Contractor shall not disturb control points or property corners during construction activities.



**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED PLANS



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
PROJECT CONTROL  
JOB NO. 2336  
RID. SCH. NO. XXXX

A-4  
ORIGINAL SCALE:  
NO SCALE  
DATE: MAY 2014  
PC-1  
SHEET 4 OF 79

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
PROJECT ITEMS			
	PREPARE SWPPP	LS	1
	WATER POLLUTION CONTROL	LS	1
	FENCE (TEMPORARY, TYPE ESA)	LF	400
	SURVEYING (CONSTRUCTION)	LS	1
	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1
	MOBILIZATION	LS	1
	CLEAR AND GRUB	LS	1
	TRAFFIC CONTROL	LS	1
	TRENCH SHEETING AND SHORING	LS	1
	PROJECT FUNDING SIGN	EA	1
	CONSTRUCTION AREA SIGNS	EA	52
ROADWAY ITEMS			
	EXCAVATION (UNCLASSIFIED)	CY	6,500
	ASPHALT CONCRETE	TON	9,278
	SLURRY SEAL	SY	14,750
	COLD MILL ASPHALT CONCRETE	SF	119,574
	AGGREGATE BASE (CLASS 2)	CY	2,220
	SHOULDER BACKING	LF	2940
	PAVEMENT FABRIC	SY	71,720
CONCRETE ITEMS			
	CURB AND GUTTER (6" VERTICAL)	LF	6,350
	SIDEWALK (4" PCC)	SF	48,450
	SIDEWALK (6" PCC)	SF	2,847
	CONCRETE (4" DECO)	SF	10,950
	CONCRETE (6" DECO)	SF	245
	CONCRETE (4")	SF	343
	DRIVEWAY (RESIDENTIAL)	SF	2,211
	DRIVEWAY (RESIDENTIAL DEPRESSED)	SF	1,989
	CONCRETE CURB RAMP	SF	3,830
	CROSS GUTTER	SF	965
	BUS TURNOUT	SF	4,622
	CONCRETE CURB (A1-6, MODIFIED)	LF	198
	CONCRETE CURB (B1-6, MODIFIED)	LF	79
	CONCRETE CURB (18")	LF	131
	CONCRETE CURB (6")	LF	16
	DETECTABLE WARNING SURFACE	EA	2
	REMOVE CONCRETE	SF	22,360
RETAINING WALL (HIGHLAND DR)			
	EXCAVATION (STRUCTURE-RETAINING WALL)	CY	181
	STRUCTURE FILL (CONTROLLED LOW-STRENGTH MATERIAL)	CY	82
	RETAINING WALL (CONCRETE)	CY	104
	BACKFILL (STRUCTURE)	CY	1300
RETAINING WALL (O'CONNOR AVE)			
	EXCAVATION (STRUCTURE-RETAINING WALL)	CY	369
	STRUCTURE FILL (CONTROLLED LOW-STRENGTH MATERIAL)	CY	104
	RETAINING WALL (CONCRETE)	CY	132
	BACKFILL (STRUCTURE)	CY	270
DRAINAGE ITEMS			
	DRAIN (UNDER SIDEWALK)	EA	2
	STORM DRAIN PIPE (15" HDPE)	LF	401
	STORM DRAIN PIPE (18" HDPE)	LF	81
	STORM DRAIN PIPE (18" RCP)	LF	10
	STORM DRAIN PIPE (24" HDPE)	LF	134
	STORM DRAIN PIPE (24" RCP)	LF	22
	STORM DRAIN PIPE (30" HDPE)	LF	310
	STORM DRAIN PIPE (30" RCP)	LF	6
	FLARED END SECTION (18" RCP)	EA	1
	STORM DRAIN FITTING (15" HDPE 11.25' BEND)	EA	4
	STORM DRAIN FITTING (15" HDPE 22.50' BEND)	EA	1
	CATCH BASIN NO.3	EA	5
	CATCH BASIN NO.4	EA	1
	CATCH BASIN NO.3 (MODIFIED)	EA	3
	REPLACE CATCH BASIN TOP	EA	1
	HEADWALL (24" OUTLET)	EA	2
	HEADWALL (30" INLET)	EA	1
	MANHOLE (STORM DRAIN, TYPE 1-4')	EA	2
	MANHOLE (STORM DRAIN, TYPE 1-6')	EA	1
	ROCK SLOPE PROTECTION (FACING, METHOD B)	TON	58
	ROCK SLOPE PROTECTION (FABRIC)	SY	62
	REMOVE AREA DRAIN	EA	1
	REMOVE MANHOLE	EA	1
	REMOVE STORM DRAIN PIPE	EA	44
	REMOVE CATCH BASIN	EA	1

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
WATER ITEMS			
	WATER MAIN (6" PVC CLASS 150)	LF	54
	WATER MAIN (6" DIP)	LF	22
	WATER MAIN (8" PVC CLASS 150)	LF	1,617
	WATER MAIN (8" DIP)	LF	82
	WATER MAIN (12" DIP)	LF	4,004
	WATER MAIN (16" DIP)	LF	710
	WATER MAIN (18" DIP)	LF	6
	VALVE (12" BUTTERFLY)	EA	20
	VALVE (16" BUTTERFLY)	EA	4
	VALVE (18" BUTTERFLY)	EA	6
	VALVE (4" RESILIENT WEDGE GATE)	EA	1
	VALVE (6" RESILIENT WEDGE GATE)	EA	1
	VALVE (8" RESILIENT WEDGE GATE)	EA	27
	VALVE (BLOW OFF)	EA	3
	VALVE (AIR RELIEF)	EA	3
	ABANDON VALVE	EA	41
	RECONNECT WATER SERVICE (1")	EA	32
	RECONNECT WATER SERVICE (2")	EA	2
	RECONNECT WATER SERVICE (4")	EA	1
	WATER METER	EA	2
	WATER SERVICE (1")	EA	4
	RELOCATE WATER METER	EA	12
	FIRE HYDRANT ASSEMBLY	EA	12
	REPLACE FIRE HYDRANT	EA	2
	SALVAGE FIRE HYDRANT	EA	13
SEWER ITEMS			
	REPLACE MANHOLE COVER (SS)	EA	10
SIGN, STRIPE AND MARKING ITEMS			
	PAVEMENT MARKING (THERMOPLASTIC)	SF	4,687
	REMOVE PAVEMENT MARKING	SF	4,222
	REMOVE TRAFFIC STRIPE (WHITE)	LF	22,011
	REMOVE TRAFFIC STRIPE (YELLOW)	LF	34,630
	TRAFFIC STRIPE (4" THERMOPLASTIC)	LF	47,458
	TRAFFIC STRIPE (6" THERMOPLASTIC)	LF	15,038
	TRAFFIC STRIPE (8" THERMOPLASTIC)	LF	14,243
	PAVEMENT MARKER	EA	1,544
	INSTALL SIGN	EA	36
	REMOVE SIGN	EA	35
	RELOCATE SIGN	EA	23
	CURB MARKING (RED)	LF	100
	BEACON (RECTANGULAR RAPID FLASHING)	EA	2
	OBJECT MARKER (TYPE K-1)	EA	2
	MEDIAN BARRIER (MODULAR CURB)	LF	78
TRAFFIC SIGNAL ITEMS			
	SIGNAL CONDUIT (WISCONSIN AVE)	LS	1
	PULL BOX (2E) (WISCONSIN AVE)	EA	8
	MODIFY TRAFFIC SIGNAL (PLEASANT ST)	LS	1
	MODIFY TRAFFIC SIGNAL (AIRPARK DR)	LS	1
ELECTRIC ITEMS			
	ELECTRIC SERVICE PEDESTAL	EA	3
	CONDUIT (2" PVC)	LF	3345
	CONDUIT (4" PVC)	LF	385
	CONDUIT (6" PVC)	LF	170
	CONDUCTOR (#6)	LF	4065
	CONDUCTOR (1/0 TRIPLEX SECONDARY)	LF	1015
	ELECTRIC SPLICE BOX (2E)	EA	3
	ELECTRIC SPLICE BOX (3E)	EA	5
	REMOVE STREET LIGHT	EA	1
	STREET LIGHT (25' STD & LUMINAIRE)	EA	5
	STREET LIGHT (35' STD & LUMINAIRE)	EA	10
LANDSCAPE ITEMS			
	TREE (15' CALLON)	EA	17
	TREE (24" BOX)	EA	98
	MULCH	CY	240
	BARRIER (ROOT)	EA	375
IRRIGATION ITEMS			
	CHECK VALVE (IN-LINE)	EA	12
	MASTER CONTROL VALVE	EA	3
	BALL VALVE	EA	3
	VALVE (QUICK COUPLING)	EA	3
	REDUCED PRESSURE PRINCIPLE DEVICE (1")	EA	2
	IRRIGATION CONTROLLER ASSEMBLY	EA	3

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
	IRRIGATION CONTROL VALVE	EA	6
	IRRIGATION BUBBLER	EA	230
	PVC PIPE (0.75")	LF	1,000
	PVC PIPE (1")	LF	1,585
	PVC PIPE (1.5")	LF	2,300
	PVC PIPE (2")	LF	660
	PVC SLEEVE (6" SCH. 40)	LF	500
MISCELLANEOUS ITEMS			
	MONUMENT (CENTERLINE)	EA	2
	FENCE (4' VINYL COATED CHAIN LINK)	LF	370
	RAILING (CABLE)	LF	12
	ADJUST MANHOLE	EA	20
	ADJUST VALVE	EA	69
	ADJUST MONUMENT	EA	20
	RESET MAILBOX	EA	5
	ADJUST PULL BOX	EA	9
	RELOCATE PULL BOX	EA	2
	RESET WATER METER BOX	EA	2



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
CITY OF REDDING  
PROJECT ENGINEER

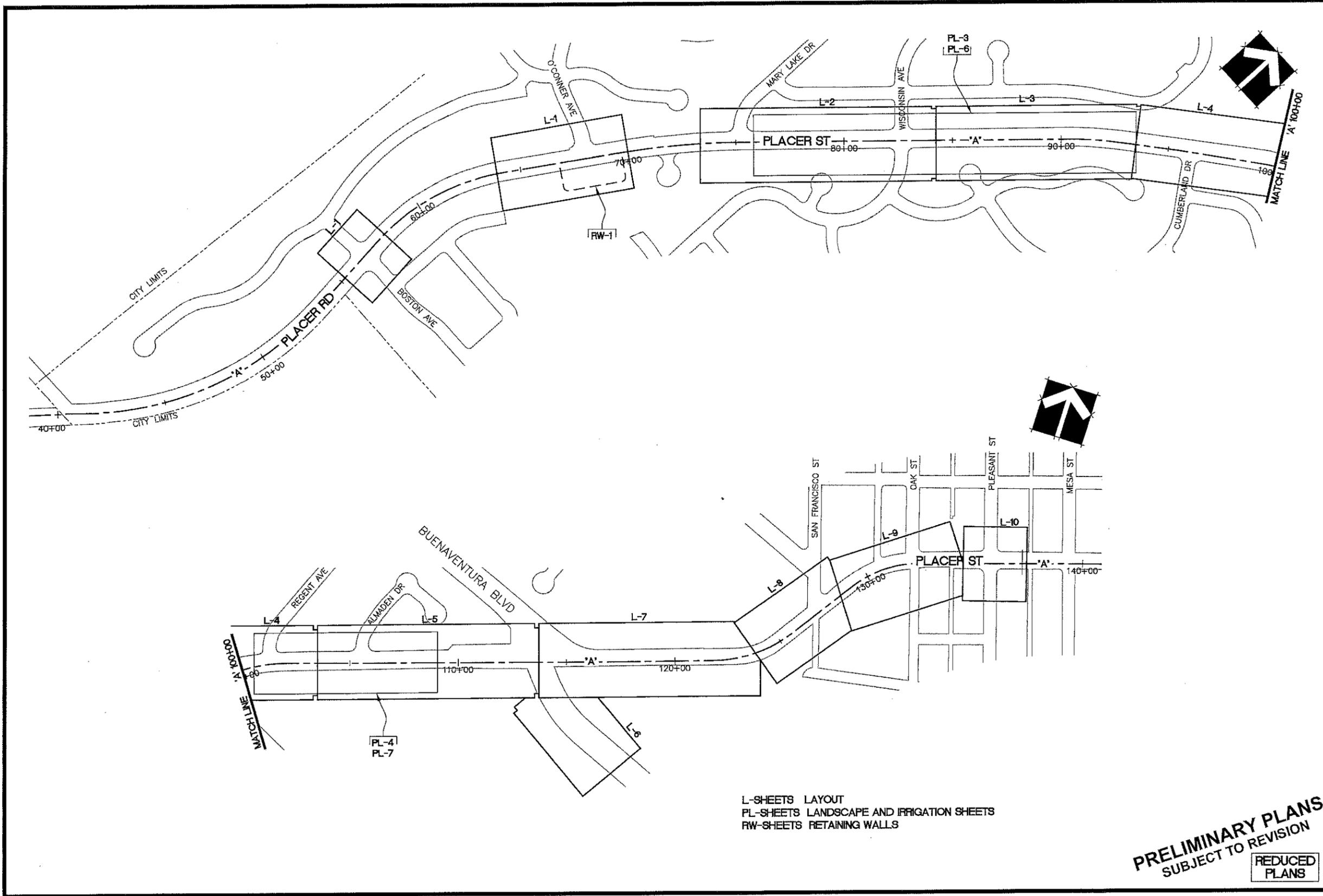
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
QUANTITIES  
JOB NO. 2336  
BID. SCH. NO. XXXX

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**

A-5  
ORIGINAL SCALE:  
NONE  
DATE: MAY 2014  
Q-1  
SHEET 5 OF 79

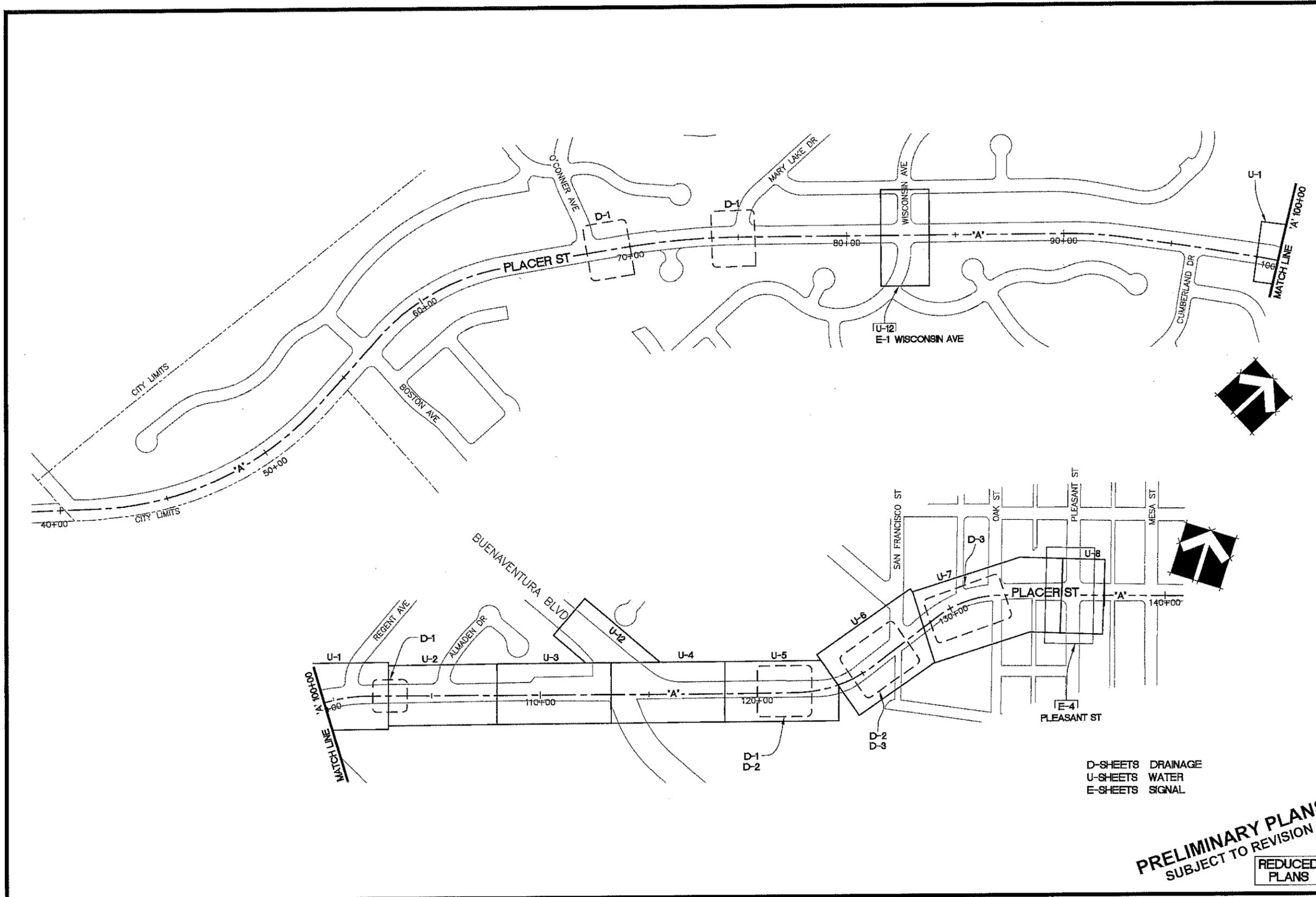


L-SHEETS LAYOUT  
 PL-SHEETS LANDSCAPE AND IRRIGATION SHEETS  
 RW-SHEETS RETAINING WALLS

**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

REDUCED  
 PLANS

ORIGINAL SCALE IN INCHES 
DESIGNED BY: J ABSHIER DRAWN BY: W DANIELS REVIEWED BY:
DESIGNED BY: PROJECT ENGINEER
CITY OF REDDING PUBLIC WORKS DEPARTMENT
PLACER STREET IMPROVEMENTS KEY MAP JOB NO. 2336 BID. SCH. NO. XXXX
A-6 ORIGINAL SCALE: NOT TO SCALE DATE: MAY 2014
K-1 SHEET 6 OF 78

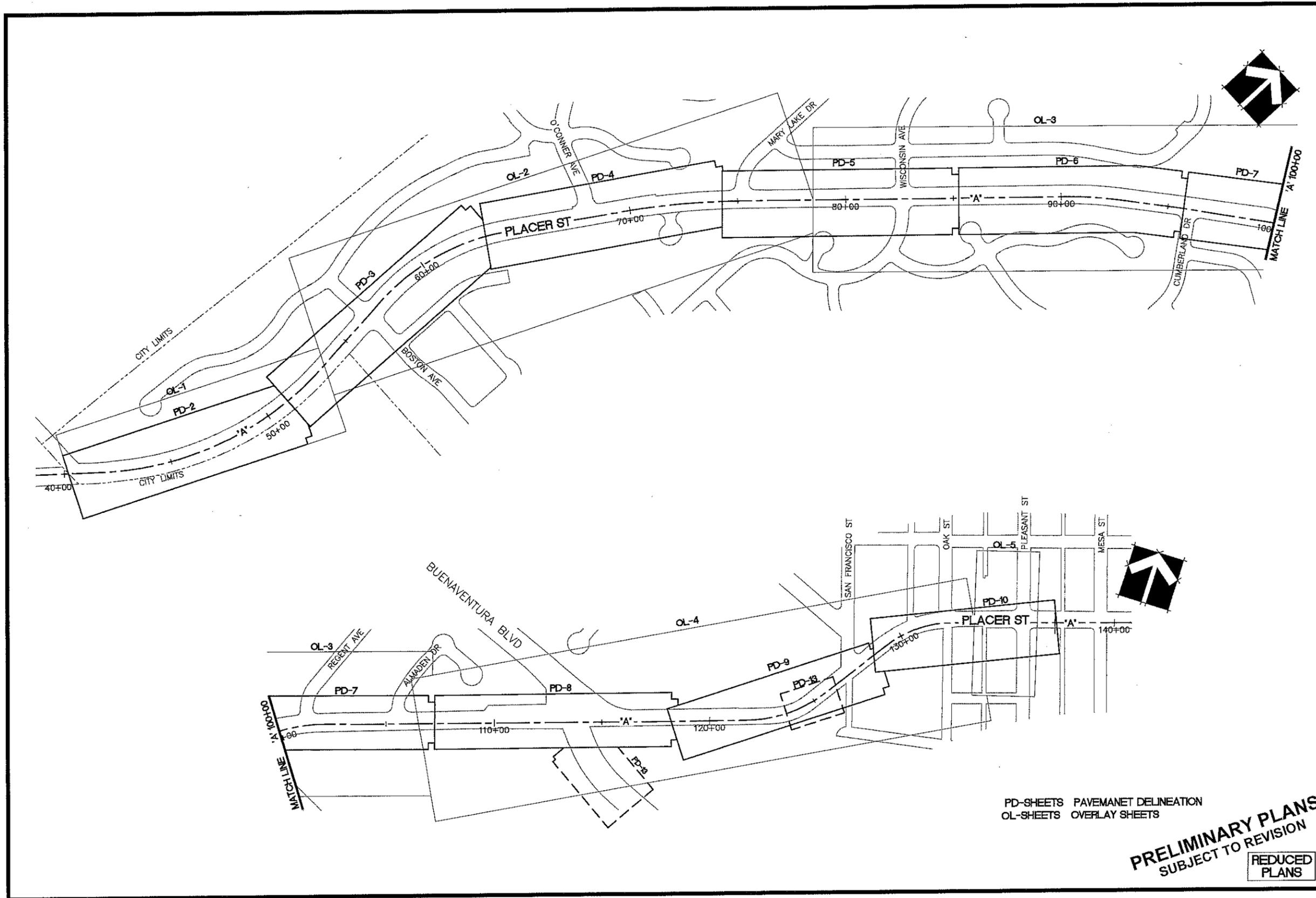


D-SHEETS DRAINAGE  
 U-SHEETS WATER  
 E-SHEETS SIGNAL

**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

REDUCED PLANS

ORIGINAL SCALE IN INCHES 
DESIGNED BY: J. ABSHIER DRAWN BY: W. DANIELS REVIEWED BY:
DESIGNED BY: PROJECT ENGINEER
CITY OF REDDING PUBLIC WORKS DEPARTMENT
PLACER STREET IMPROVEMENTS JOB NO. 2356 BID SHT. NO. XXXX KEY MAP
A-7 ORIGINAL SCALE: NOT TO SCALE DATE: MAY 2014 K-2 SHEET 7 OF 79



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

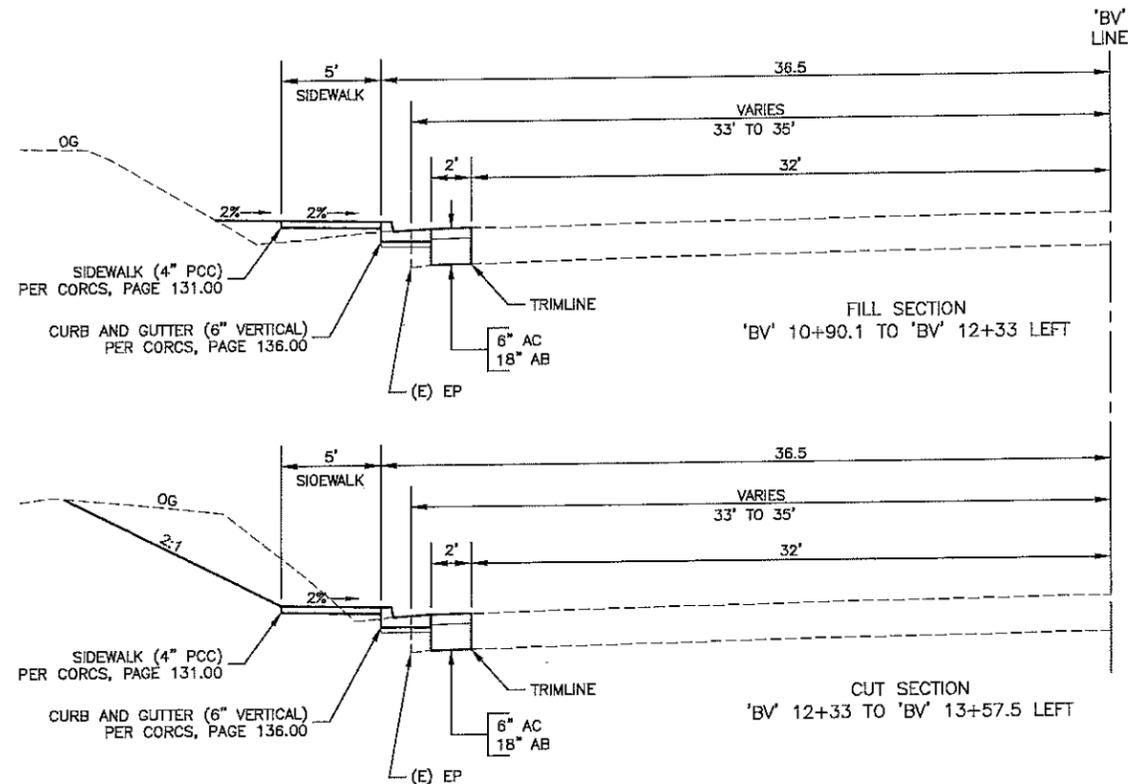
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
JOB NO. 2336  
BID SCH NO. XXXX  
KEY MAP

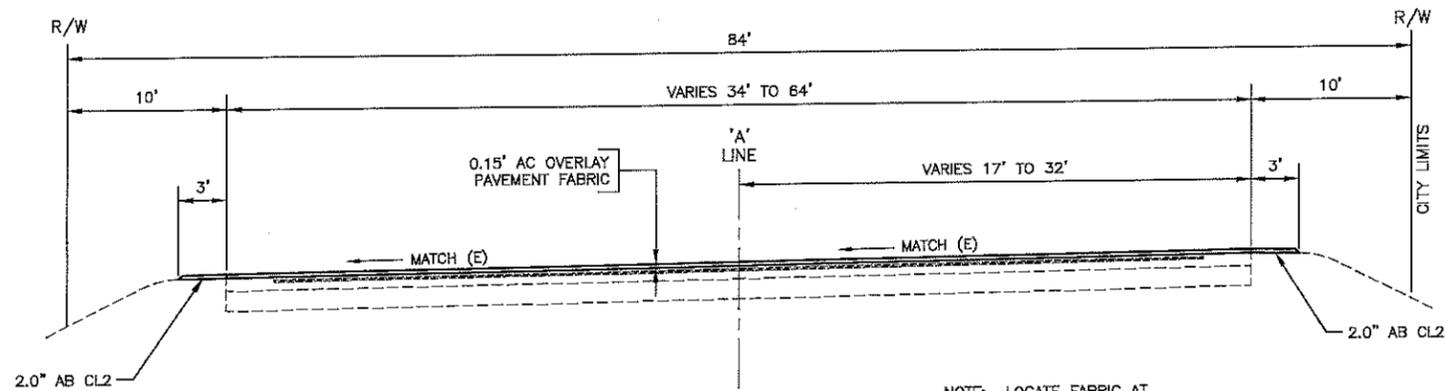
A-8  
ORIGINAL SCALE  
NOT TO SCALE  
DATE: MAY 2014  
K-3  
SHEET 8 OF 79

PD-SHEETS PAVEMENT DELINEATION  
OL-SHEETS OVERLAY SHEETS

**PRELIMINARY PLANS**  
SUBJECT TO REVISION  
**REDUCED PLANS**

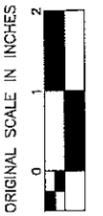


**BUENAVENTURA BLVD TYPICAL SECTION**



**PLACER RD**  
'A' 40+20 TO 'A' 54+80

NOTE: LOCATE FABRIC AT CENTER OF LANE TYPICAL



DESIGNED BY  
J. ABSEHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



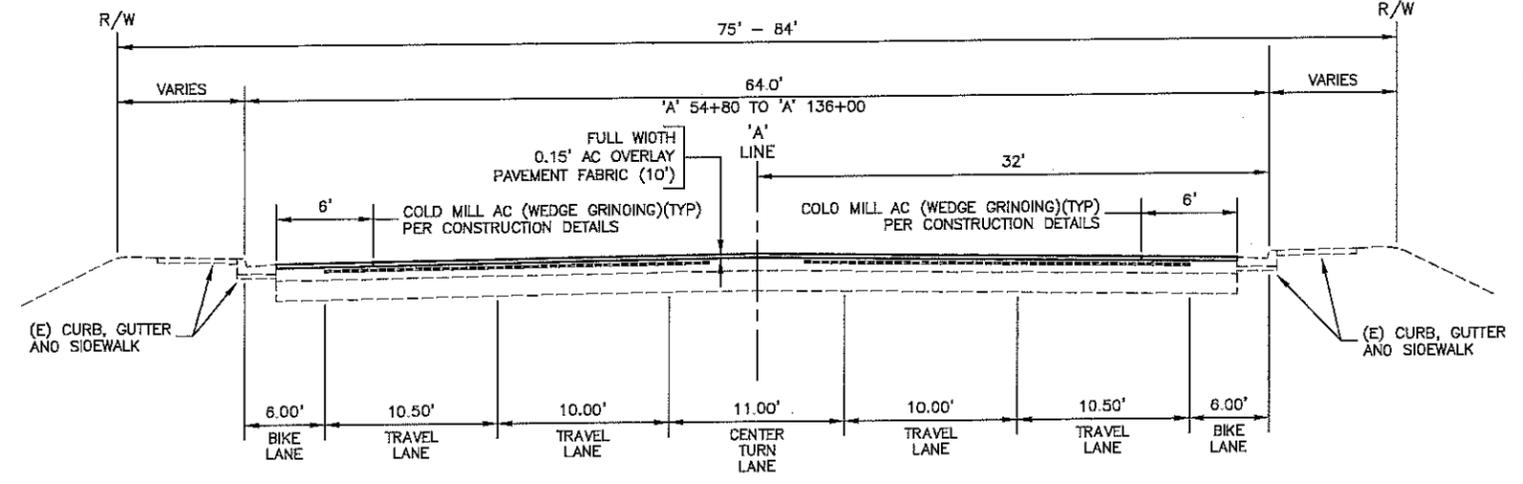
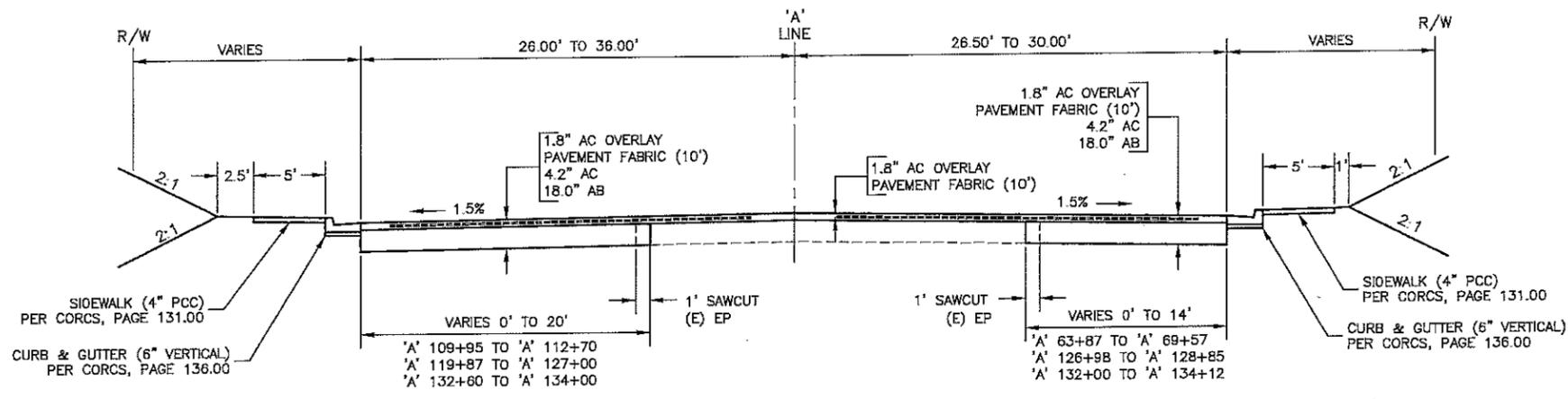
DESIGNED BY:  
PROJECT ENGINEER

**CITY OF REDDING**  
**PUBLIC WORKS DEPARTMENT**

**PLACER STREET IMPROVEMENTS**  
TYPICAL SECTIONS  
JOB NO. 2336  
BID. SCH. NO. XXXX

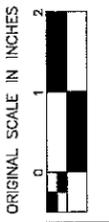
A-9  
ORIGINAL SCALE:  
NONE  
DATE: MAY 2014  
**X-1**  
SHEET 9 OF 79

**PRELIMINARY PLANS**  
SUBJECT TO REVISION  
**REDUCED PLANS**



**PLACER ST/RD**  
'A' 54+80 TO 'A' 136+00

NOTE: LOCATE FABRIC AT CENTER OF LANE, TYPICAL.



DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:



DESIGNED BY: PROJECT ENGINEER

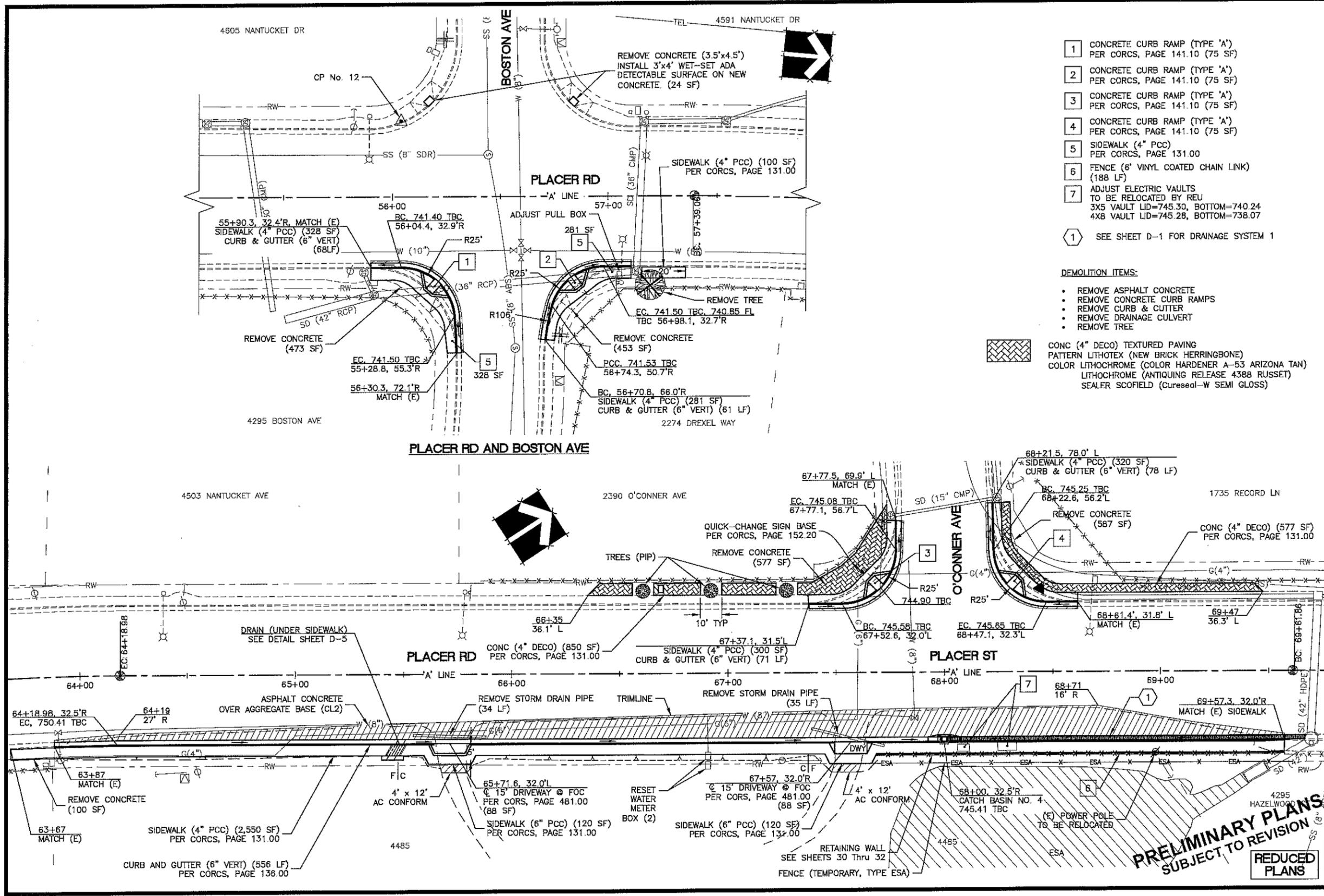
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
JOB NO. 2536  
TYPICAL SECTIONS  
BID SCH. NO. XXXX

A-10  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
X-2  
SHEET 10 OF 79

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

REDUCED PLANS



- 1 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
  - 2 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
  - 3 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
  - 4 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
  - 5 SIDEWALK (4" PCC) PER CORCS, PAGE 131.00 (188 LF)
  - 6 FENCE (6" VINYL COATED CHAIN LINK) (188 LF)
  - 7 ADJUST ELECTRIC VAULTS TO BE RELOCATED BY RELU 3X5 VAULT LID=745.30, BOTTOM=740.24 4X8 VAULT LID=745.28, BOTTOM=738.07
- ① SEE SHEET D-1 FOR DRAINAGE SYSTEM 1

**DEMOLITION ITEMS:**

- REMOVE ASPHALT CONCRETE
- REMOVE CONCRETE CURB RAMP
- REMOVE CURB & CUTTER
- REMOVE DRAINAGE CULVERT
- REMOVE TREE

CONC (4" DECO) TEXTURED PAVING  
 PATTERN LITHOTEX (NEW BRICK HERRINGBONE)  
 COLOR LITHOCHROME (COLOR HARDENER A-53 ARIZONA TAN)  
 LITHOCHROME (ANTIQUING RELEASE 4388 RUSSET)  
 SEALER SCOFIELD (Cureseal-W SEMI GLOSS)

ORIGINAL SCALE IN INCHES  
 2  
 1  
 0

DESIGNED BY: J. ABSHIER  
 DRAWN BY: W. DANIELS  
 REVIEWED BY:

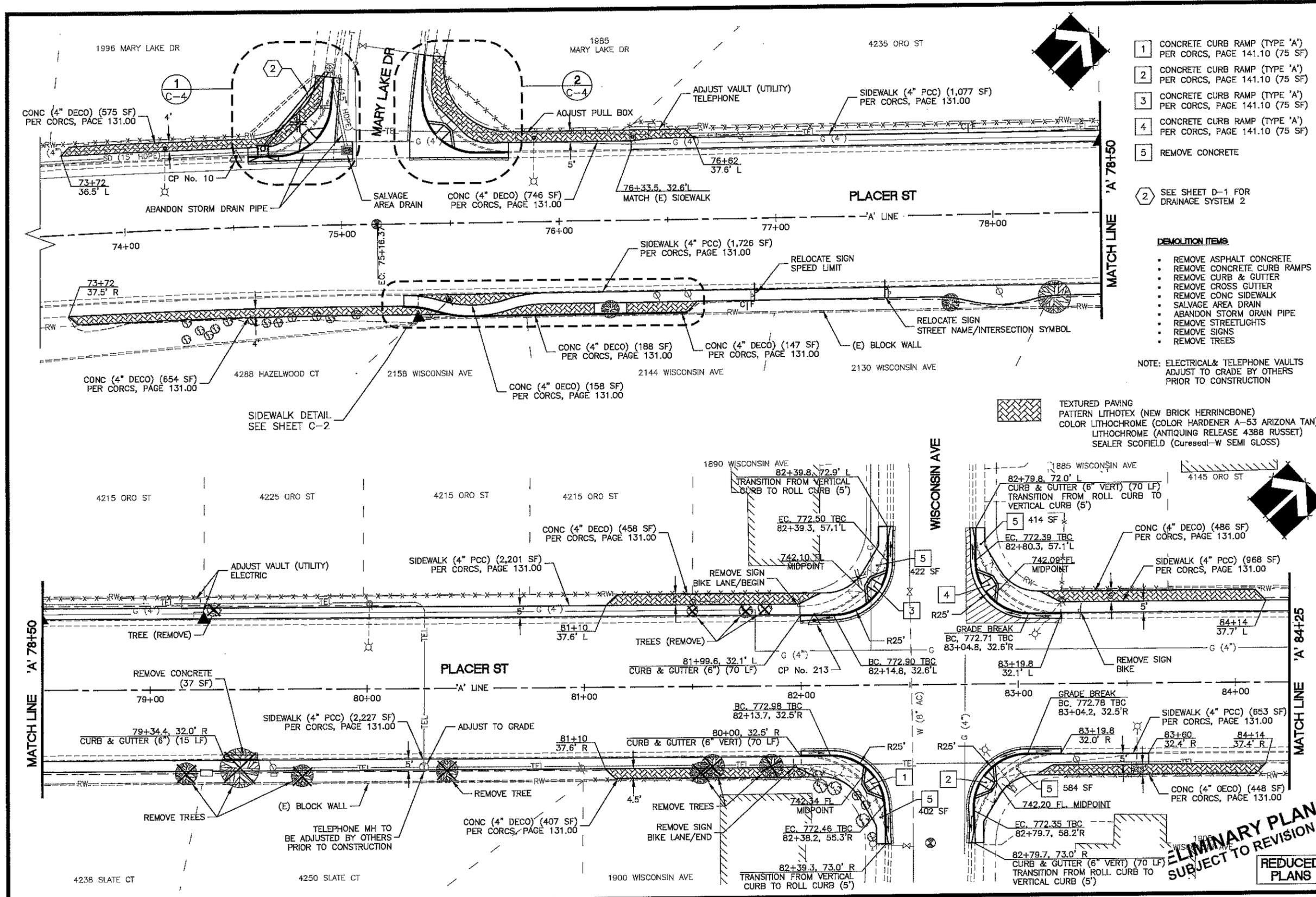
CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
 LAYOUT

JOB NO. 2336  
 BID. SCHED. NO. 2222

A-11  
 ORIGINAL SCALE: 1"=20'  
 DATE: MAY 2014  
 L-1  
 SHEET 11 OF 79

**PRELIMINARY PLANS  
 SUBJECT TO REVISION  
 REDUCED PLANS**

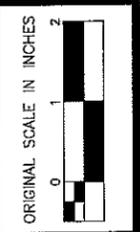


- 1 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
- 2 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
- 3 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
- 4 CONCRETE CURB RAMP (TYPE 'A') PER CORCS, PAGE 141.10 (75 SF)
- 5 REMOVE CONCRETE
- 6 SEE SHEET D-1 FOR DRAINAGE SYSTEM 2

- DEMOLITION ITEMS**
- REMOVE ASPHALT CONCRETE
  - REMOVE CONCRETE CURB RAMPS
  - REMOVE CURB & GUTTER
  - REMOVE CROSS GUTTER
  - REMOVE CONC SIDEWALK
  - SALVAGE AREA DRAIN
  - ABANDON STORM DRAIN PIPE
  - REMOVE STREETLIGHTS
  - REMOVE SIGNS
  - REMOVE TREES

NOTE: ELECTRICAL & TELEPHONE VAULTS ADJUST TO GRADE BY OTHERS PRIOR TO CONSTRUCTION

TEXTURED PAVING  
 PATTERN LITHOTEX (NEW BRICK HERRINGBONE)  
 COLOR LITHOCHROME (COLOR HARDENER A-53 ARIZONA TAN)  
 LITHOCHROME (ANTIQUING RELEASE 4388 RUSSET)  
 SEALER SCOFIELD (Cureseal-W SEMI GLOSS)



DESIGNED BY J. ABSHIER  
 DRAWN BY W. DANIELS  
 REVIEWED BY



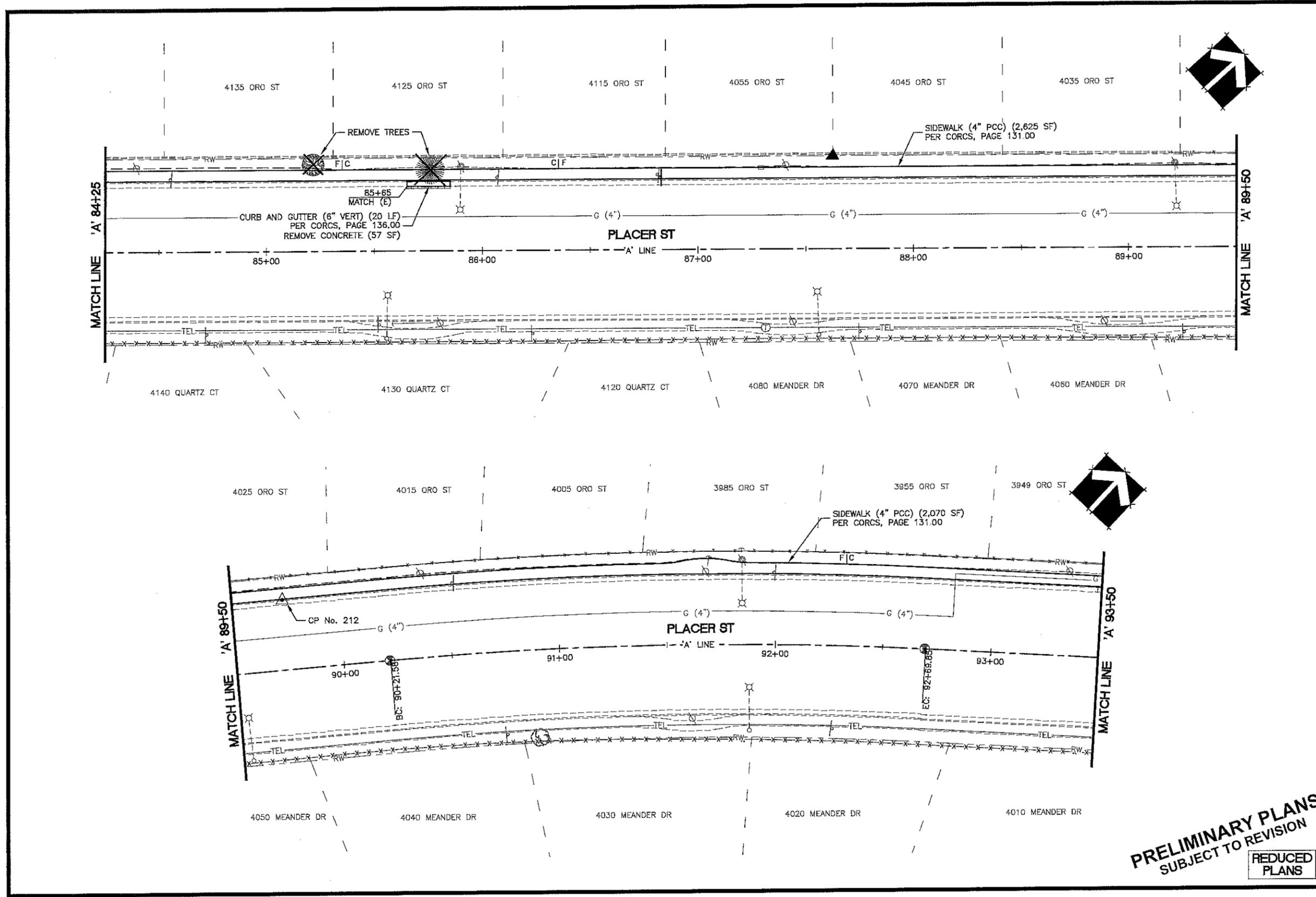
DESIGNED BY  
 DRAWN BY  
 REVIEWED BY  
 PROJECT ENGINEER

CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
 LAYOUT  
 JOB NO. 2335  
 BID. SICH. NO. XXXX

A-12  
 ORIGINAL SCALE:  
 1"=20'  
 DATE: MAY 2014  
 L-2  
 SHEET 12 OF 79

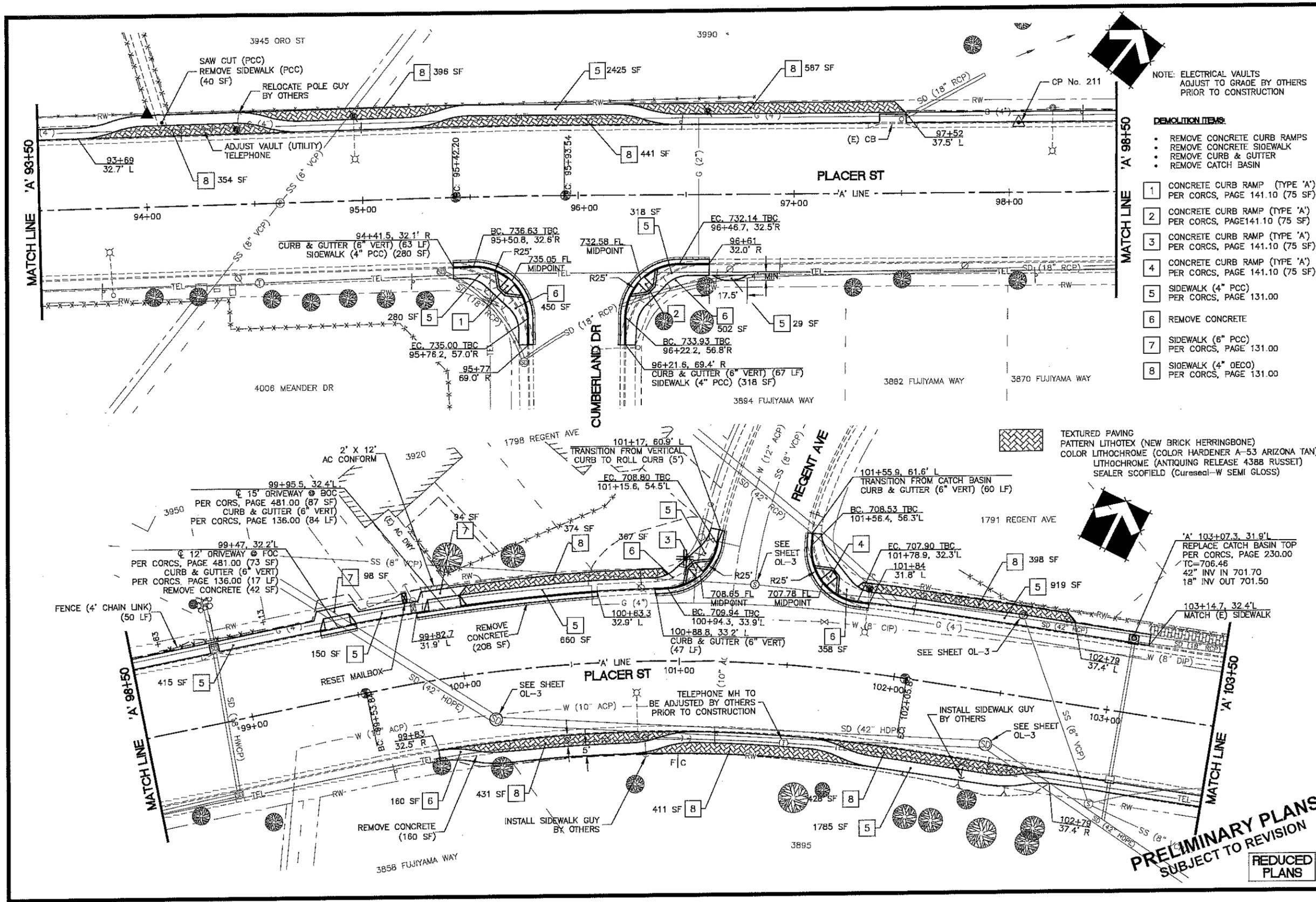
**ELIMINARY PLANS  
 SUBJECT TO REVISION  
 REDUCED PLANS**



**PRELIMINARY PLANS  
SUBJECT TO REVISION**

REDUCED  
PLANS

ORIGINAL SCALE IN INCHES 
DESIGNED BY: J. ABSHIER DRAWN BY: W. DANIELS REVIEWED BY:
DESIGNED BY: PROJECT ENGINEER
CITY OF REDDING PUBLIC WORKS DEPARTMENT
PLACER STREET IMPROVEMENTS LAYOUT BID. SICH. NO. XXXX JOB NO. 2336
A-13 ORIGINAL SCALE: 1"=20' DATE: MAY 2014 L-3 SHEET 13 OF 79

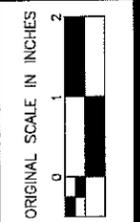


NOTE: ELECTRICAL VAULTS  
ADJUST TO GRADE BY OTHERS  
PRIOR TO CONSTRUCTION

**DEMOLITION ITEMS:**

- REMOVE CONCRETE CURB RAMP
  - REMOVE CONCRETE SIDEWALK
  - REMOVE CURB & GUTTER
  - REMOVE CATCH BASIN
- 1 CONCRETE CURB RAMP (TYPE 'A')  
PER CORCS, PAGE 141.10 (75 SF)
  - 2 CONCRETE CURB RAMP (TYPE 'A')  
PER CORCS, PAGE 141.10 (75 SF)
  - 3 CONCRETE CURB RAMP (TYPE 'A')  
PER CORCS, PAGE 141.10 (75 SF)
  - 4 CONCRETE CURB RAMP (TYPE 'A')  
PER CORCS, PAGE 141.10 (75 SF)
  - 5 SIDEWALK (4" PCC)  
PER CORCS, PAGE 131.00
  - 6 REMOVE CONCRETE
  - 7 SIDEWALK (6" PCC)  
PER CORCS, PAGE 131.00
  - 8 SIDEWALK (4" DECO)  
PER CORCS, PAGE 131.00

TEXTURED PAVING  
PATTERN LITHOTEX (NEW BRICK HERRINGBONE)  
COLOR LITHOCHROME (COLOR HARDENER A-53 ARIZONA TAN)  
LITHOCHROME (ANTIQUING RELEASE 4388 RUSSET)  
SEALER SCOFIELD (Cureseal-W SEMI GLOSS)



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



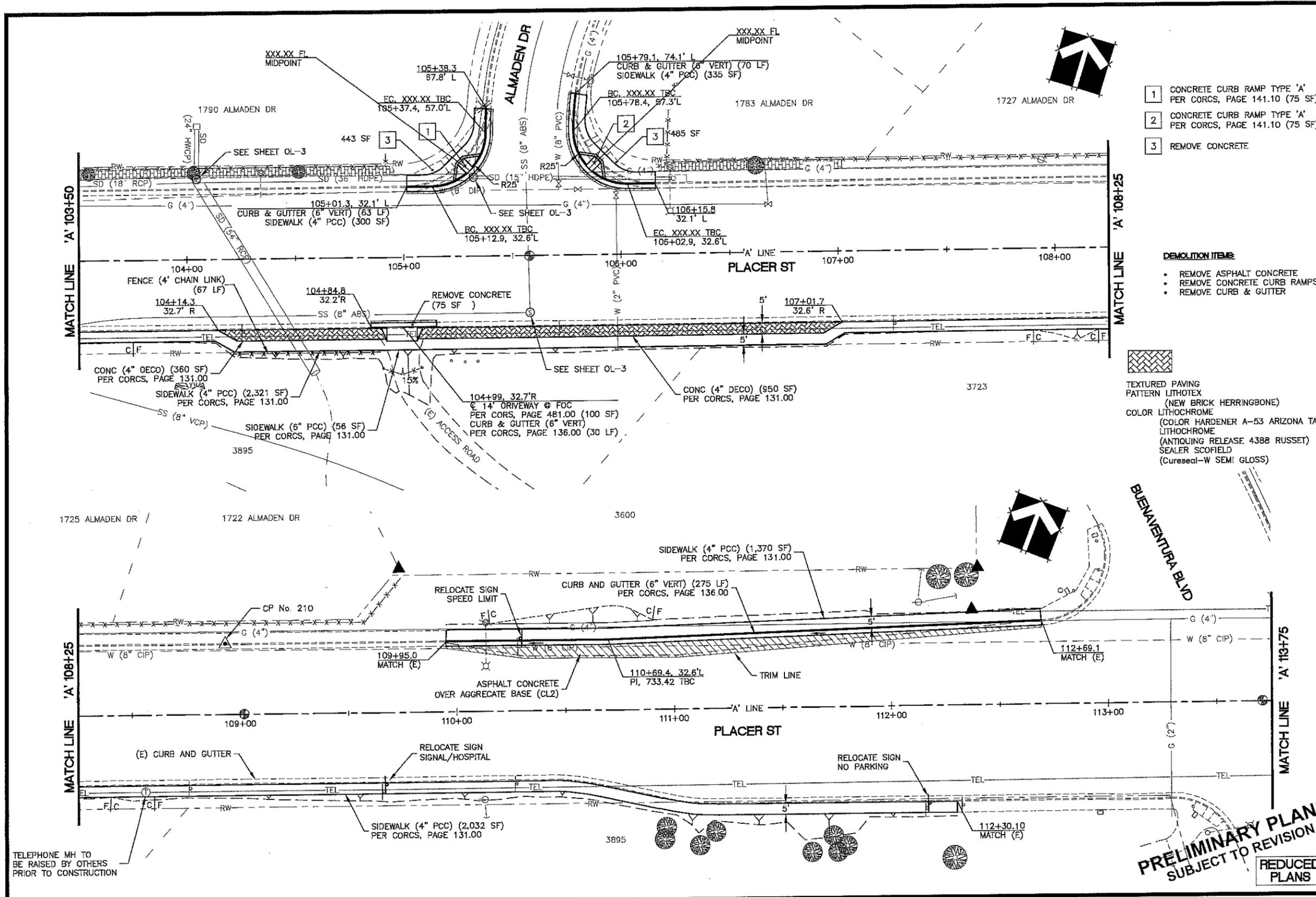
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
LAYOUT

A-14  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
L-4  
SHEET 14 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED  
PLANS



- 1 CONCRETE CURB RAMP TYPE 'A' PER CORCS, PAGE 141.10 (75 SF)
- 2 CONCRETE CURB RAMP TYPE 'A' PER CORCS, PAGE 141.10 (75 SF)
- 3 REMOVE CONCRETE

- DEMOLITION ITEMS:**
- REMOVE ASPHALT CONCRETE
  - REMOVE CONCRETE CURB RAMPS
  - REMOVE CURB & GUTTER

TEXTURED PAVING  
 PATTERN LITOTEX  
 (NEW BRICK HERRINGBONE)  
 COLOR LITOCROME  
 (COLOR HARDENER A-53 ARIZONA TAN)  
 LITOCROME  
 (ANTIQUING RELEASE 4388 RUSSET)  
 SEALER SCOFIELD  
 (Cureseal-W SEMI GLOSS)

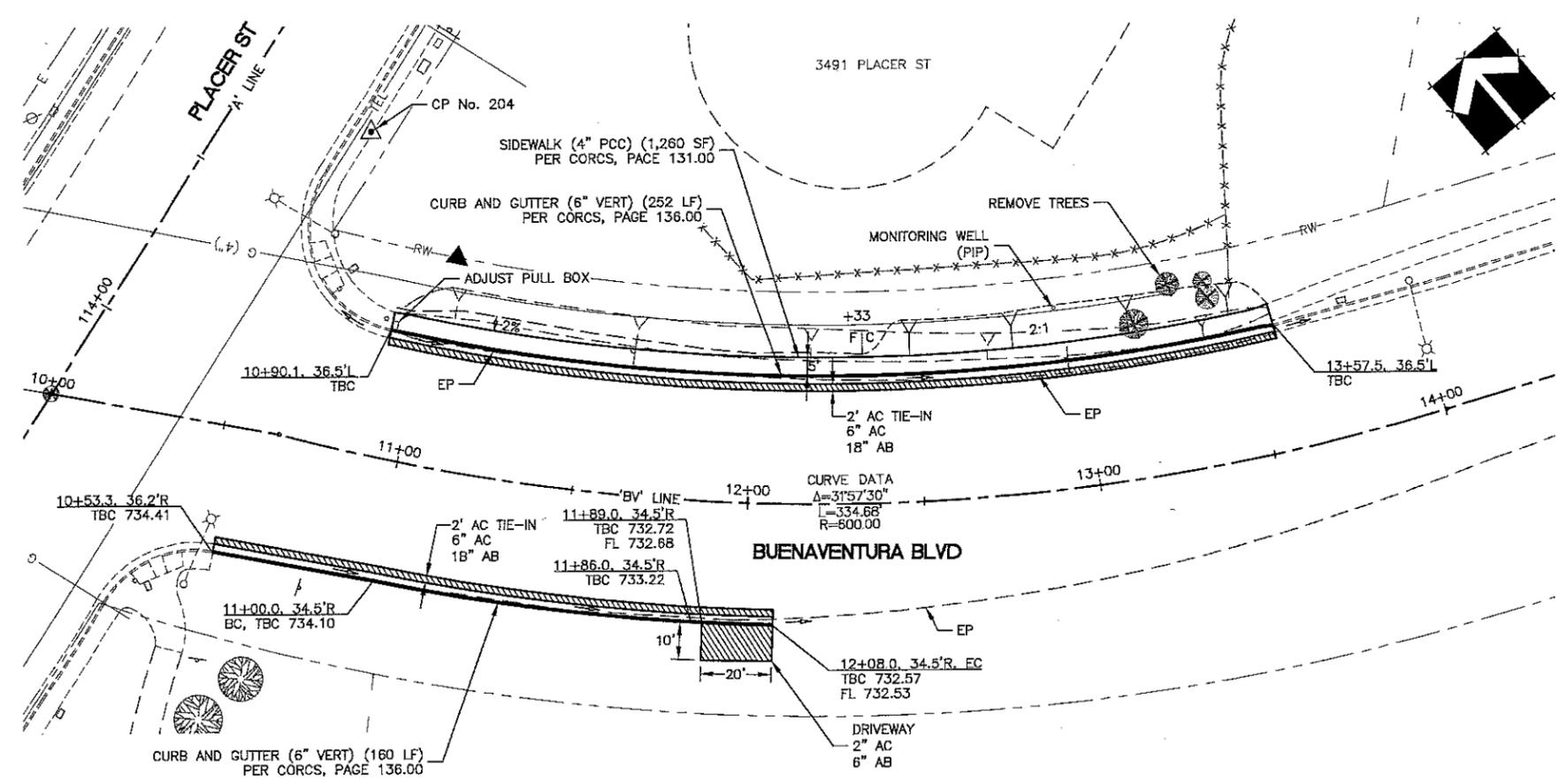
ORIGINAL SCALE IN INCHES 0 1 2
DESIGNED BY J. ABSHIER
DRAWN BY W. DANIELS
REVIEWED BY

DESIGNED BY
PROJECT ENGINEER
<b>CITY OF REDDING</b>
<b>PUBLIC WORKS DEPARTMENT</b>
<b>PLACER STREET IMPROVEMENTS</b>
LAYOUT
JOB NO. 2326      BID. SCH. NO. XXXX
<b>A-15</b>
ORIGINAL SCALE: 1"=20'
DATE: MAY 2014
<b>L-5</b>
SHEET 15 OF 79

**PRELIMINARY PLANS  
 SUBJECT TO REVISION**

**REDUCED  
 PLANS**

TELEPHONE MH TO BE RAISED BY OTHERS PRIOR TO CONSTRUCTION

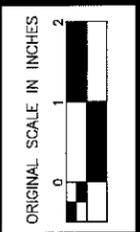


SEE SHEET X-1 FOR TYPICAL SECTION

- DEMOLITION ITEMS:**
- REMOVE ASPHALT CONCRETE
  - REMOVE TREES

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

**REDUCED PLANS**



DESIGNED BY  
J. ABISHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY

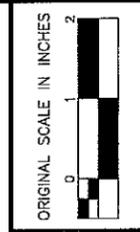
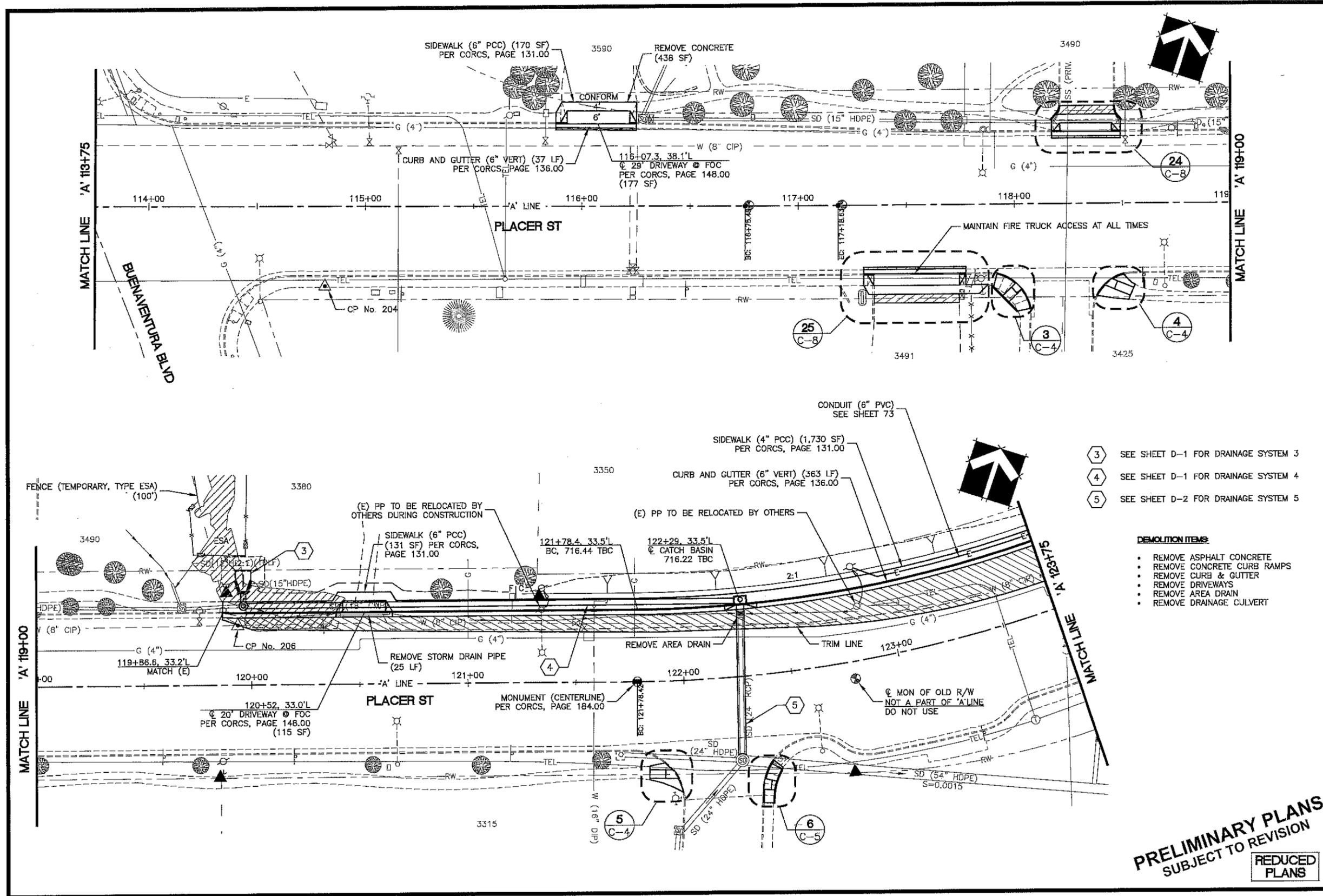


DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
LAYOUT  
JOB NO. 2335  
BID. SCH. NO. XXXX

A-16  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
L-6  
SHEET 16 OF 79



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
LAYOUT  
JOB NO. 2338  
BID. SCH. NO. XXXX

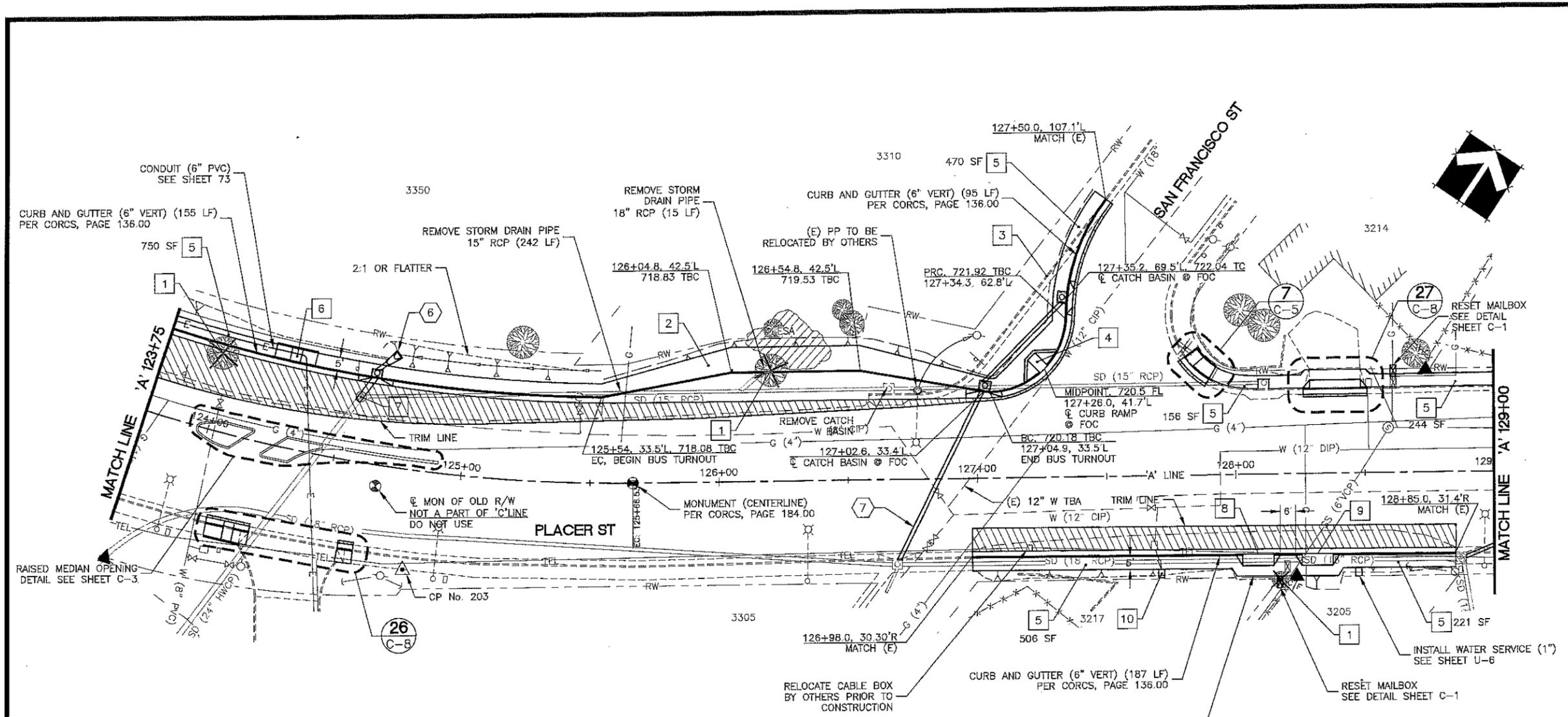
A-17  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
L-7  
SHEET 17 OF 79

- 3 SEE SHEET D-1 FOR DRAINAGE SYSTEM 3
- 4 SEE SHEET D-1 FOR DRAINAGE SYSTEM 4
- 5 SEE SHEET D-2 FOR DRAINAGE SYSTEM 5

- DEMOLITION ITEMS:**
- REMOVE ASPHALT CONCRETE
  - REMOVE CONCRETE CURB RAMPS
  - REMOVE CURB & GUTTER
  - REMOVE DRIVEWAYS
  - REMOVE AREA DRAIN
  - REMOVE DRAINAGE CULVERT

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

REDUCED  
PLANS



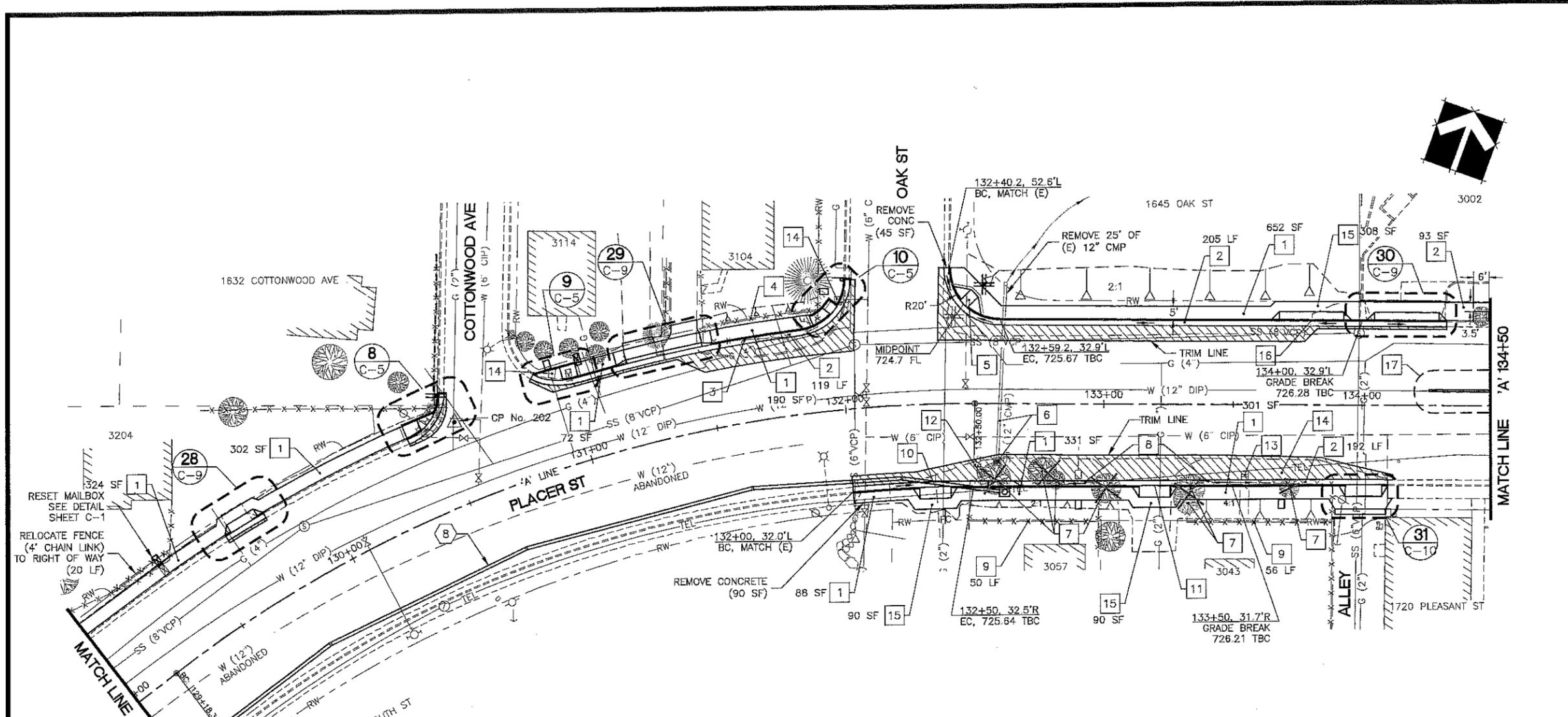
- |   |   |
|---|---|
| 1 REMOVE TREE(S)  | 6 'A' 124+27, 33'L @ FOC<br>CONC CURB RAMP (TYPE 'C')<br>PER CORCS, PAGE 141.30 (89 SF) |
| 2 BUS TURNOUT PER CORCS, PAGE 120.00<br>(2450 SF)             | 7 REMOVE MANHOLE  |
| 3 REMOVE CONCRETE (342 SF)                                    | 8 'A' 128+08.5, 31'R, @ 12' DRIVEWAY @<br>FOC PER CORCS, PAGE 148.00 (58 SF)            |
| 4 CONC CURB RAMP (TYPE 'A')<br>PER CORCS, PAGE 141.10 (86 SF) | 9 'A' 128+31.5, 31'R, @ 12' DRIVEWAY @<br>FOC PER CORCS, PAGE 148.00 (58 SF)            |
| 5 SIDEWALK (4" PCC)<br>PER CORCS, PAGE 131.00                 | 10 RELOCATE WATER METER<br>SEE SHEET U-6  |
- 
- |   |                                     |
|---|-------------------------------------|
| 6 | SEE SHEET D-2 FOR DRAINAGE SYSTEM 6 |
| 7 | SEE SHEET D-3 FOR DRAINAGE SYSTEM 7 |

- DEMOLITION ITEMS:**
- REMOVE ASPHALT CONCRETE
  - REMOVE CONCRETE CURB RAMPS
  - REMOVE CURB & GUTTER
  - REMOVE DRIVEWAYS
  - REMOVE CATCH BASIN
  - REMOVE SD MANHOLE
  - REMOVE TREES
  - REMOVE DRAINAGE CULVERT

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

REDUCED  
PLANS

<p>ORIGINAL SCALE IN INCHES</p>
<p>DESIGNED BY: J. ABSHIER DRAWN BY: W. DANIELS REVIEWED BY:</p>
<p>DESIGNED BY: _____ PROJECT ENGINEER</p>
<p><b>CITY OF REDDING</b> <b>PUBLIC WORKS DEPARTMENT</b></p>
<p><b>PLACER STREET IMPROVEMENTS</b> LAYOUT</p>
<p>JOB NO. 2356 BID. SCL. NO. XXXX</p>
<p>A-18 ORIGINAL SCALE: 1"=20' DATE: MAY 2014</p>
<p>L-8 SHEET 18 OF 79</p>



RESET MAILBOX  
SEE DETAIL  
SHEET C-1

RELOCATE FENCE  
(4' CHAIN LINK)  
TO RIGHT OF WAY  
(20 LF)

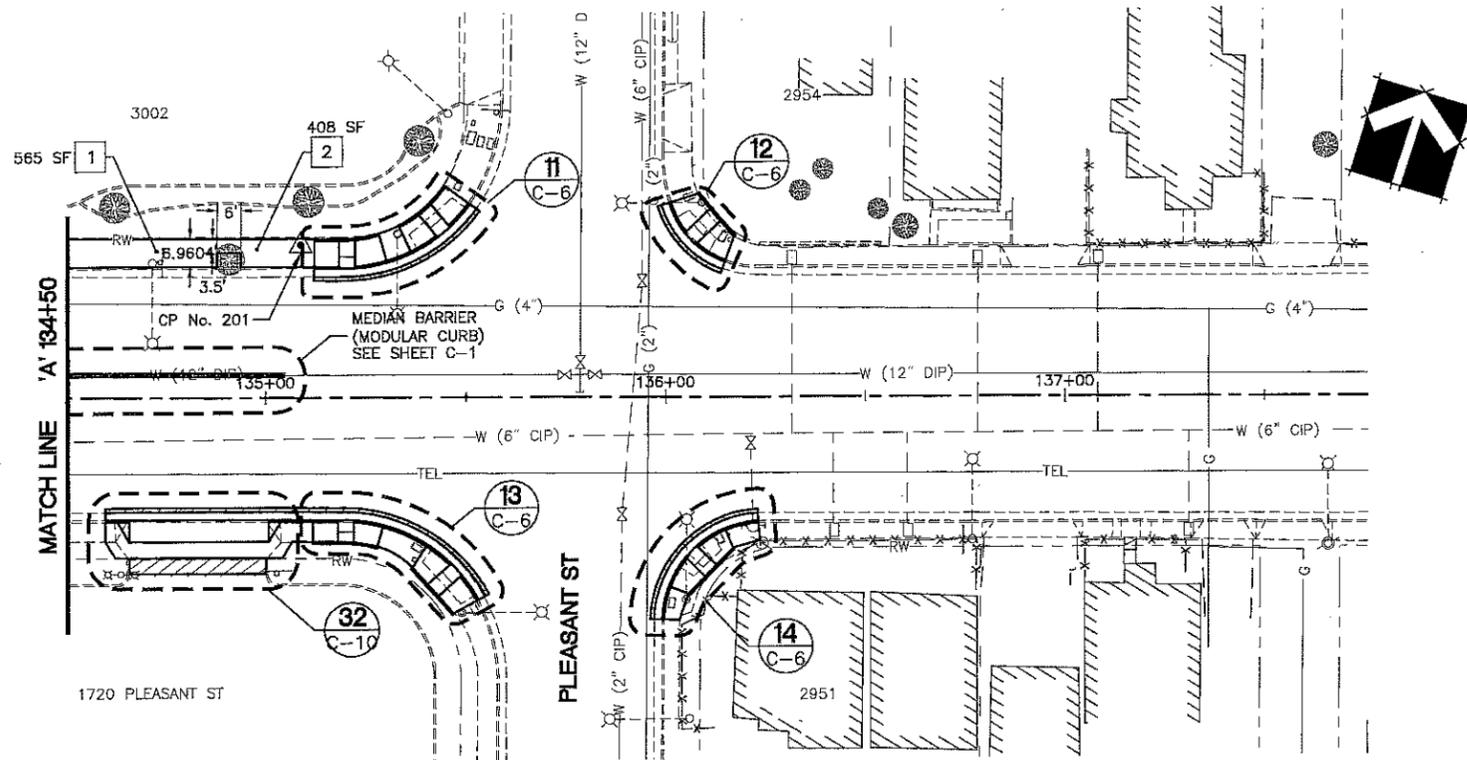
- DEMOLITION ITEMS:**
- REMOVE ASPHALT CONCRETE
  - REMOVE CONCRETE CURB RAMPS
  - REMOVE CONCRETE STEPS
  - REMOVE CURB & GUTTER
  - REMOVE DRIVEWAYS
  - REMOVE CATCH BASIN
  - REMOVE TREES
  - REMOVE BUSH
  - REMOVE DRAINAGE CULVERT
  - REMOVE RETAINING WALL
  - REMOVE FENCE

- |   |  |
|---|--|
| <p>1 SIDEWALK (4" PCC)<br/>PER CORCS, PAGE 131.00</p> <p>2 CURB AND GUTTER (6" VERT)<br/>PER CORCS, PAGE 136.00</p> <p>3 REMOVE FENCE (WOOD) 57 LF</p> <p>4 INSTALL FENCE (WOOD) 45 LF AT RW LINE</p> <p>5 CONC CURB RAMP (TYPE 'A')<br/>PER CORCS, PAGE 141.10 (74 SF)</p> <p>6 REMOVE AREA DRAIN<br/>ABANDON STORM DRAIN PIPE</p> <p>7 REMOVE TREE(S)</p> <p>8 REMOVE FENCE (WIRE) 170 LF</p> <p>9 INSTALL FENCE (WIRE) 50 LF AT RW LINE</p> <p>10 132+34.0, 32.1'R, @ 12' DRIVEWAY @ FOC<br/>PER CORCS, PAGE 148.00 (58 SF)</p> <p>11 133+20.0, 31.5'R, @ 12' DRIVEWAY @ FOC<br/>PER CORCS, PAGE 148.00 (58 SF)</p> <p>12 CABLE BOX RELOCATE BY OTHERS</p> <p>13 REMOVE CONCRETE STEPS</p> <p>14 RELOCATE WATER METER<br/>SEE SHEET U-7</p> <p>15 SIDEWALK (6" PCC)<br/>PER CORCS, PAGE 131.00</p> <p>16 133+80.1, 32.4'L, @ 25' DRIVEWAY @ FOC<br/>PER CORCS, PAGE 148.00 (84 SF)</p> <p>17 MEDIAN BARRIER (MODULAR CURB)<br/>SEE SHEET C-1</p> | <p>8 SEE SHEET D-3 FOR DRAINAGE SYSTEM B</p> |
|---|--|

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**

ORIGINAL SCALE IN INCHES 
DESIGNED BY: J. ABSHIER DRAWN BY: W. DANIELS REVIEWED BY:
DESIGNED BY: PROJECT ENGINEER
<b>CITY OF REDDING PUBLIC WORKS DEPARTMENT</b>
PLACER STREET IMPROVEMENTS LAYOUT
JOB NO. 2336 BID SCH. NO. XXXX
A-19 ORIGINAL SCALE: 1"=20' DATE: MAY 2014 L-9 SHEET 19 OF 79



- 1 REMOVE CONCRETE
- 2 SIDEWALK (4" PCC)  
PER CORCS, PAGE 131.00

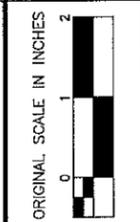
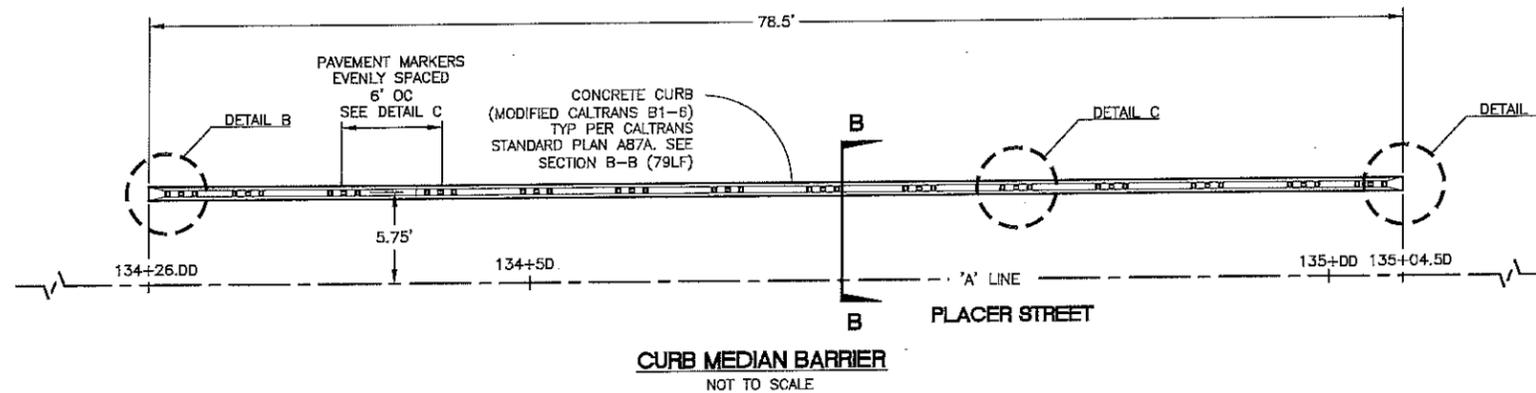
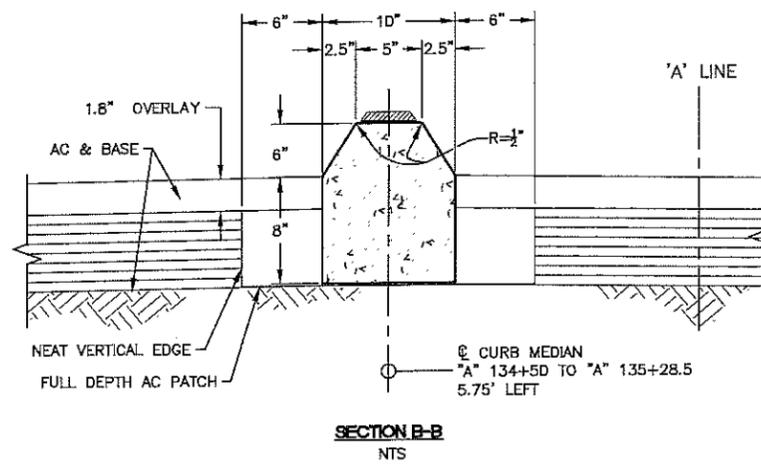
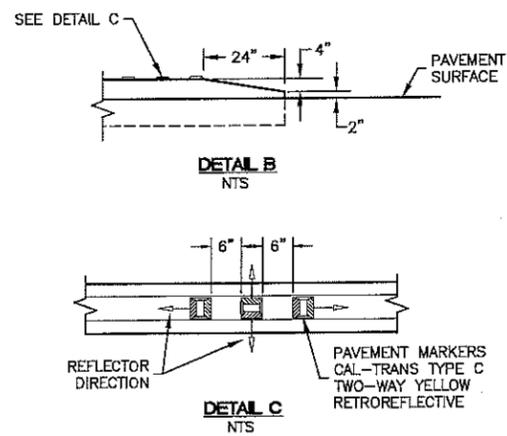
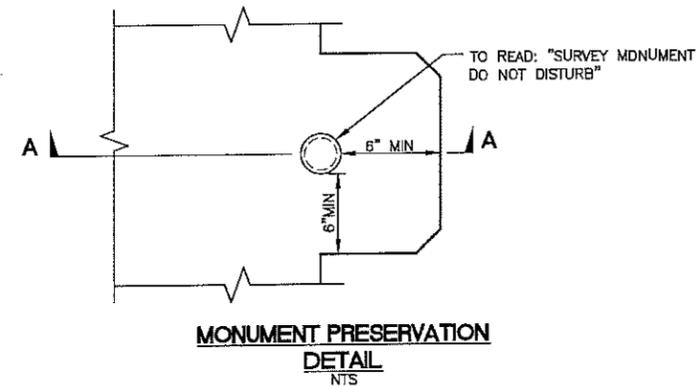
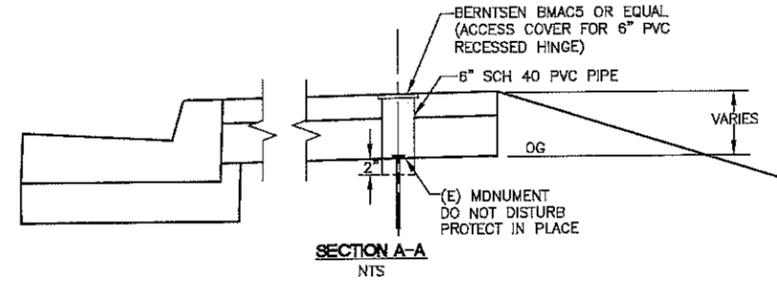
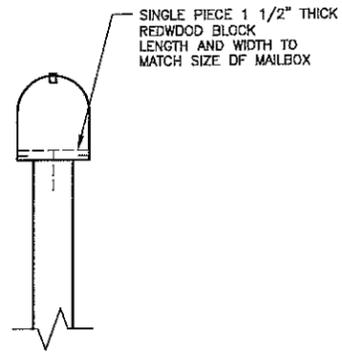
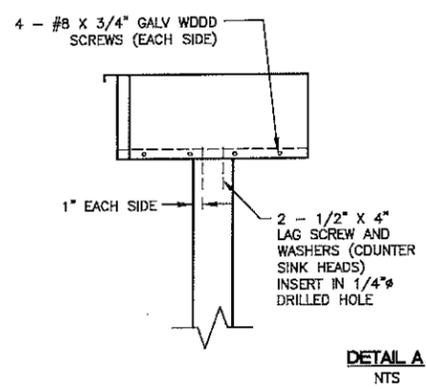
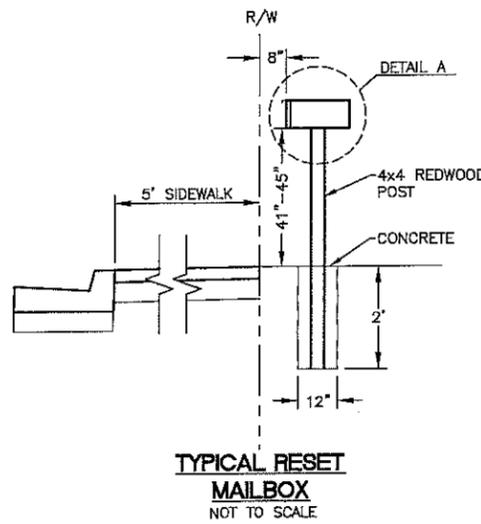
**DEMOLITION ITEMS**

- REMOVE ASPHALT CONCRETE
- REMOVE CONCRETE CURB RAMP
- REMOVE CURB & GUTTER
- REMOVE CONCRETE SIDEWALK

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

REDUCED  
PLANS

<p><b>PLACER STREET IMPROVEMENTS</b></p> <p>JOB NO. 2356</p>	<p>BID SCH. NO. XXXX</p> <p>LAYOUT</p>	<p>A-20</p> <p>ORIGINAL SCALE: 1"=20'</p> <p>DATE: MAY 2014</p> <p>L-10</p> <p>SHEET 20 OF 79</p>	<p><b>CITY OF REDDING</b></p> <p><b>PUBLIC WORKS DEPARTMENT</b></p>
<p>DESIGNED BY: J. ABSHIER</p> <p>DRAWN BY: W. DANIELS</p> <p>REVIEWED BY:</p>			
<p>DESIGNED BY:</p> <p>PROJECT ENGINEER</p>		<p>ORIGINAL SCALE IN INCHES</p>	



DESIGNED BY: J. AEBHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:



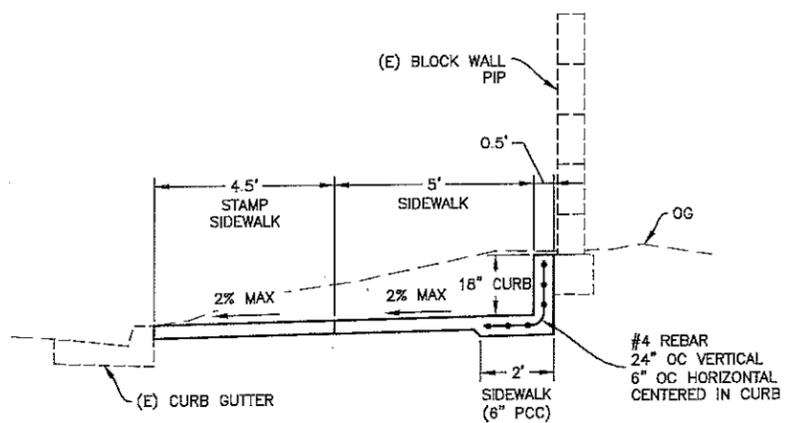
DESIGNED BY:  
PROJECT ENGINEER:

**CITY OF REDDING**  
**PUBLIC WORKS DEPARTMENT**

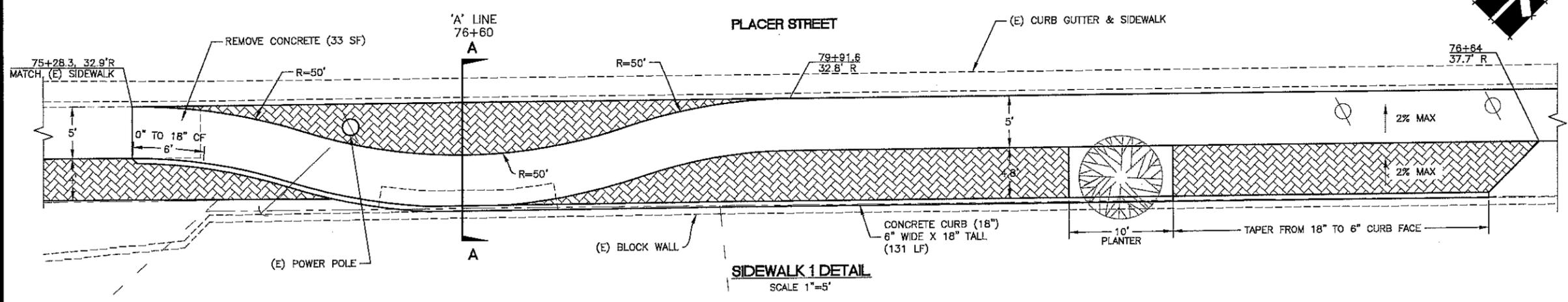
**PLACER STREET IMPROVEMENTS**  
CONSTRUCTION DETAILS  
JOB NO. 2336  
BID. SCH. NO. XXXX

A-21  
ORIGINAL SCALE: AS NOTED  
DATE: MAY 2014  
C-1  
SHEET 21 OF 79

**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**  
**REDUCED PLANS**



'A' LINE 76+60  
SECTION A-A  
SCALE 1"=2'



SIDEWALK 1 DETAIL  
SCALE 1"=5'



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

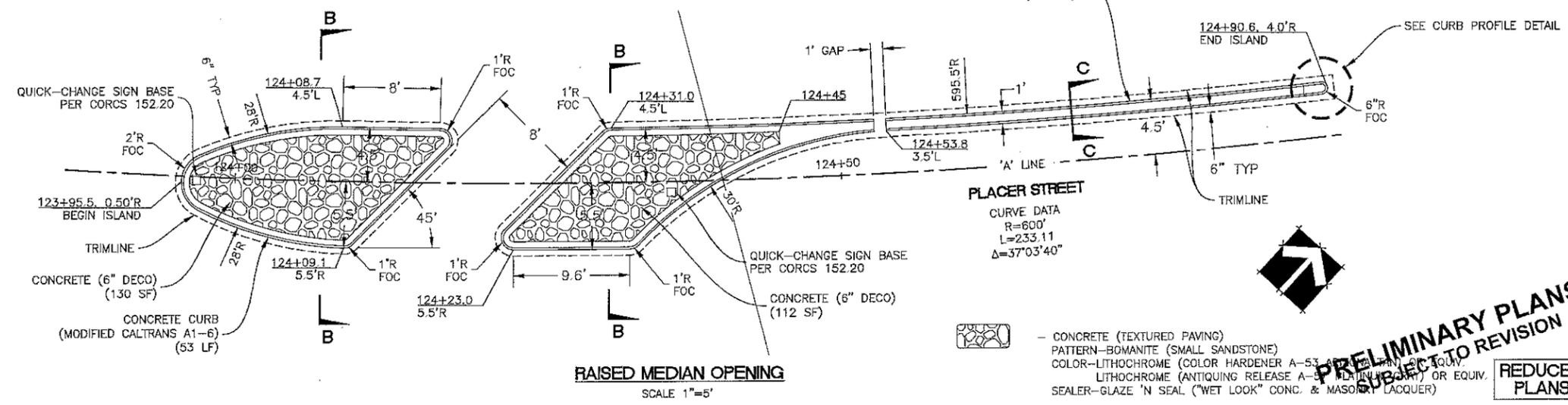
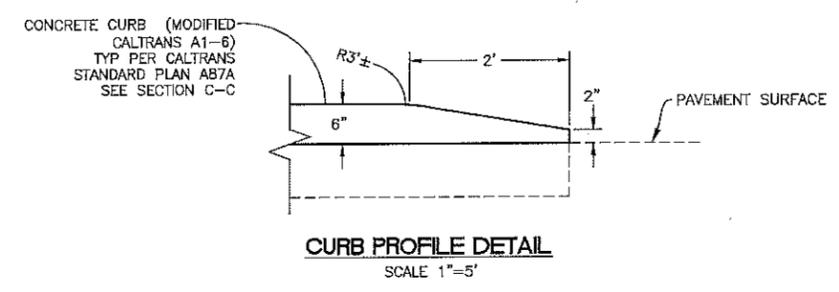
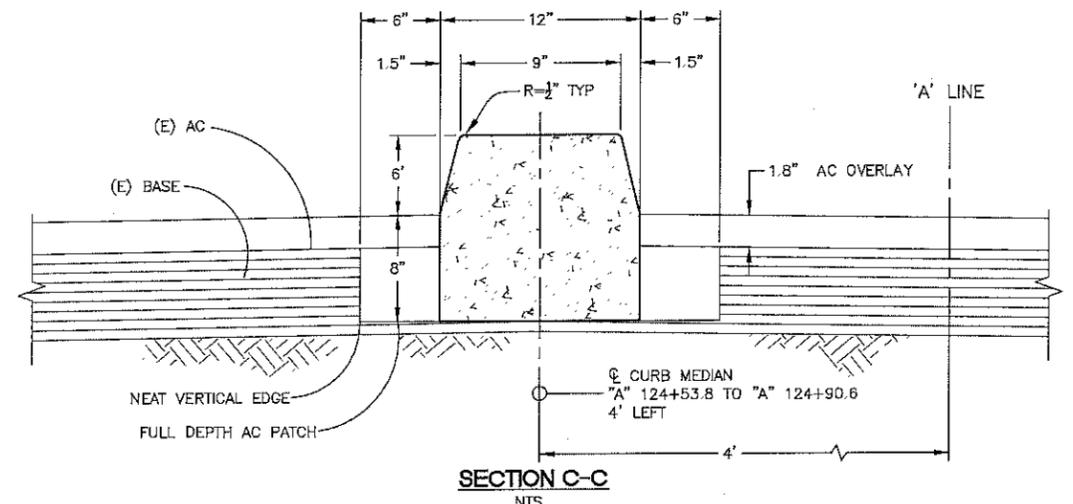
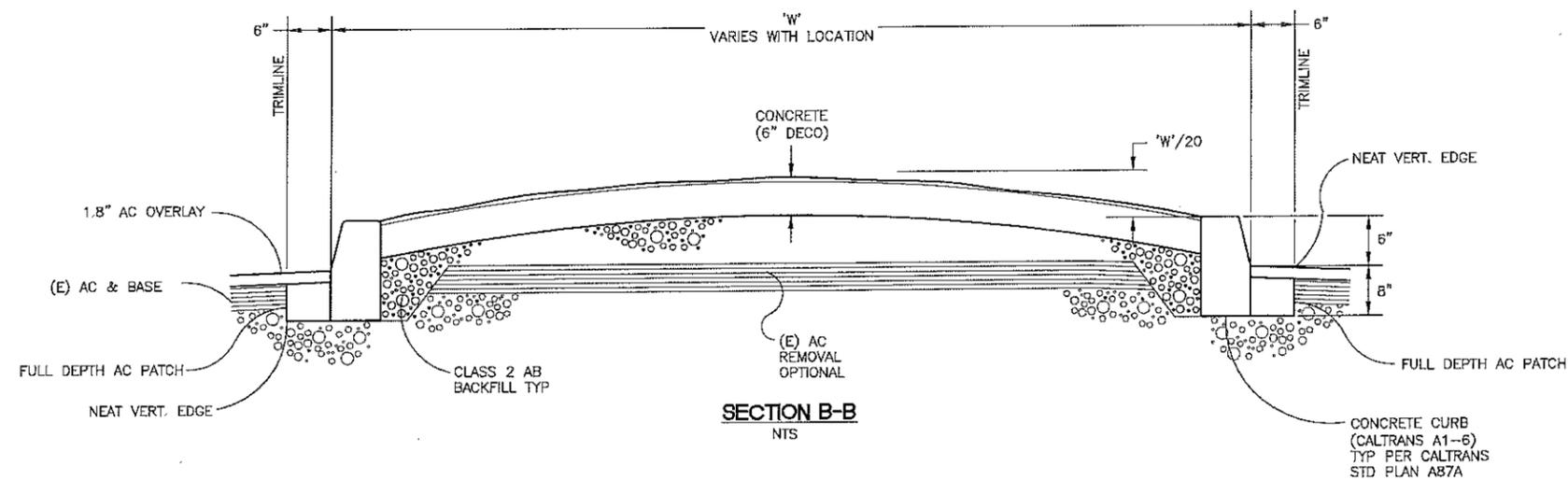
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS  
JOB NO. 2335  
BID SCH. NO. XXXX

A-22  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-2  
SHEET 22 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

REDUCED  
PLANS



DESIGNED BY  
J. ABBSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

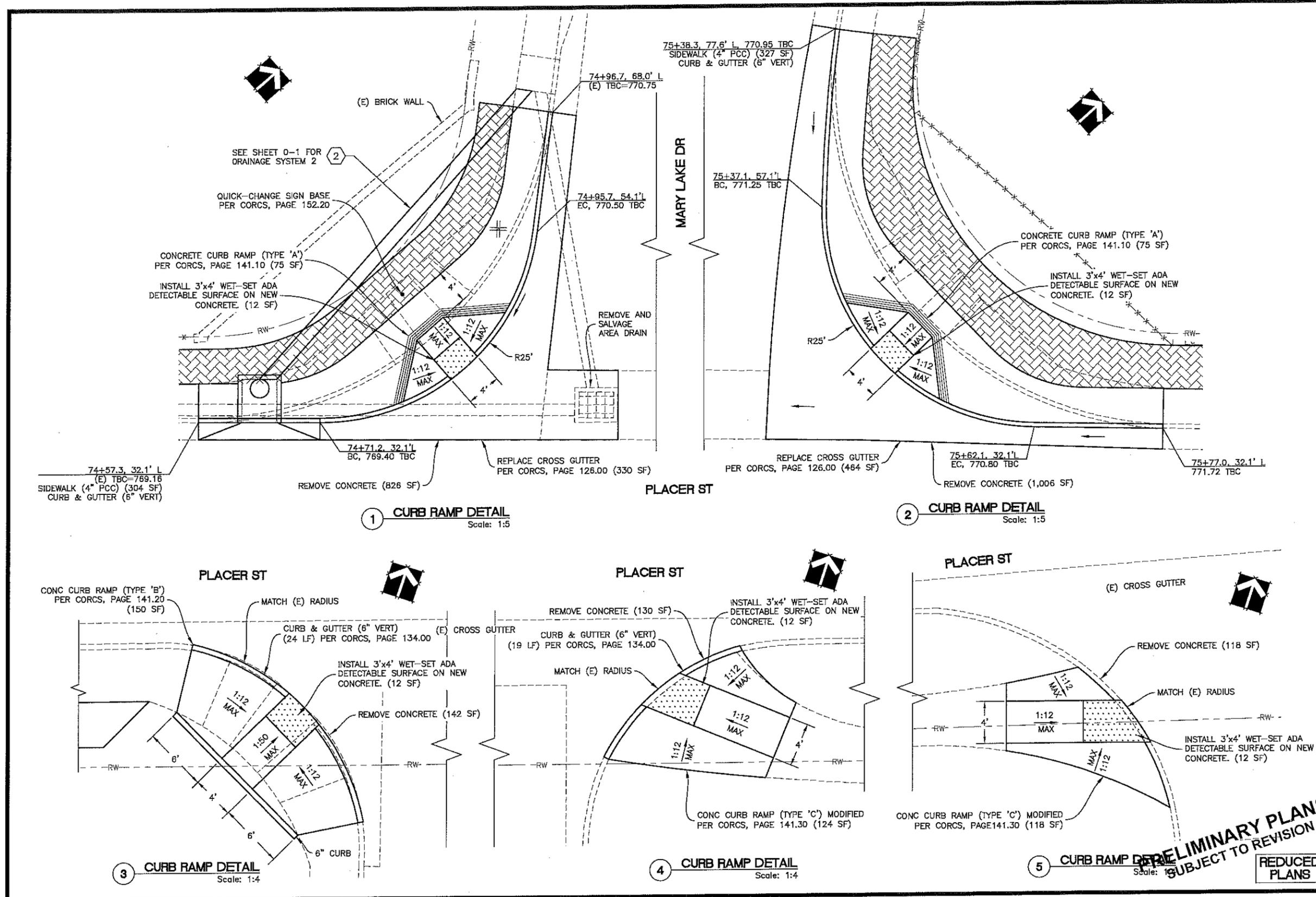
PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS

A-23  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-3  
SHEET 23 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**

- CONCRETE (TEXTURED PAVING)
- PATTERN-BOMANITE (SMALL SANDSTONE)
- COLOR-LITHOCHROME (COLOR HARDENER A-53)
- LITHOCHROME (ANTIQUE RELEASE A-53)
- SEALER-GLAZE 'N SEAL ('WET LOOK' CONC. & MASONRY LACQUER)



74+57.3, 32.1' L  
(E) TBC=769.16  
SIDEWALK (4" PCC) (304 SF)  
CURB & GUTTER (6" VERT)

CONCRETE CURB RAMP (TYPE 'A')  
PER CORCS, PAGE 141.10 (75 SF)  
INSTALL 3'x4' WET-SET ADA  
DETECTABLE SURFACE ON NEW  
CONCRETE. (12 SF)

QUICK-CHANGE SIGN BASE  
PER CORCS, PAGE 152.20

SEE SHEET D-1 FOR  
DRAINAGE SYSTEM 2

(E) BRICK WALL

74+95.7, 54.1' L  
EC, 770.50 TBC

REMOVE AND  
SALVAGE  
AREA DRAIN

74+71.2, 32.1' L  
BC, 769.40 TBC  
REMOVE CONCRETE (826 SF)  
REPLACE CROSS GUTTER  
PER CORCS, PAGE 126.00 (330 SF)

MARY LAKE DR  
PLACER ST

75+37.1, 57.1' L  
BC, 771.25 TBC

75+38.3, 77.6' L, 770.95 TBC  
SIDEWALK (4" PCC) (327 SF)  
CURB & GUTTER (6" VERT)

REPLACE CROSS GUTTER  
PER CORCS, PAGE 126.00 (464 SF)

75+62.1, 32.1' L  
EC, 770.80 TBC  
REMOVE CONCRETE (1,006 SF)

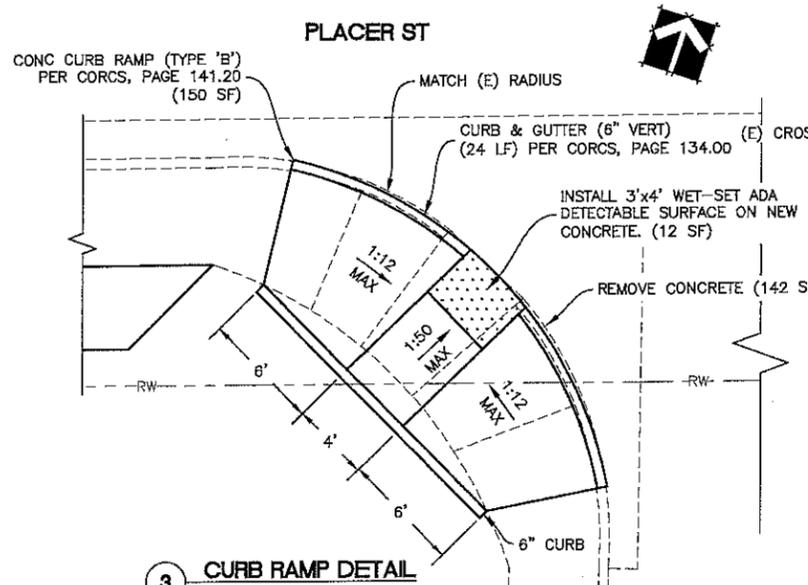
75+77.0, 32.1' L  
771.72 TBC

CONCRETE CURB RAMP (TYPE 'A')  
PER CORCS, PAGE 141.10 (75 SF)

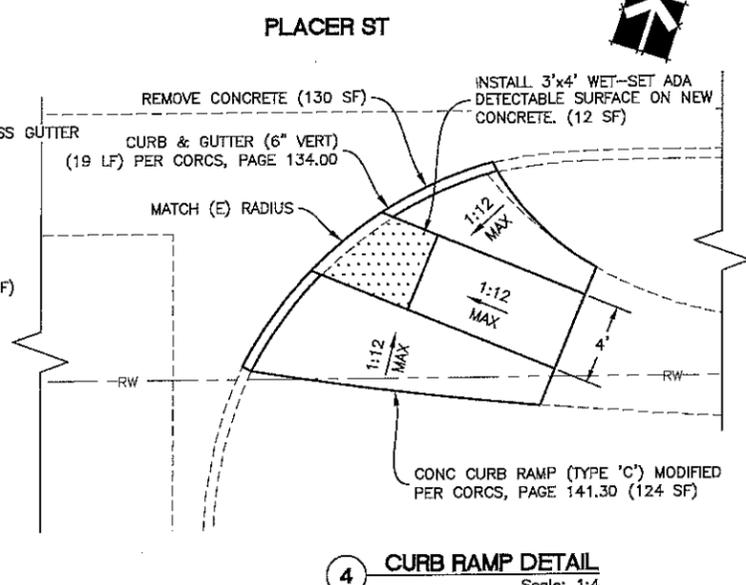
INSTALL 3'x4' WET-SET ADA  
DETECTABLE SURFACE ON NEW  
CONCRETE. (12 SF)

1 CURB RAMP DETAIL  
Scale: 1:5

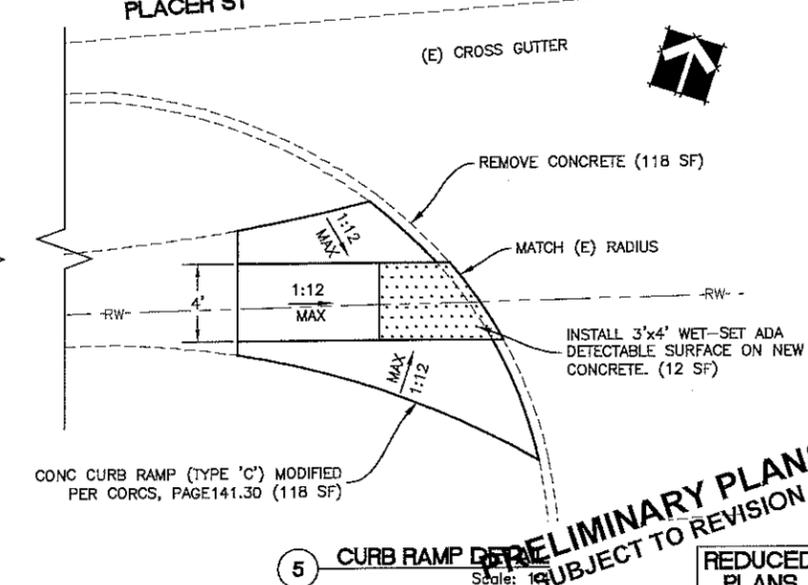
2 CURB RAMP DETAIL  
Scale: 1:5



3 CURB RAMP DETAIL  
Scale: 1:4



4 CURB RAMP DETAIL  
Scale: 1:4



5 CURB RAMP DETAIL  
Scale: 1:4

**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**  
**REDUCED PLANS**



DESIGNED BY  
J. ABSHIER

DRAWN BY  
W. DANIELS

REVIEWED BY



DESIGNED BY: PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

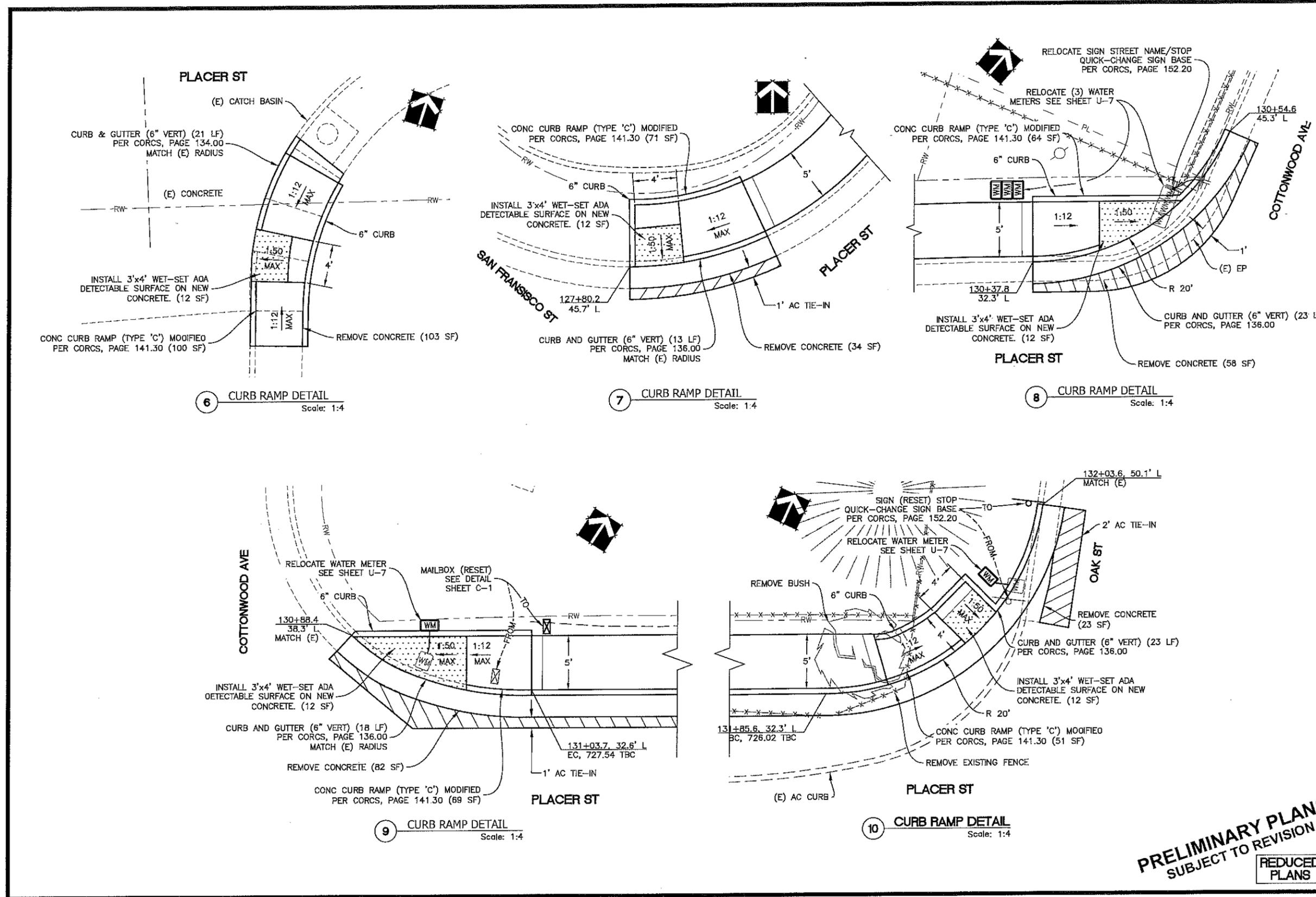
PLACER STREET  
IMPROVEMENTS

BID. SCH. NO. XXXX

CONSTRUCTION DETAILS

JOB NO. 2336

A-24  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-4  
SHEET 24 OF 79



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

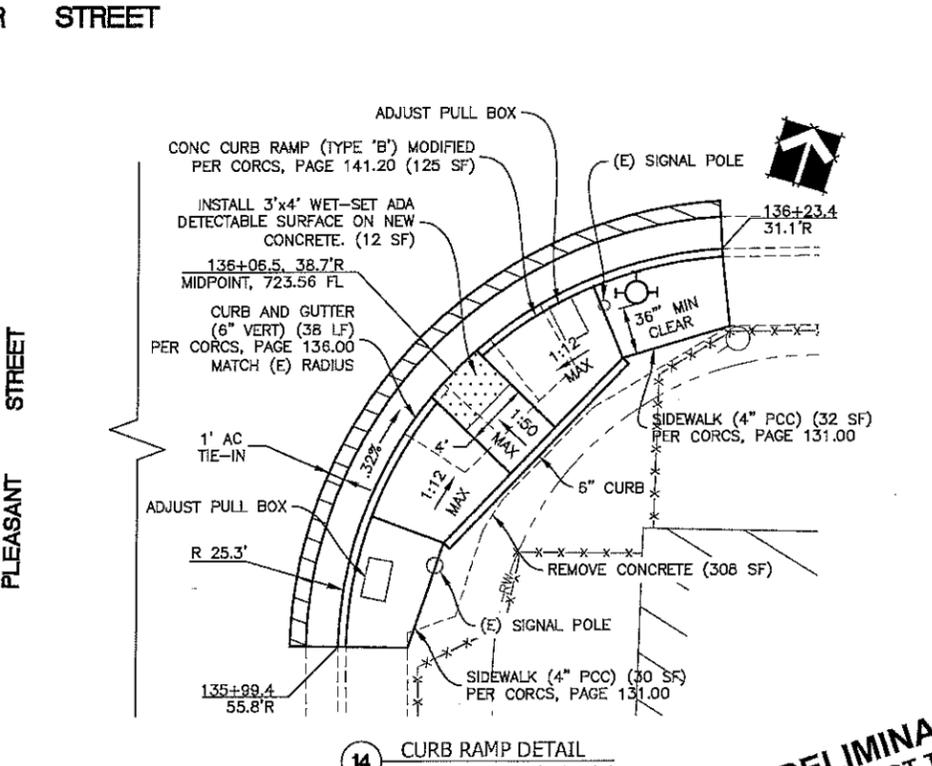
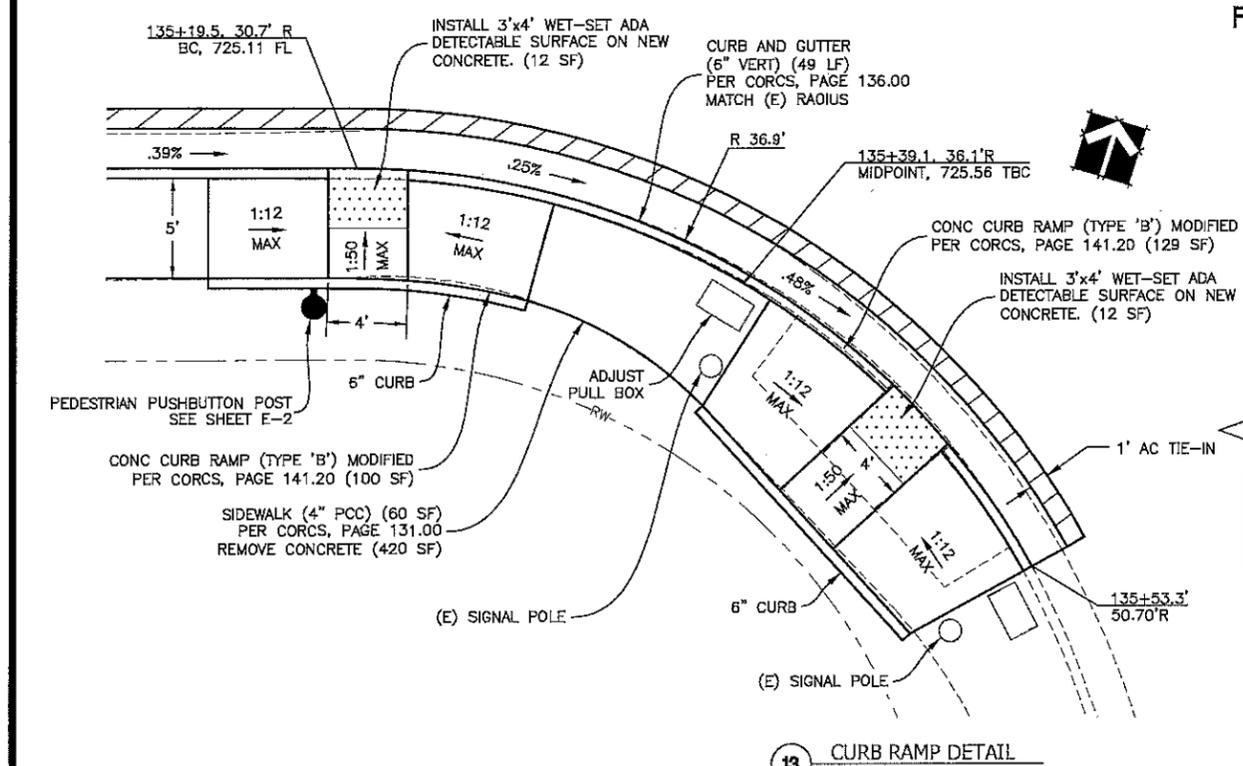
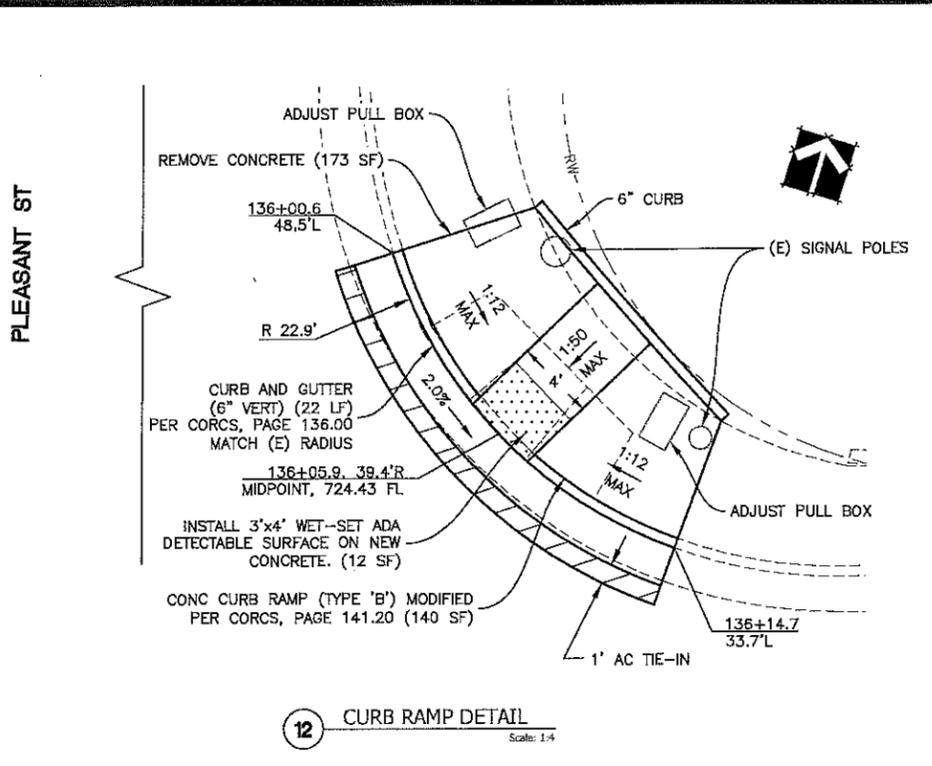
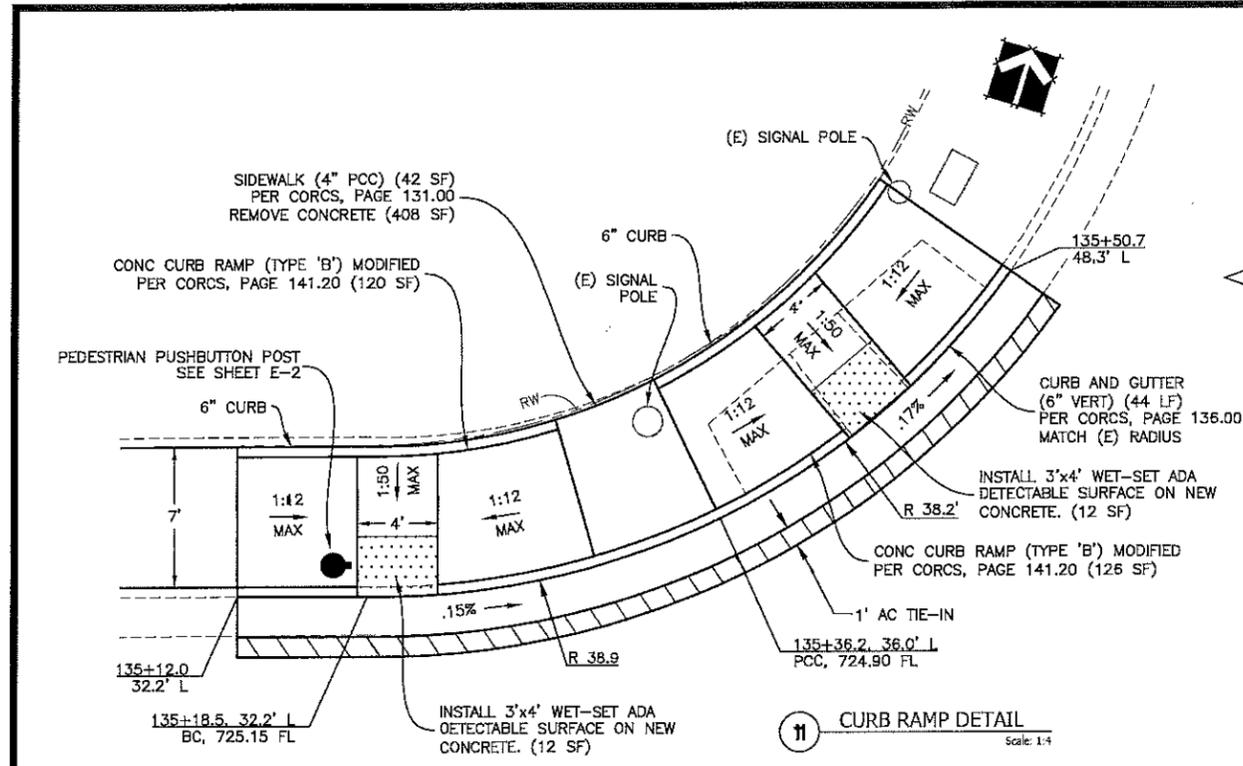
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS

JOB NO. 2336  
A-25  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
C-5  
SHEET 25 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**



DESIGNED BY  
J ABSSHIER  
DRAWN BY  
W DANIELS  
REVIEWED BY



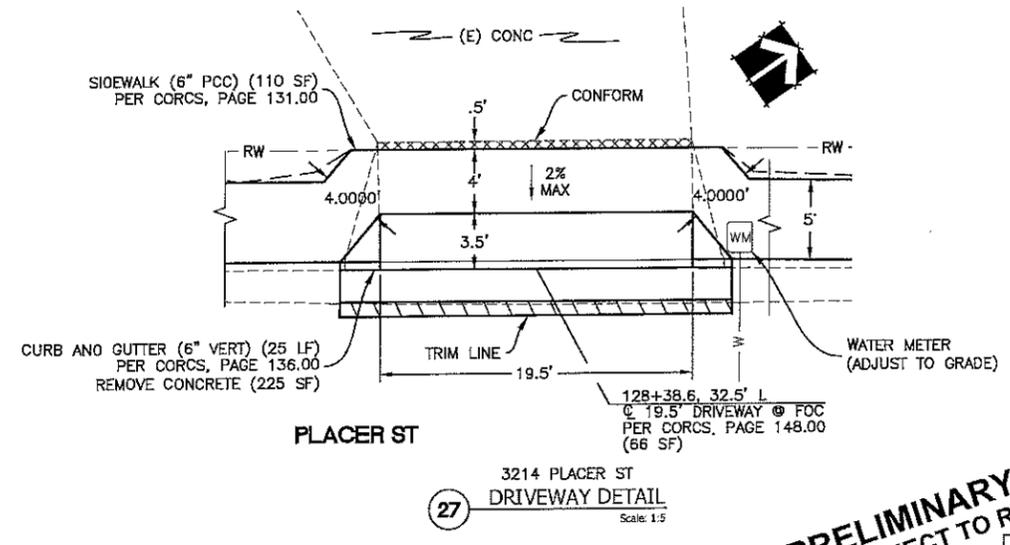
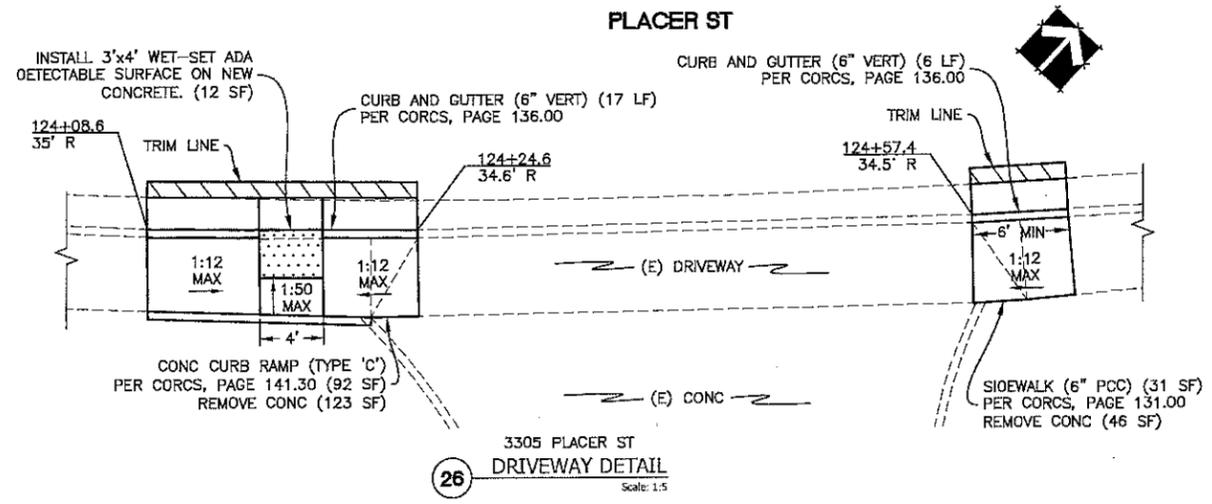
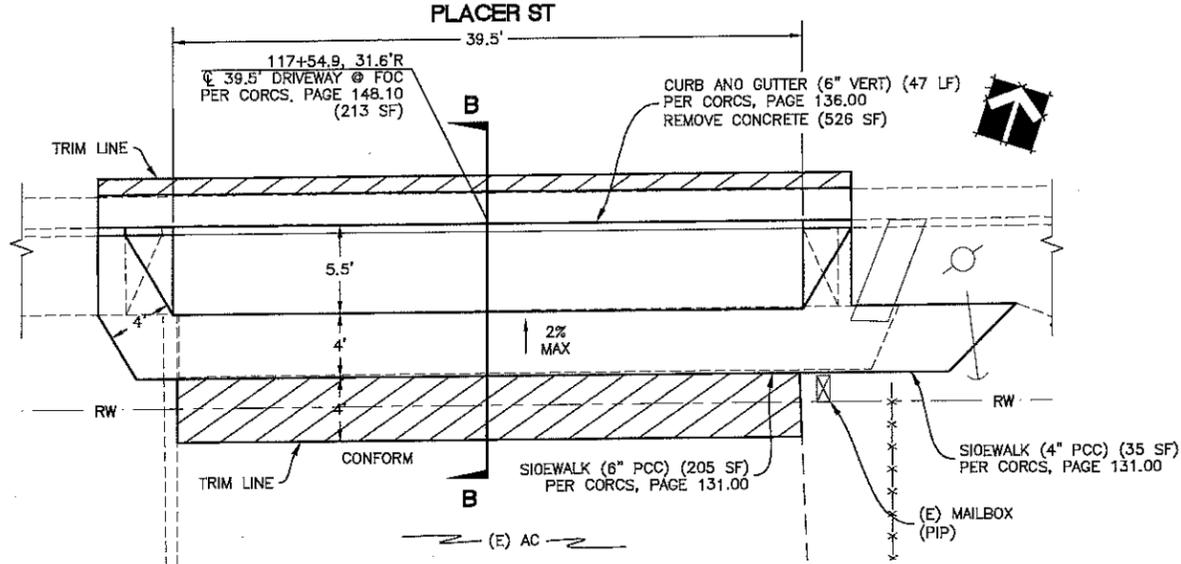
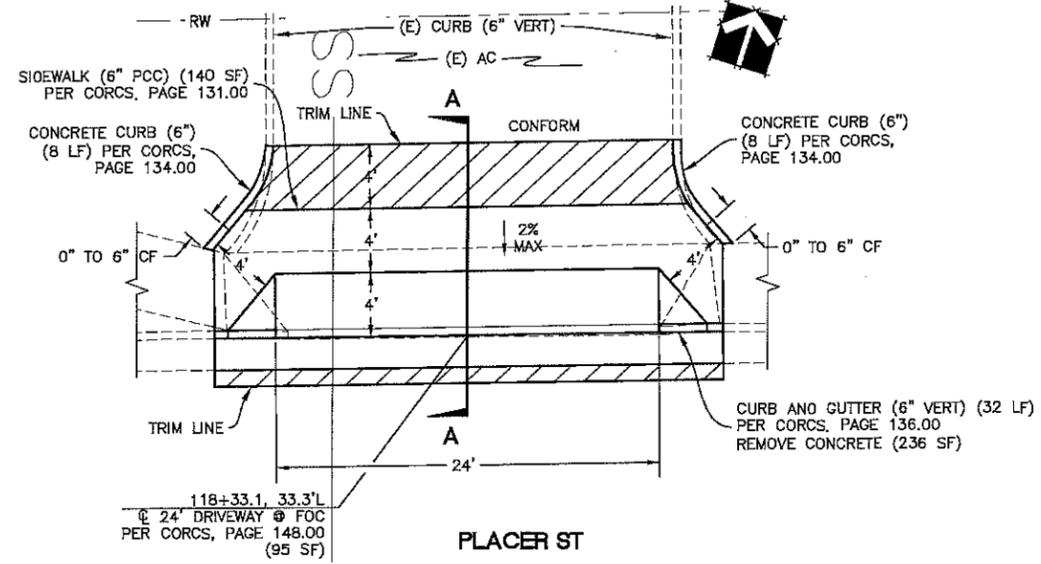
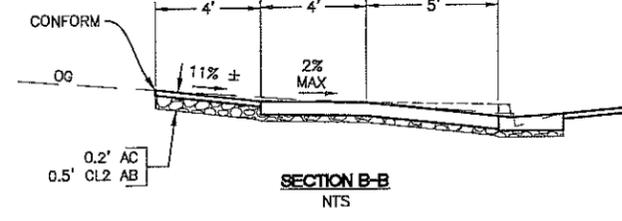
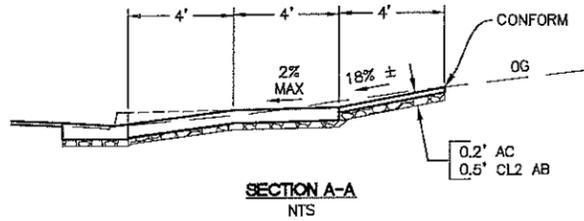
DESIGNED BY:  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS  
JOB NO. 2356  
BID SPEC NO. XXXX

A-26  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-6  
SHEET 26 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
**REDUCED  
PLANS**



**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**

ORIGINAL SCALE IN INCHES

DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

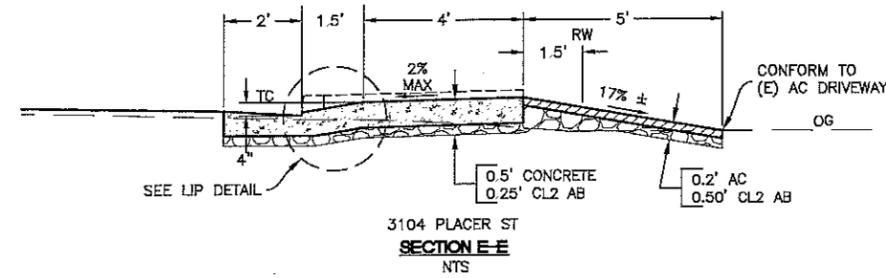
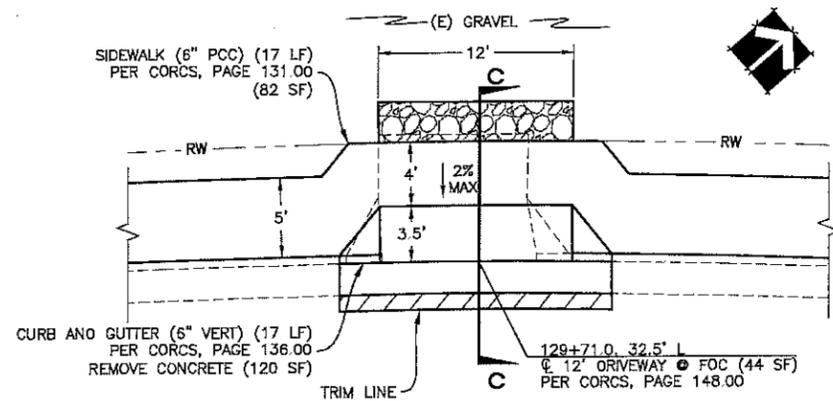
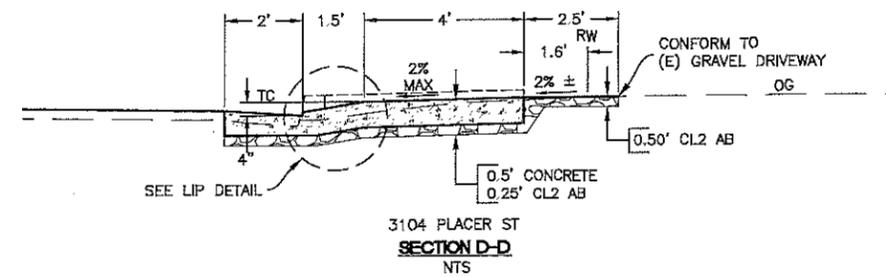
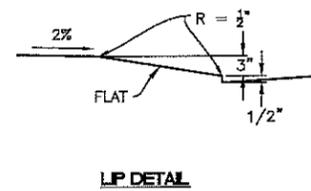
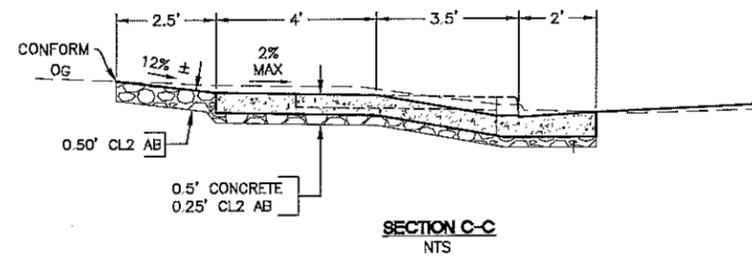
PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS

DESIGNED BY:  
PROJECT ENGINEER

PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS

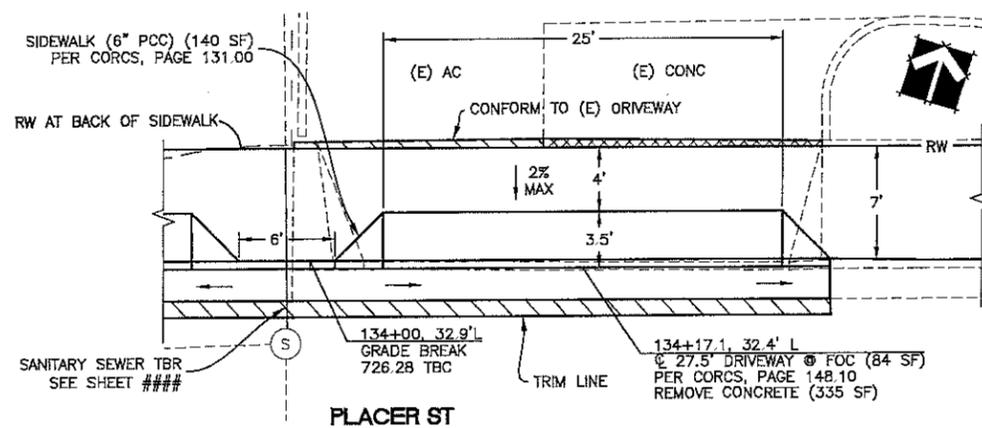
JOB NO. 2336  
BID. SCH. NO. XXXX

A-27  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-8  
SHEET 27 OF 79

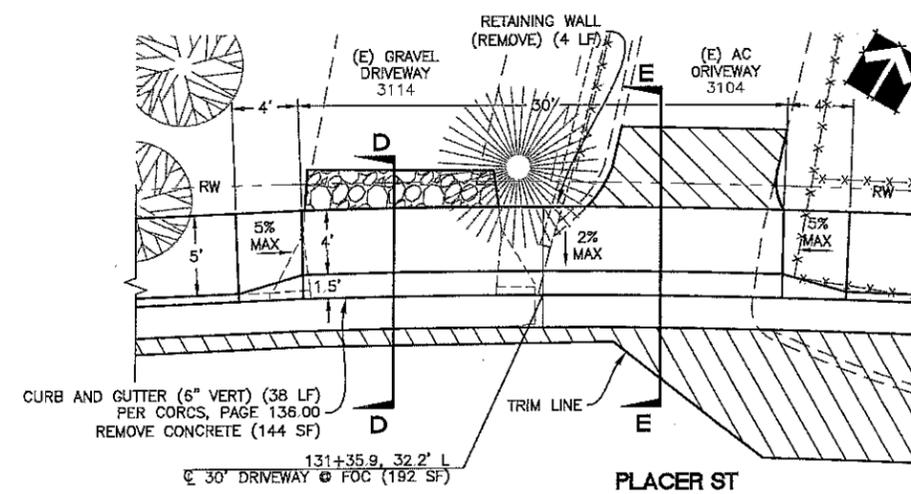


**PLACER ST**

28 3204 PLACER ST DRIVEWAY DETAIL Scale: 1:5



30 3002 PLACER ST DRIVEWAY DETAIL Scale: 1:5



29 3114 & 3104 PLACER ST DRIVEWAY DETAIL Scale: 1:5

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY

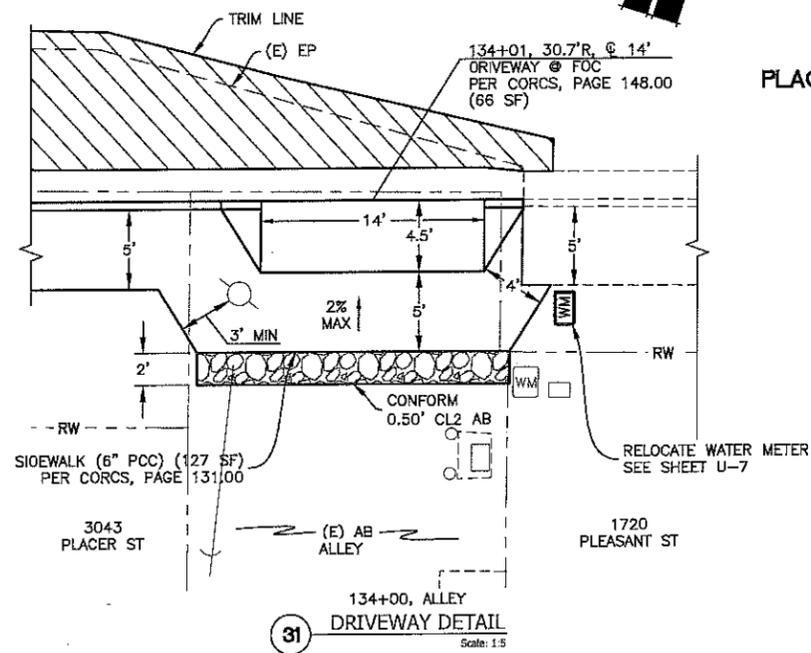


DESIGNED BY  
PROJECT ENGINEER

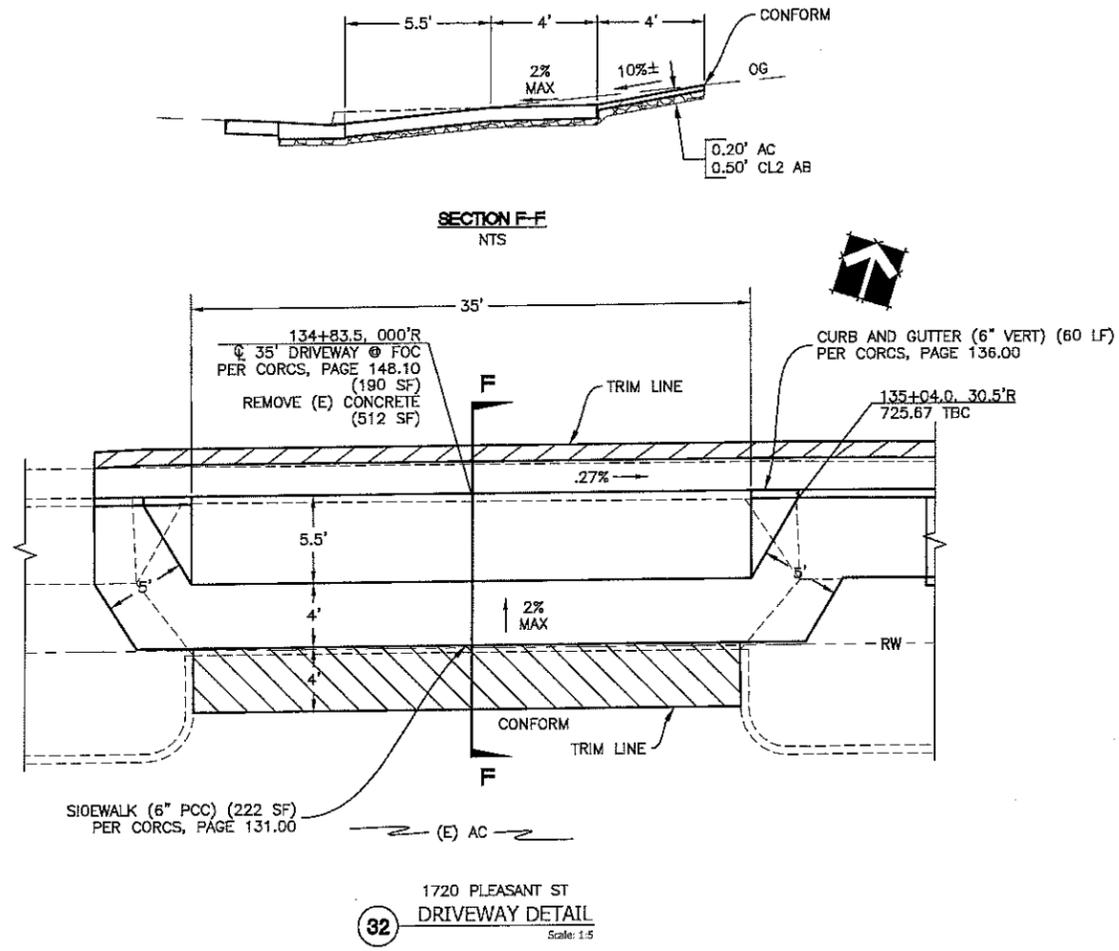
**CITY OF REDDING  
PUBLIC WORKS DEPARTMENT**

**PLACER STREET  
IMPROVEMENTS**  
CONSTRUCTION DETAILS  
JOB NO. 235B  
BID. SCH. NO. XXXX

A-28  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-9  
SHEET 28 OF 79



PLACER ST



SECTION F-F  
NTS



DESIGNED BY: J. ABISHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:



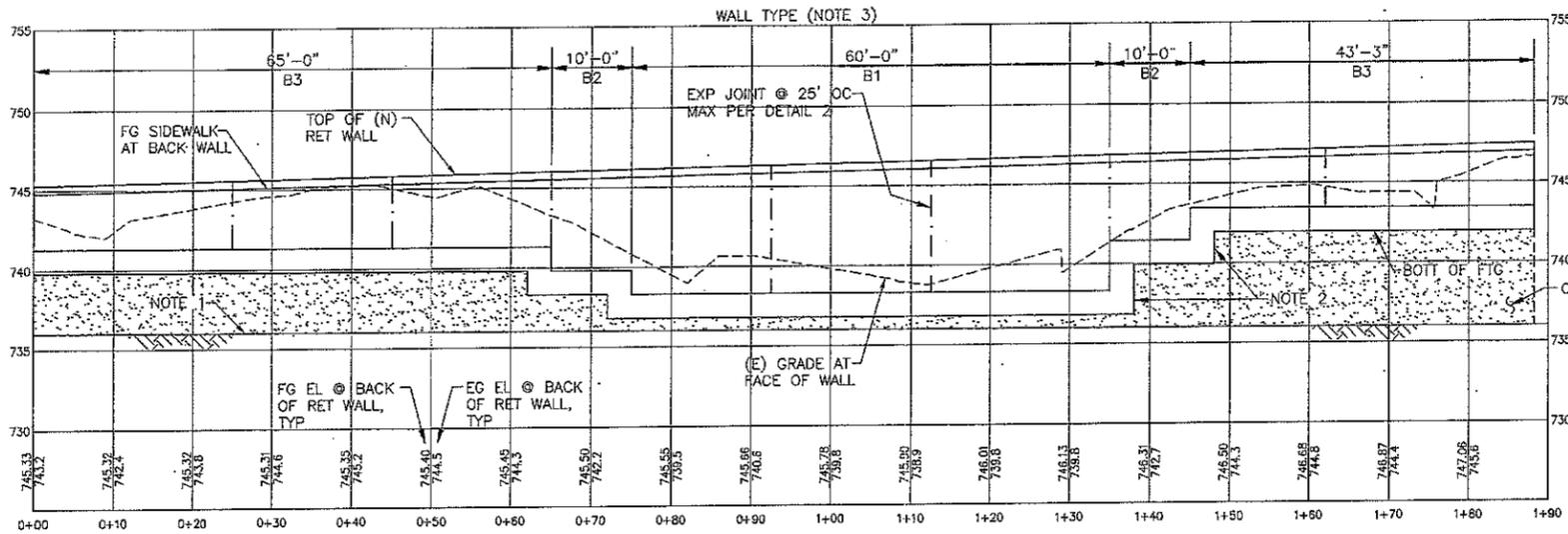
DESIGNED BY: PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
CONSTRUCTION DETAILS  
JOB NO. 2336  
BID. SCH. NO. XXXX

**PRELIMINARY PLANS**  
SUBJECT TO REVISION  
**REDUCED PLANS**

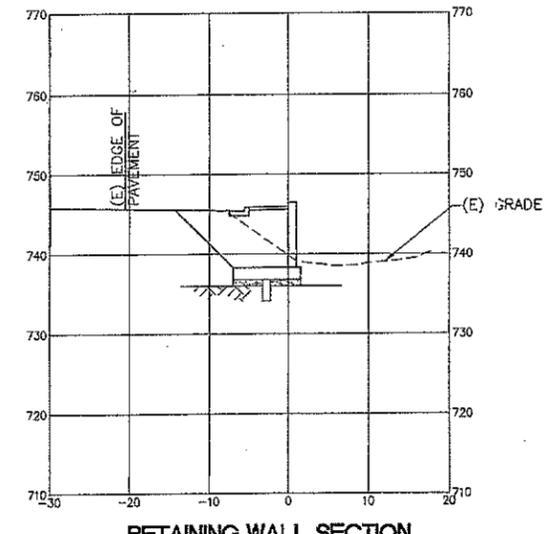
A-29  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
C-10  
SHEET 29 OF 79



**RETAINING WALL PROFILE**

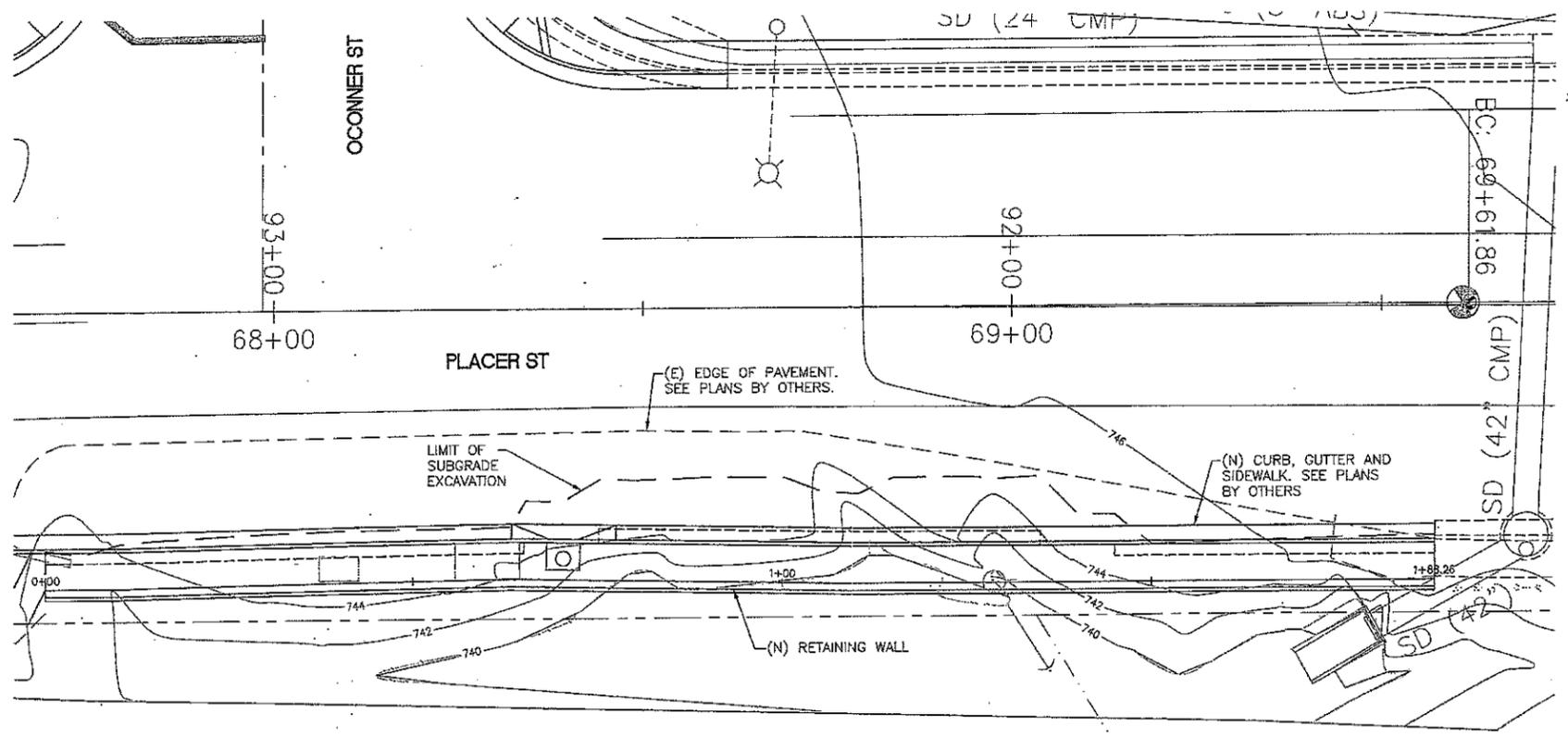
VERT: 1" = 5'  
 HORZ: 1" = 10'

- NOTES:  
 1. ASSUMED ELEV. OF ROCK = 736  
 2. SEE DETAIL 2 FOR FOOTING STEPS  
 3. SEE SECTION B FOR WALL INFORMATION



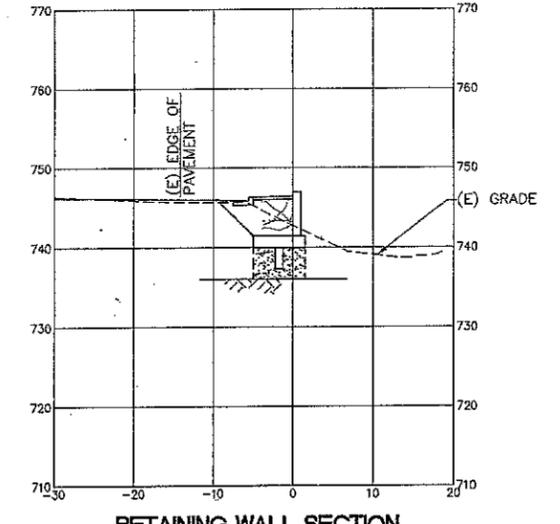
**RETAINING WALL SECTION  
 STA 1+00**

VERT: 1" = 10'  
 HORZ: 1" = 10'



**RETAINING WALL PLAN**

1" = 10'



**RETAINING WALL SECTION  
 STA 1+40**

VERT: 1" = 10'  
 HORZ: 1" = 10'

**PRELIMINARY PLANS  
 SUBJECT TO REVISION**

**REDUCED  
 PLANS**

DESIGNED BY: J. BRUNEMEIER  
 DRAWN BY: S. PETRIE  
 ORIGINAL SCALE IN INCHES: 1" = 10'  
 CITY OF REDDING RECORD DRAWING  
 DATE: \_\_\_\_\_

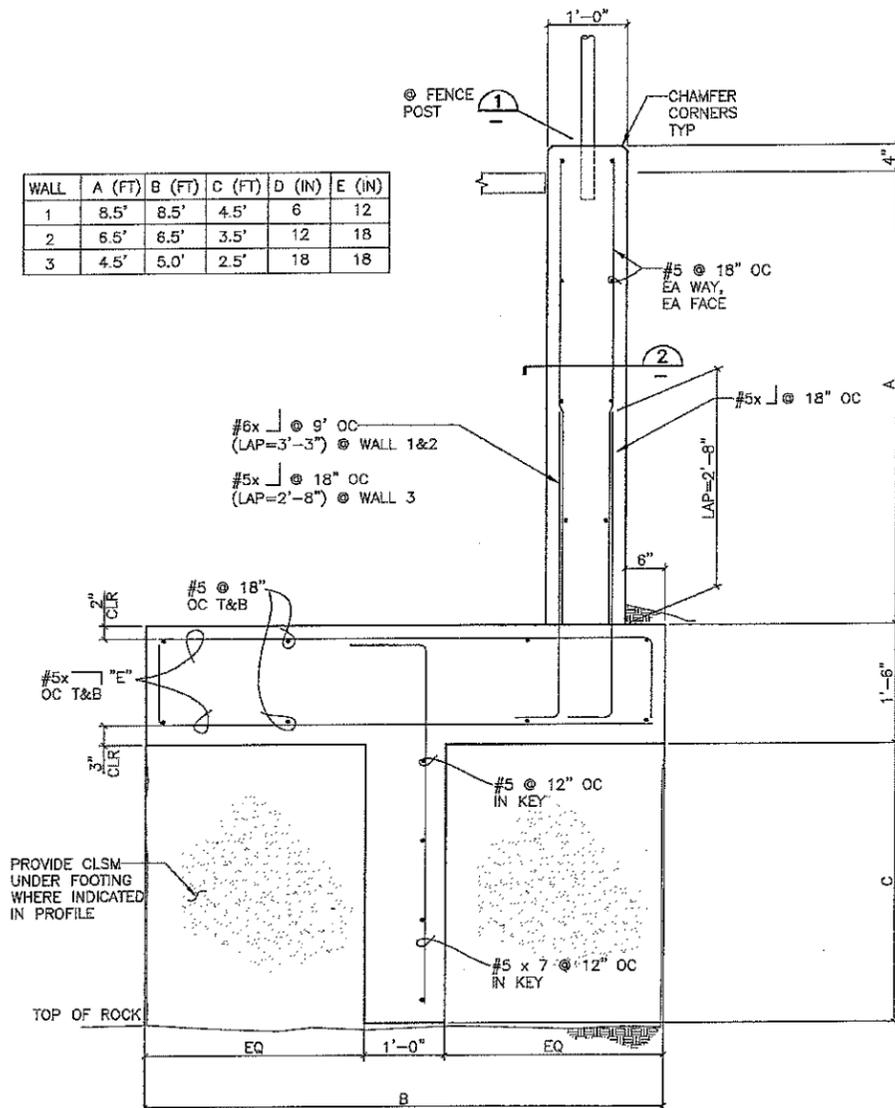
**PACE ENGINEERING**  
 PROFESSIONAL ENGINEER  
 LICENSE NO. 14105  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA

**CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT**

**PLACER STREET  
 IMPROVEMENTS**  
 CONSTRUCTION DETAILS  
 JOB NO. 2336  
 BID. SCH. NO. XXXX

A-30  
 ORIGINAL SCALE:  
 AS SHOWN  
 DATE: MAY 2014  
**C-13**  
 SHEET 30 OF 79

WALL	A (FT)	B (FT)	C (FT)	D (IN)	E (IN)
1	8.5'	8.5'	4.5'	6	12
2	6.5'	6.5'	3.5'	12	18
3	4.5'	5.0'	2.5'	18	18



(B) SECTION 1"=1'-0"

DESIGNED BY J. BRUNEMEIER  
DRAWN BY S. PETRIE  
CITY OF REDDING RECORD DRAWING

ORIGINAL SCALE IN INCHES

REGISTERED PROFESSIONAL ENGINEER  
JAMES BRUNEMEIER  
No. 1105  
STATE OF CALIFORNIA

**PACE**  
ENGINEERING  
INCORPORATED

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
CONSTRUCTION DETAILS

JOB NO. 233/B  
BID SCH. NO. XXXX

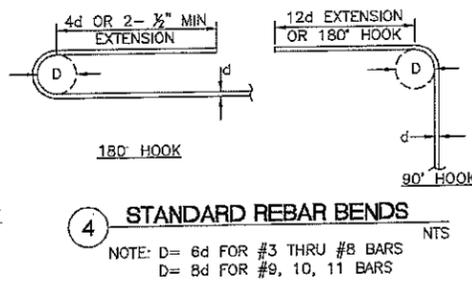
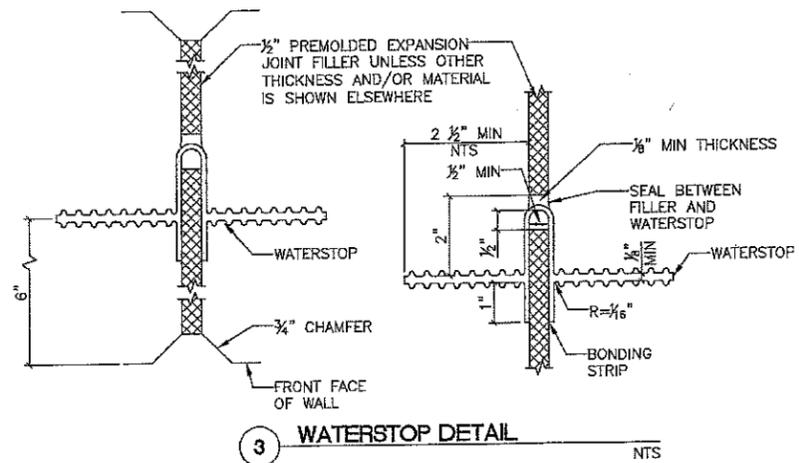
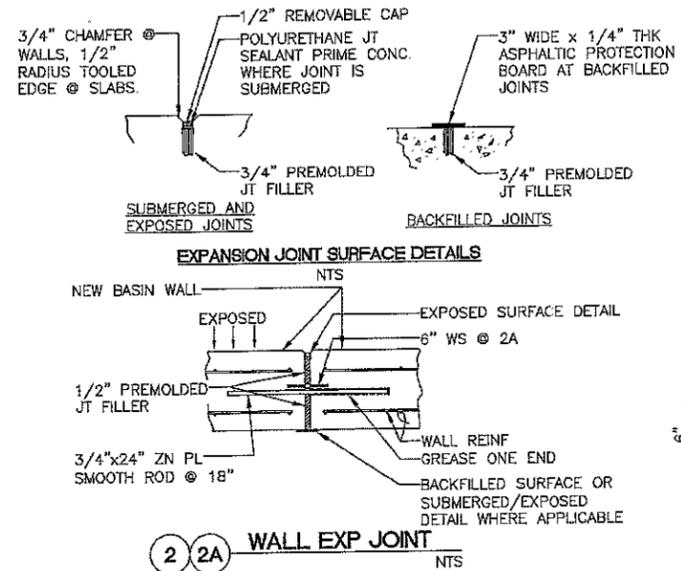
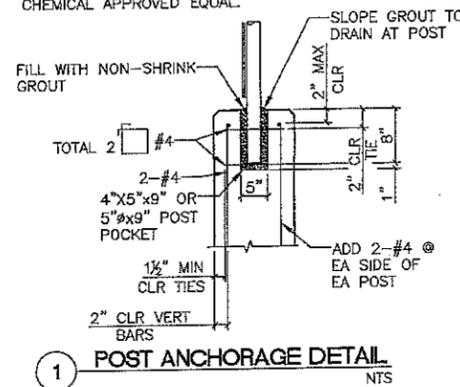
A-31  
ORIGINAL SCALE:  
AS SHOWN  
DATE: MAY 2014

C-15  
SHEET 31 OF 79

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

REDUCED  
PLANS

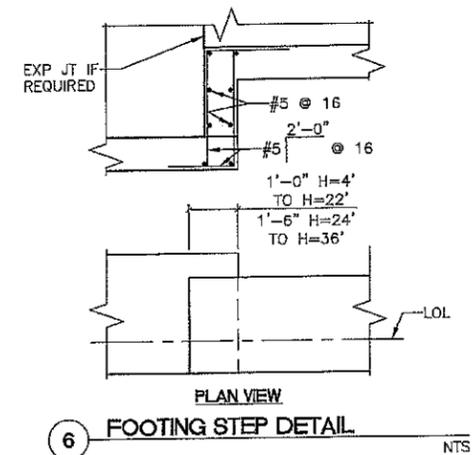
- NOTES:
1. POST SHALL BE VERTICAL
  2. FENCING SHALL CONFORM TO HORIZONTAL AND VERTICAL ALIGNMENT
  3. FOR DETAILS AND REINFORCEMENT NOT SHOWN SEE CALTRANS STANDARD PLAN B11-54.
  4. NON-SHRINK GROUT SHALL BE EUCO NS GROUT BY EUCLID CHEMICAL APPROVED EQUAL.



1/8" SPLICE LENGTH TABLE (SEE NOTES)

BAR SIZE	3	4	5	6	7	8	9	10	11	28 DAY DESIGN COMPR STRENGTH
MIN COVER(1)	3/4	3/4	3/4	1	1	1	2	2	2 1/2	2000 psi
TOP BAR	26	34	43	51	61	69	146	102	77	185
OTHER	20	27	33	39	48	53	111	78	59	142
TOP BAR	23	31	39	46	55	73	131	91	69	166
OTHER	18	24	30	35	43	56	100	70	53	128
TOP BAR	21	28	35	42	50	66	119	83	63	151
OTHER	16	22	27	32	39	51	43	91	64	116
TOP BAR	18	24	30	36	43	57	103	72	55	131
OTHER	16	19	23	28	33	44	37	79	56	101

5 CONCRETE REINF. SPLICE TABLE  
NOTES:  
1. SEE PLANS FOR ACTUAL COVER



6 FOOTING STEP DETAIL

DESIGNED BY  
J. BRUNEMEIER

DRAWN BY  
S. PETRIE

ORIGINAL SCALE IN INCHES  
0 1 2

CITY OF REDDING RECORD DRAWING

DATE



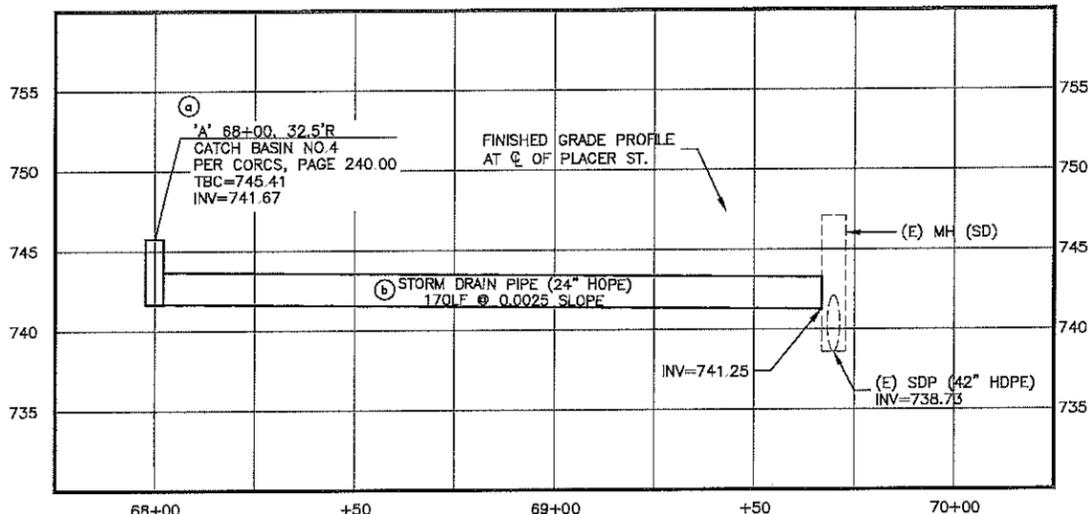
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
CONSTRUCTION DETAILS

JOB NO. 2336  
BRD. SCH. NO. XXXX

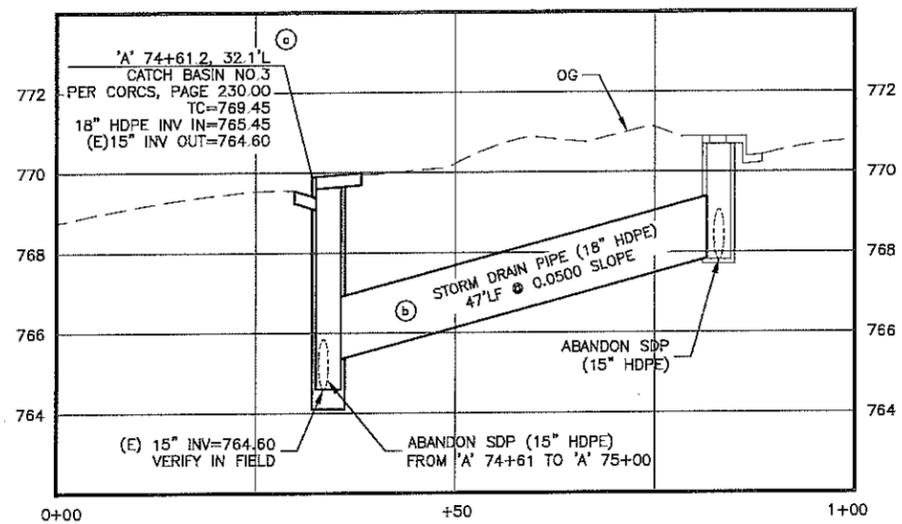
A-32  
ORIGINAL SCALE:  
AS SHOWN  
DATE: MAY 2014  
C-16  
SHEET 32 OF 79

PRELIMINARY PLANS  
SUBJECT TO REVISION  
REDUCED PLANS



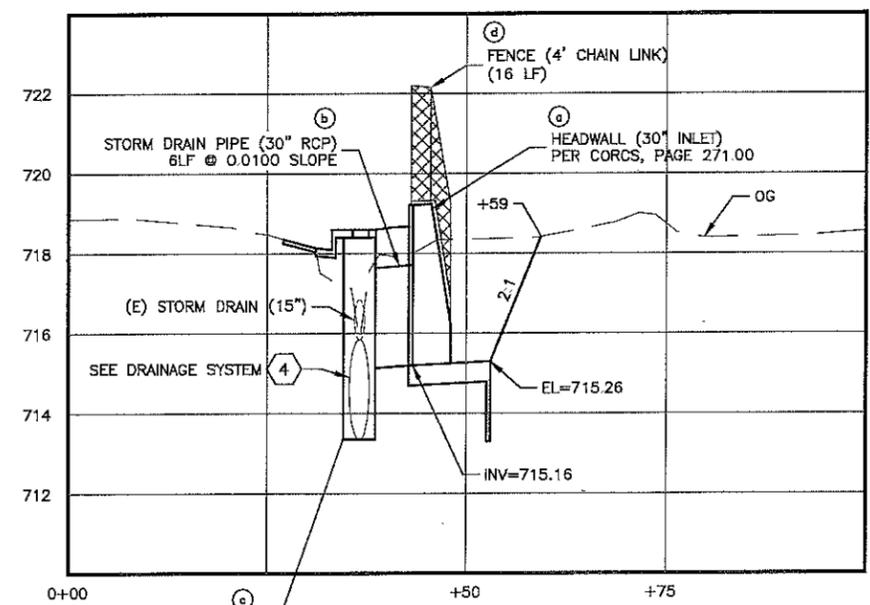
**DRAINAGE SYSTEM ①**

HORIZ: 1" = 20'  
VERT: 1" = 5'



**DRAINAGE SYSTEM ②**

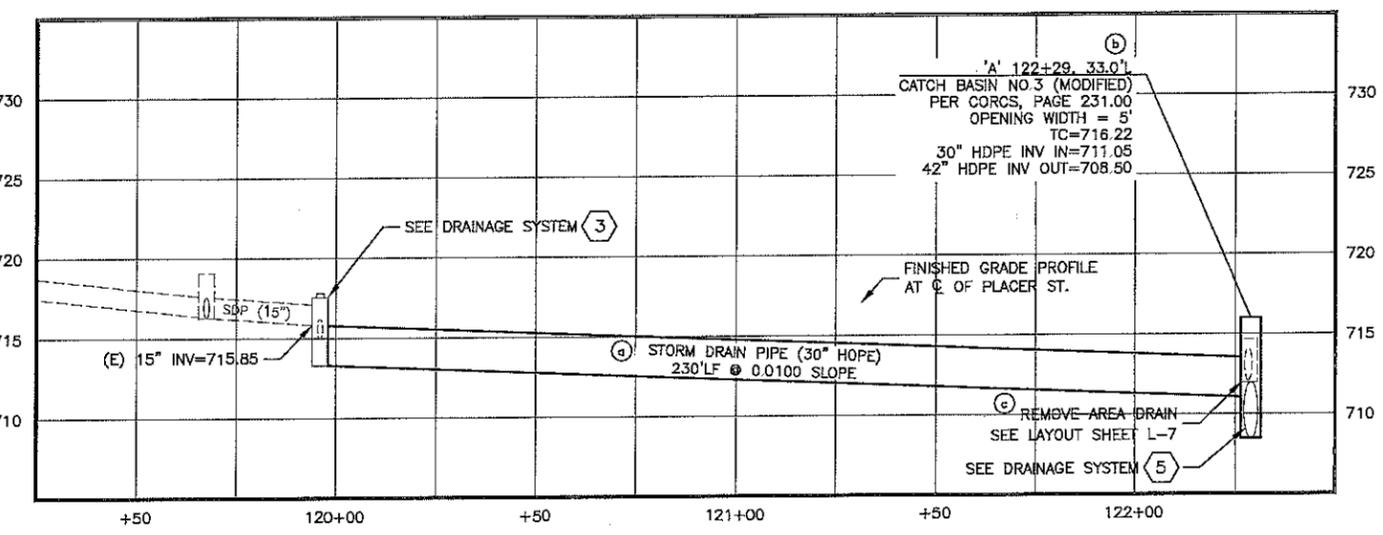
HORIZ: 1" = 10'  
VERT: 1" = 2'



**DRAINAGE SYSTEM ③**

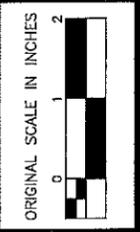
HORIZ: 1" = 10'  
VERT: 1" = 2'

'A' 119+96 36.6' L  
MH (STORM DRAIN TYPE 1-4)  
PER CORCS, PAGE 260.00  
RIM=718.70  
(E)15" HDPE INV IN=715.85  
30"RCP INV IN=715.10 (NORTH)  
30"HDPE INV OUT=713.35 (EAST)



**DRAINAGE SYSTEM ④**

HORIZ: 1" = 20'  
VERT: 1" = 5'



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



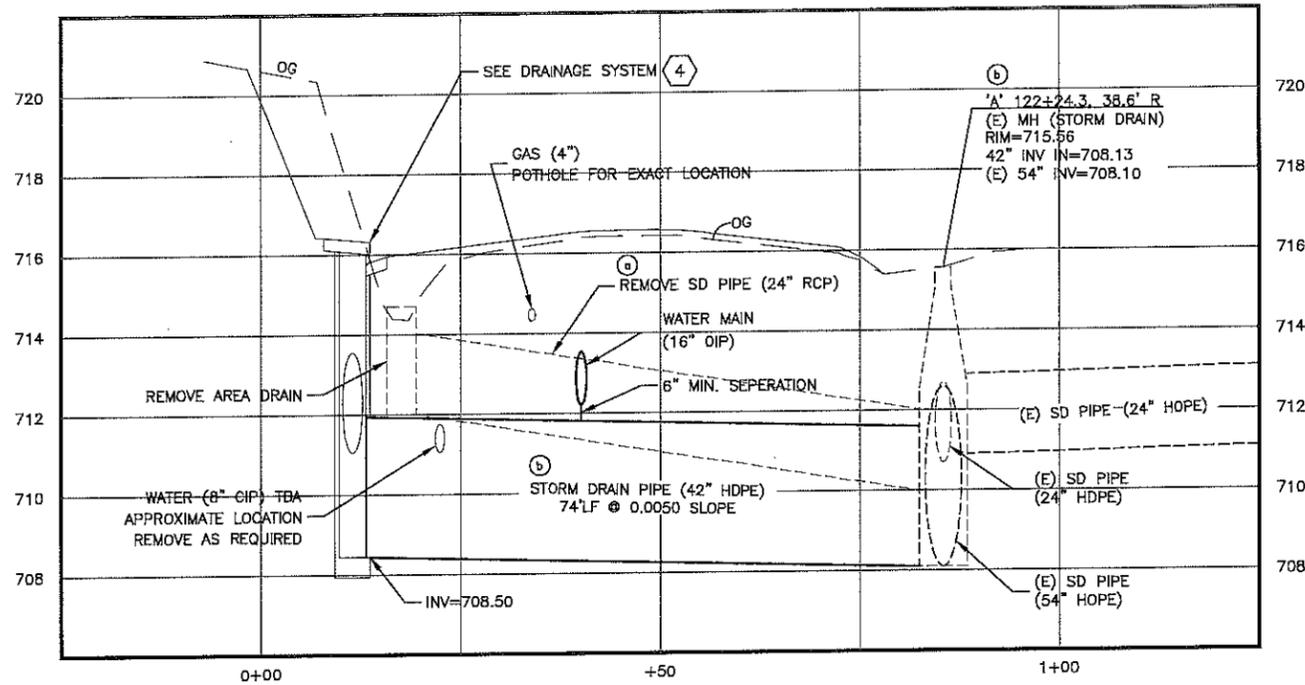
DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

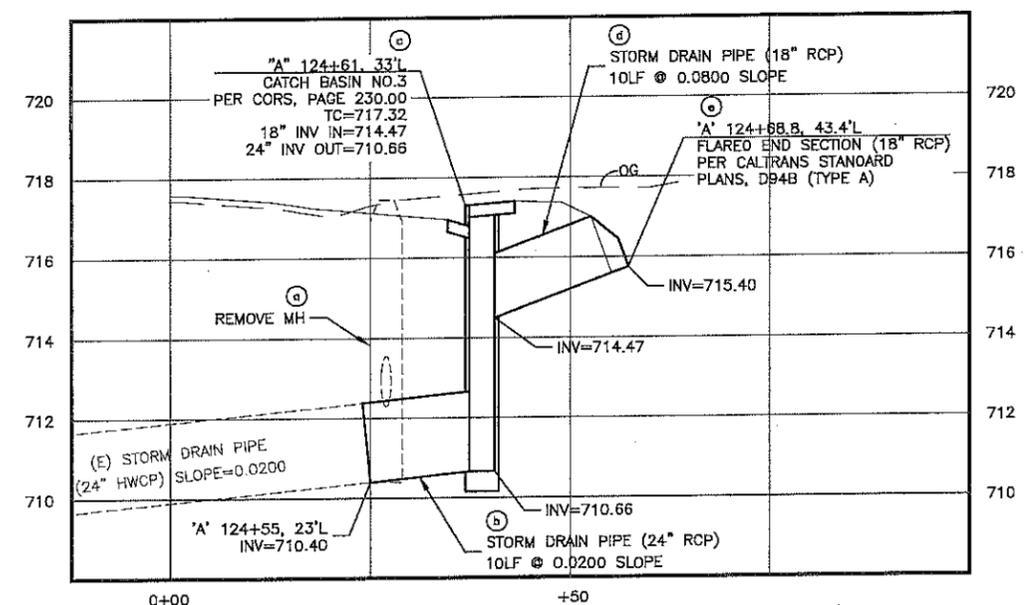
PLACER STREET  
IMPROVEMENTS  
DRAINAGE PROFILES  
JOB NO. 2536  
BID. SCH. NO. XXXX

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED  
PLANS

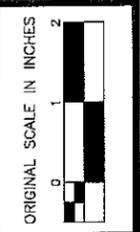
A-33  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
D-1  
SHEET 33 OF 79



**DRAINAGE SYSTEM 5**  
 HORIZ: 1" = 10'  
 VERT: 1" = 2'



**DRAINAGE SYSTEM 6**  
 HORIZ: 1" = 10'  
 VERT: 1" = 2'



DESIGNED BY: J ABSHIER  
 DRAWN BY: W DANIELS  
 REVIEWED BY:



DESIGNED BY:  
 PROJECT ENGINEER

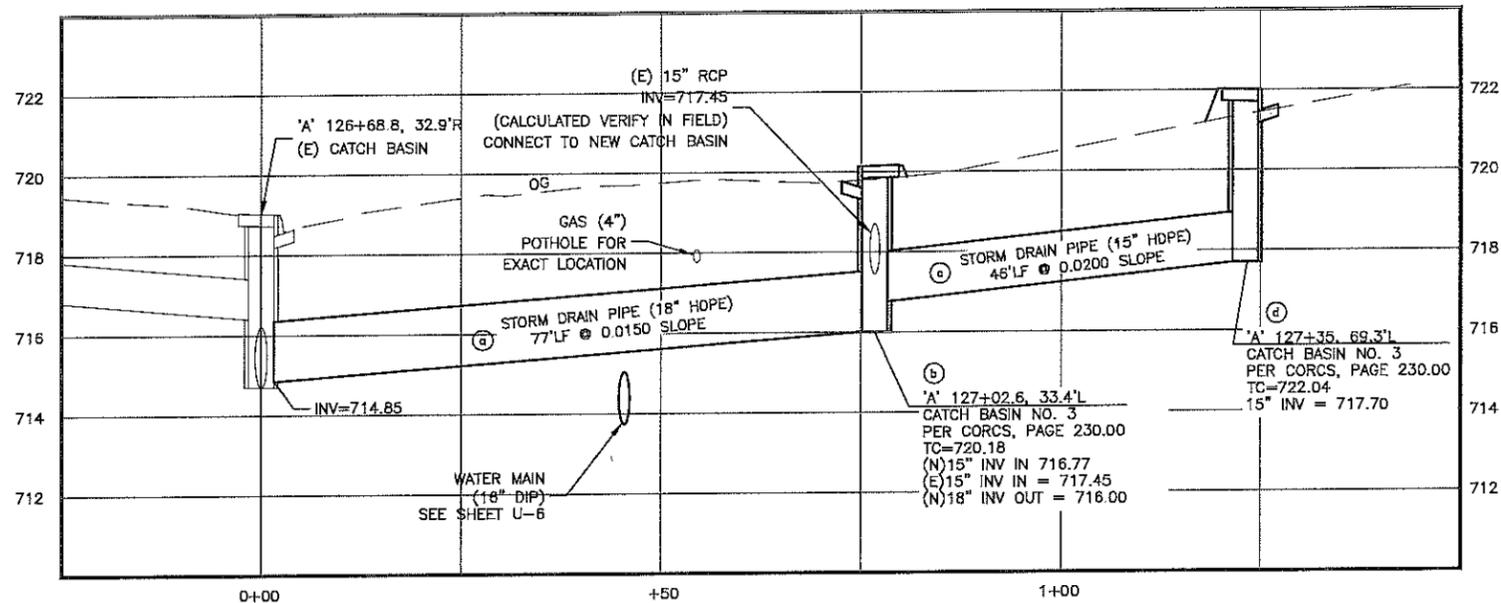
CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
 DRAINAGE PROFILES  
 JOB NO. 2336  
 BID SCH. NO. XXXX

**PRELIMINARY PLANS  
 SUBJECT TO REVISION**

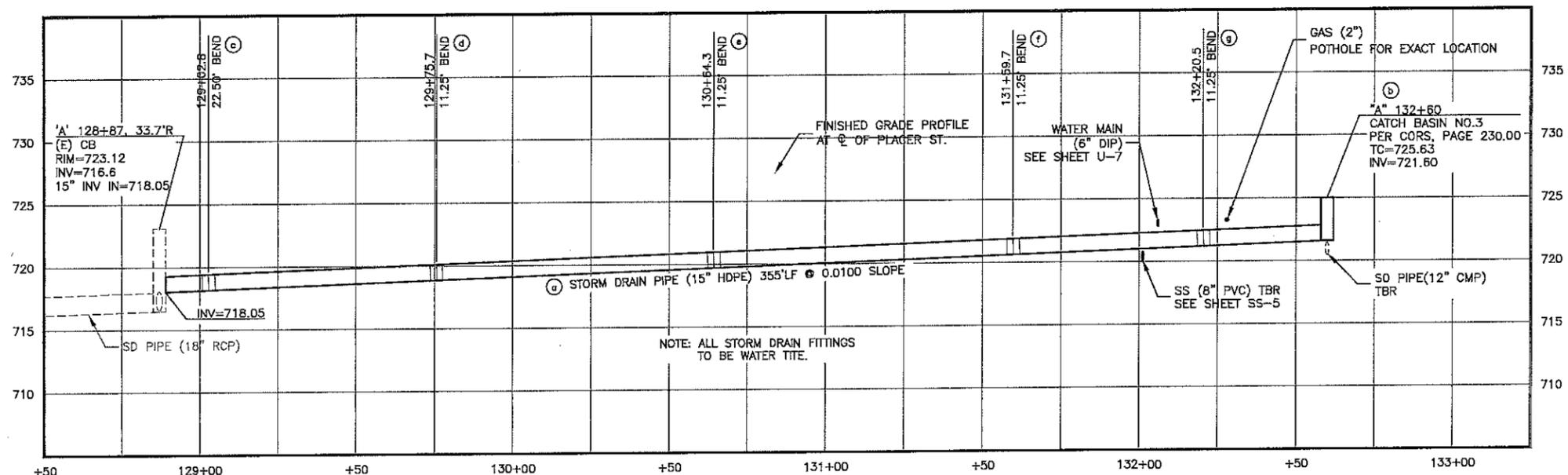
**REDUCED  
 PLANS**

A-34  
 ORIGINAL SCALE:  
 AS NOTED  
 DATE: MAY 2014  
**D-2**  
 SHEET 34 OF 79



**DRAINAGE SYSTEM 7**

HORIZ: 1" = 10'  
VERT: 1" = 2'



**DRAINAGE SYSTEM 8**

HORIZ: 1" = 20'  
VERT: 1" = 5'



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

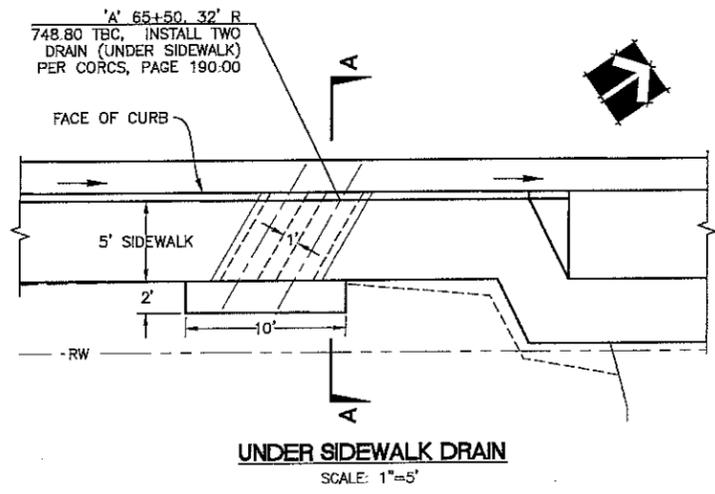
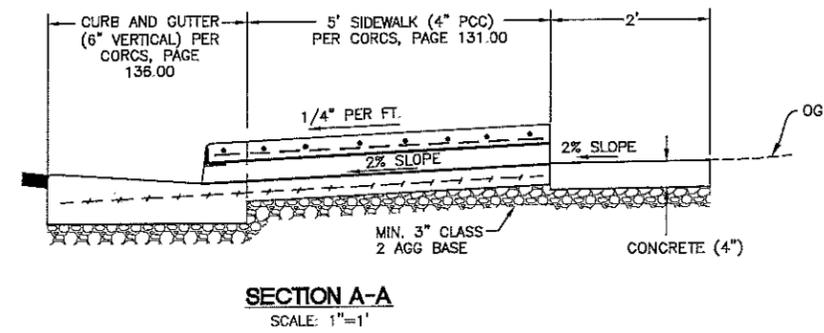
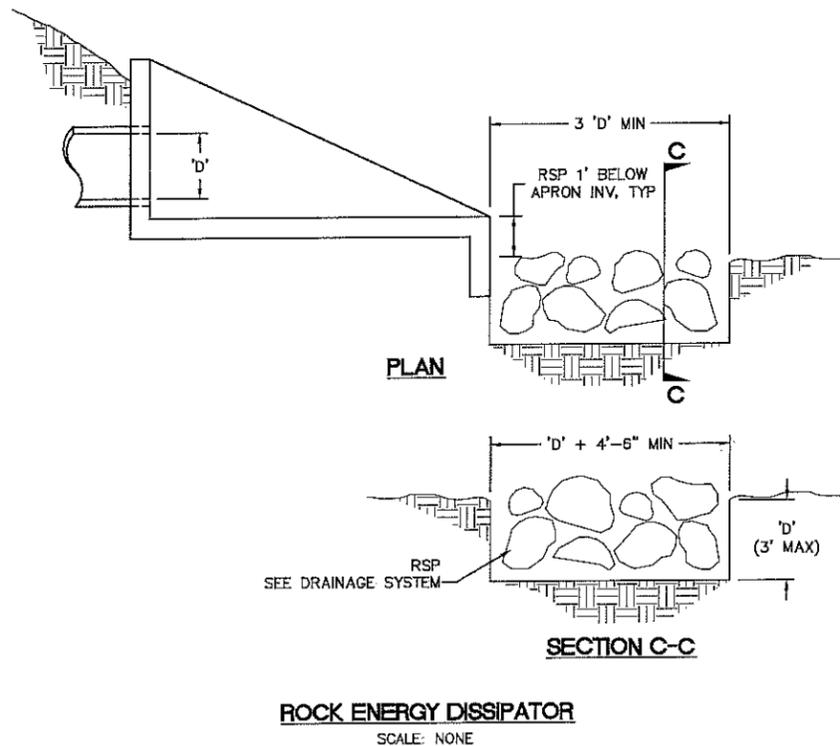
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
DRAINAGE PROFILES  
JOB NO. 2136  
BID. SCH. NO. XXXX

A-35  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
D-3  
SHEET 35 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**



DESIGNED BY  
J ABSHIER  
DRAWN BY  
W DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
DRAINAGE DETAILS  
JOB NO. 2326  
BID SCH. NO. XXXX

A-36  
ORIGINAL SCALE:  
AS NOTED  
DATE: MAY 2014  
D-5  
SHEET 36 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED PLANS

**DRAINAGE QUANTITIES**

DRAINAGE SYSTEM No.	DRAINAGE UNIT No.	REMOVE AREA DRAIN	REMOVE MANHOLE	REMOVE STORM DRAIN PIPE	REMOVE CATCH BASIN	HEADWALL (24" OUTLET)	FLARED END SECTION (18" RCP)	HEADWALL (30" INLET)	CATCH BASIN NO. 3	CATCH BASIN NO. 4	CATCH BASIN NO.3 (MODIFIED)	MANHOLE (TYPE 1-4)	MANHOLE (TYPE 1-6)	STORM DRAIN PIPE (42" HDPE)	STORM DRAIN PIPE (24" RCP)	STORM DRAIN PIPE (30" RCP)	STORM DRAIN PIPE (18" RCP)	STORM DRAIN PIPE (18" HDPE)	STORM DRAIN PIPE (24" HDPE)	STORM DRAIN PIPE (30" HDPE)	STORM DRAIN PIPE (15" HDPE 22.50° BEND)	STORM DRAIN FITTING (15" HDPE 11.25° BEND)	FENCE (4" VINYL COATED CHAIN LINK)	RSP (FACING METHOD B)	RSP (FABRIC)	DESCRIPTION	STATION	DRAINAGE SYSTEM No.		
1	a									1																	CATCH BASIN	A' 68+39	1	
	b																		170									CATCH BASIN	A' 68+39	
2	a								1																			CATCH BASIN	A' 74+61	2
	b																	47										CATCH BASIN	A' 74+61	
3	a							1																				HEADWALL INLET	A' 119+96	3
	b															6												30" RCP	A' 119+96	
	c											1																MANHOLE (TYPE 1-4)	A' 119+96	
4	a										1																	30" HDPE	A' 122+29	4
	b																		230								CATCH BASIN	A' 122+29		
	c	1																										AREA DRAIN	A' 122+29	
5	a			65																								24" RCP	A' 122+29	5
	b													74														42" HDPE	A' 122+29	
6	a		1																									MANHOLE	A' 124+56	6
	b															10												24" RCP	A' 124+61	
	c								1																			CATCH BASIN	A' 124+61	
	d																10											18" RCP	A' 124+61	
	e						1																					FLARED END SECTION	A' 124+69	
7	a																	77										18" HDPE	A' 124+68	7
	b								1																			CATCH BASIN	A' 127+03	
	c																											15" HDPE	A' 127+03	
	d								1																			CATCH BASIN	A' 127+35	
8	a																											15" HDPE	A' 132+60	8
	b								1																			CATCH BASIN	A' 132+60	
	c																											SD FITTING (22.50° BEND)	A' 129+03	
	d																											SD FITTING (11.25° BEND)	A' 129+76	
	e																											SD FITTING (11.25° BEND)	A' 130+64	
	f																											SD FITTING (11.25° BEND)	A' 131+60	
	g																											SD FITTING (11.25° BEND)	A' 132+21	
<b>TOTAL</b>		1	1	65	0	0	1	1	5	1	1	1	0		10	6	10	124	170	230	401	1	4	0	0	0	<b>TOTAL</b>			



DESIGNED BY: J. ABSHIER  
 DRAWN BY: W. DANIELS  
 REVIEWED BY:



DESIGNED BY:  
 PROJECT ENGINEER

**CITY OF REDDING**  
**PUBLIC WORKS DEPARTMENT**

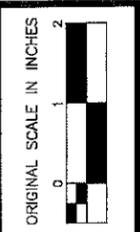
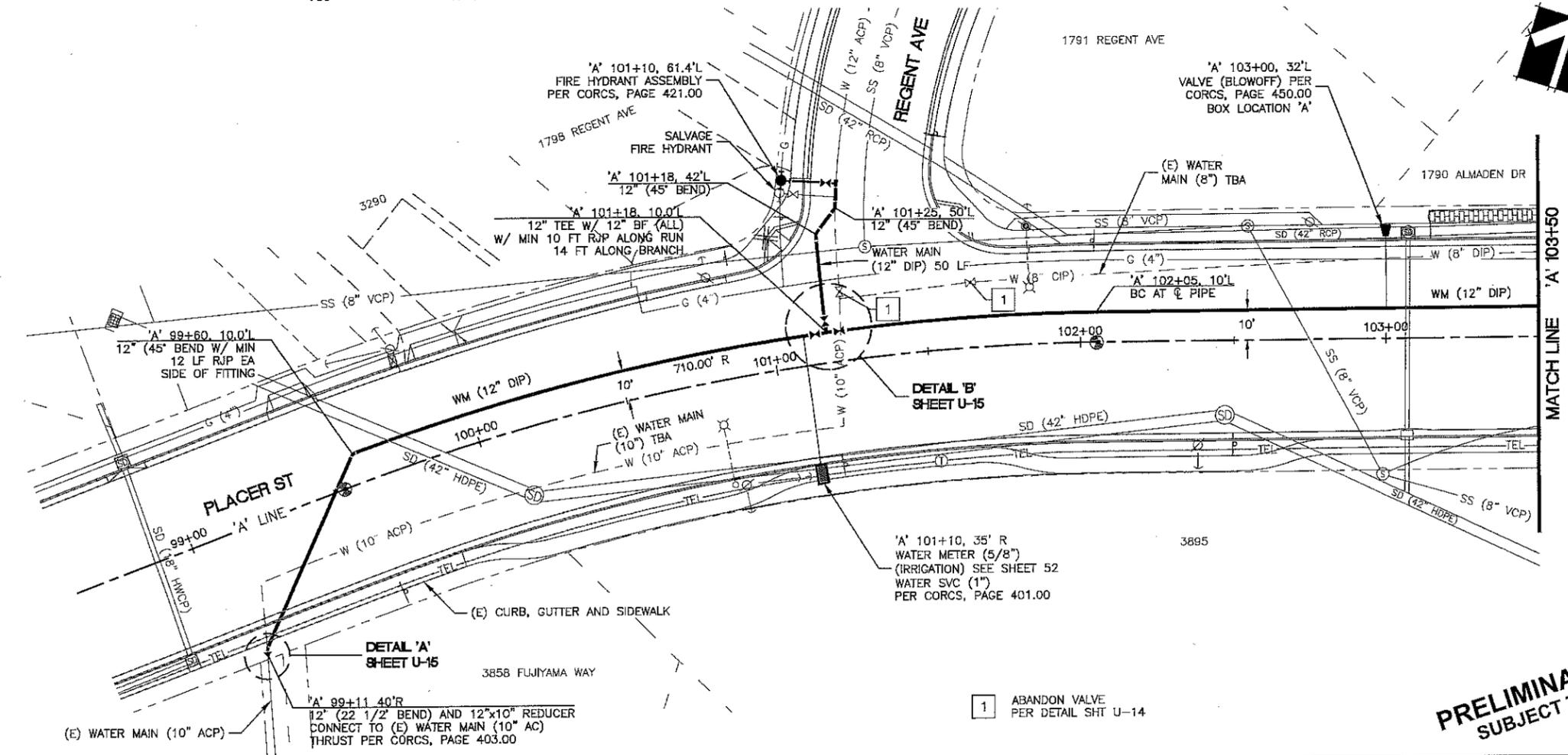
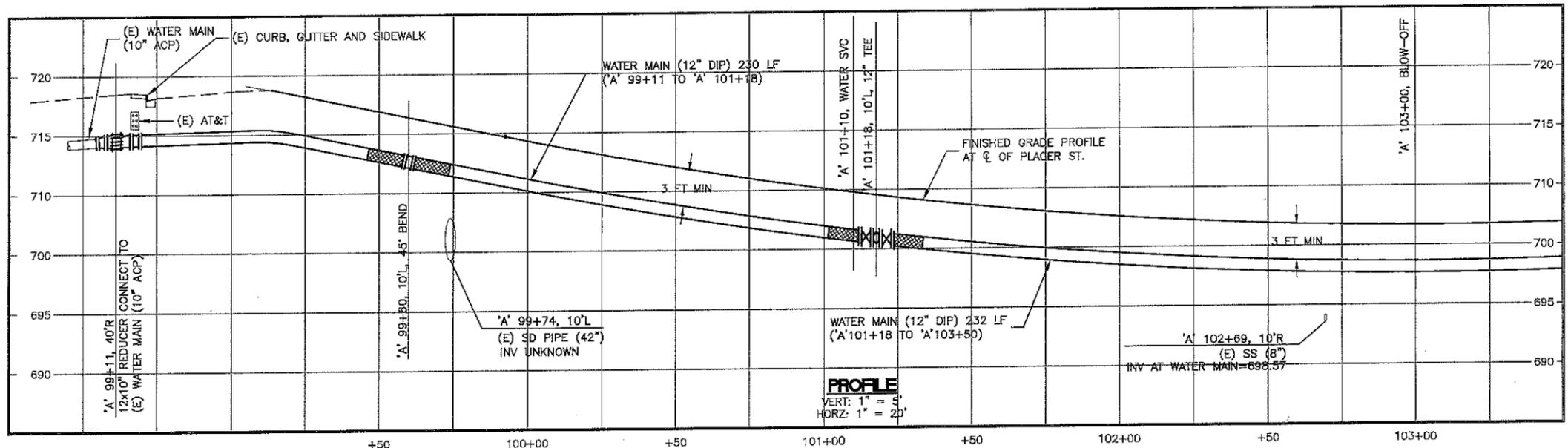
**PLACER STREET IMPROVEMENTS**  
**DRAINAGE QUANTITIES**

JOB NO. 2336  
 BID SCH. NO. XXXX

A-37  
 ORIGINAL SCALE: NONE  
 DATE: MAY 2014  
**D-6**  
 SHEET 37 OF 79

**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**

**REDUCED PLANS**



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

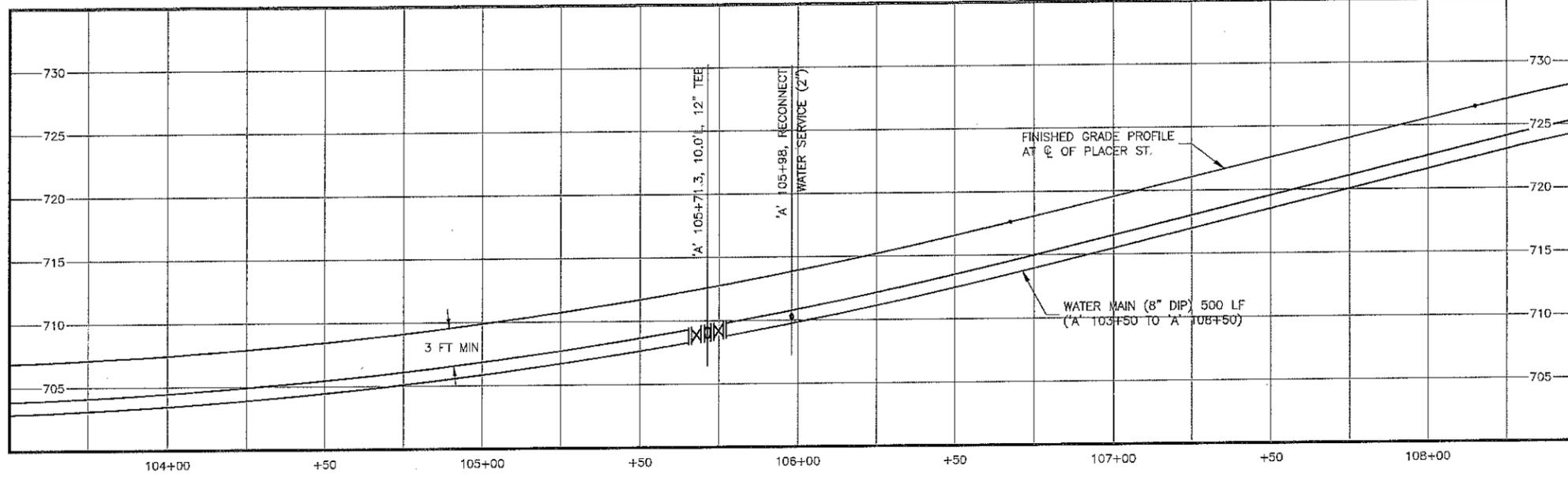
PLACER STREET  
IMPROVEMENTS  
WATER  
JOB NO. 2336  
BID. SCH. NO. XXXX

A-38  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
U-1  
SHEET 38 OF 79

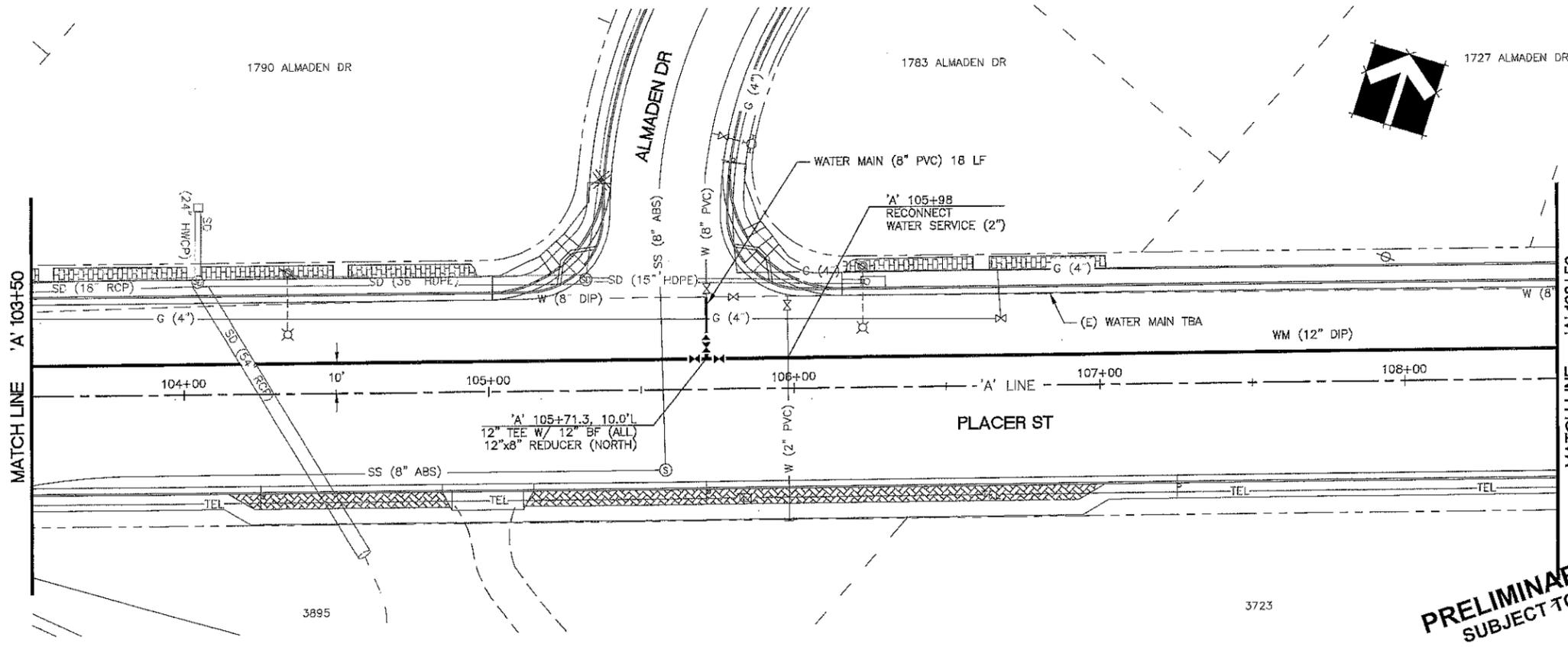
**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**

1 ABANDON VALVE  
PER DETAIL SHT U-14



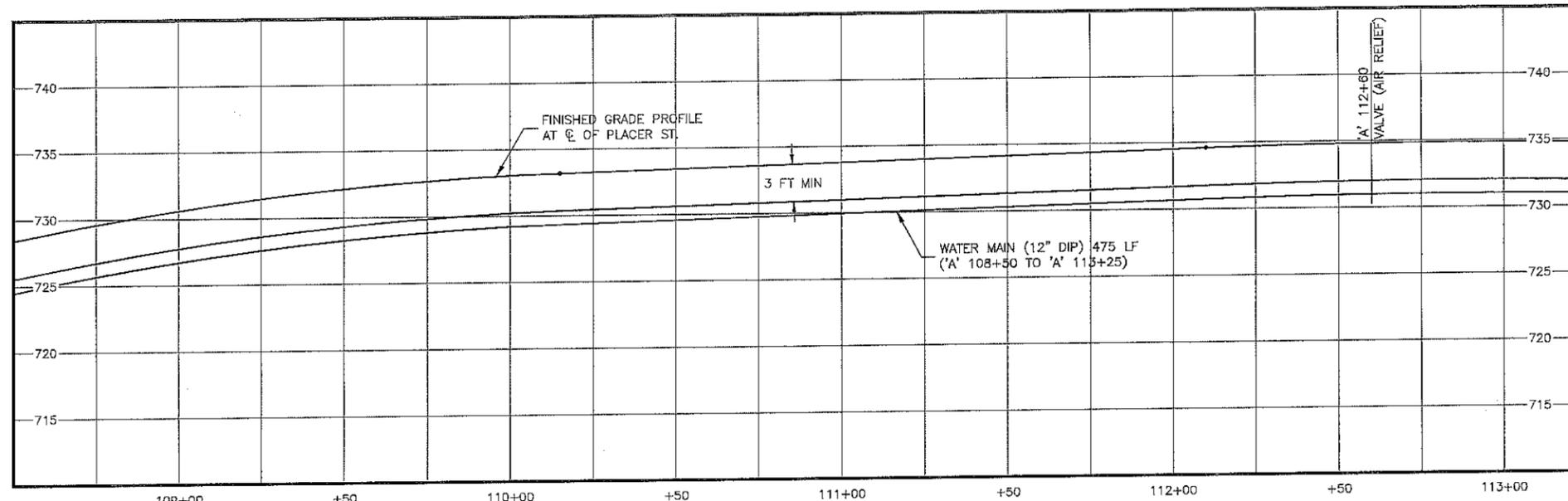
**PROFILE**  
 VERT: 1" = 5'  
 HORZ: 1" = 20'



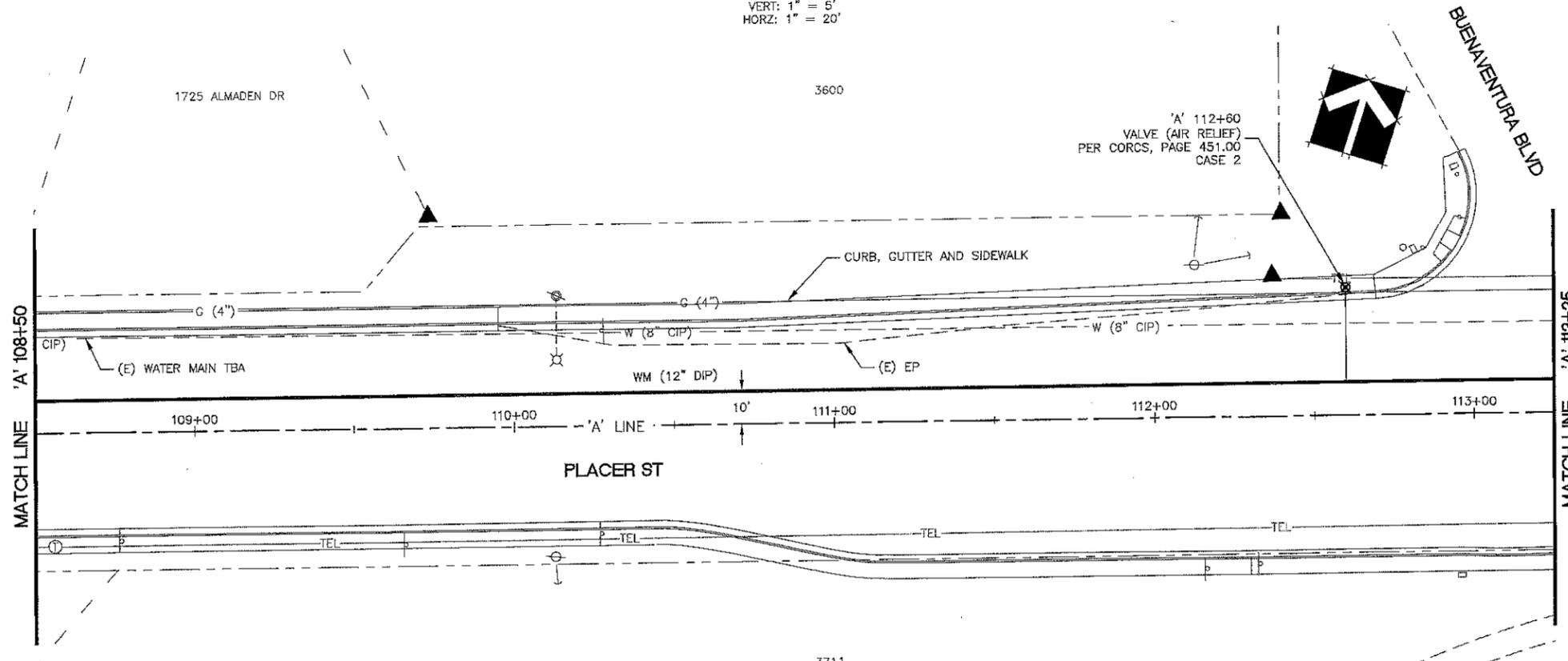
**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

**REDUCED PLANS**

DESIGNED BY: J ABESHER	ORIGINAL SCALE IN INCHES: 2
DRAWN BY: W DANIELS	
REVIEWED BY:	
DESIGNED BY:	PROJECT ENGINEER
<b>CITY OF REDDING</b> <b>PUBLIC WORKS DEPARTMENT</b>	
<b>PLACER STREET IMPROVEMENTS</b> WATER BID SCH. NO. XXXX JOB NO. 2536	
<b>A-39</b> ORIGINAL SCALE: 1" = 20' DATE: MAY 2014 <b>U-2</b> SHEET 39 OF 79	



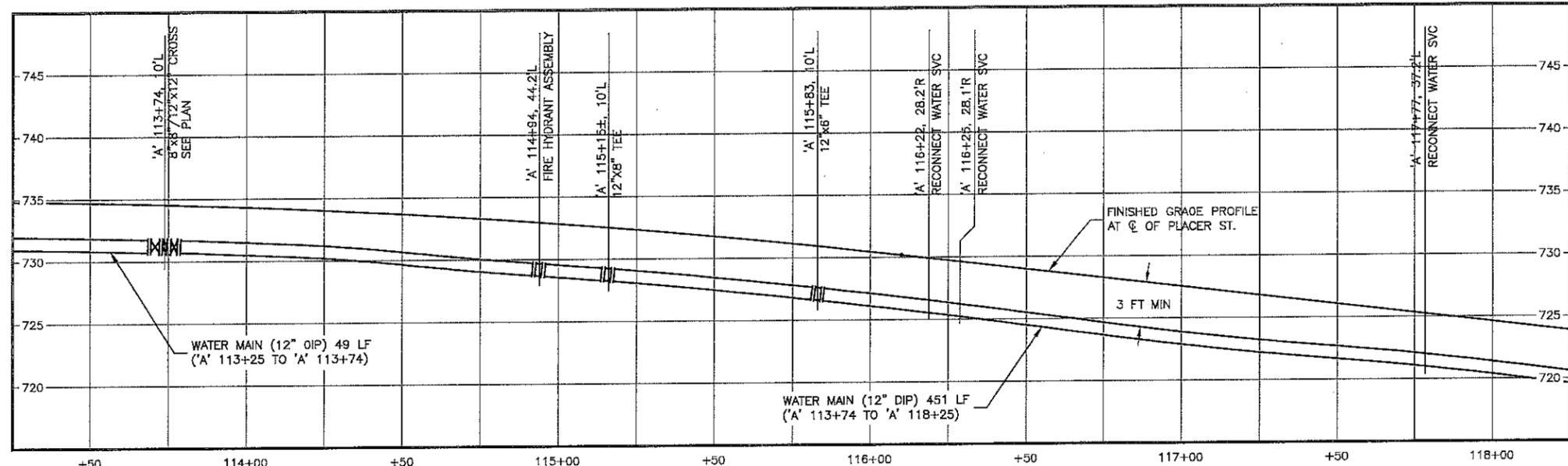
**PROFILE**  
 VERT: 1" = 5'  
 HORZ: 1" = 20'



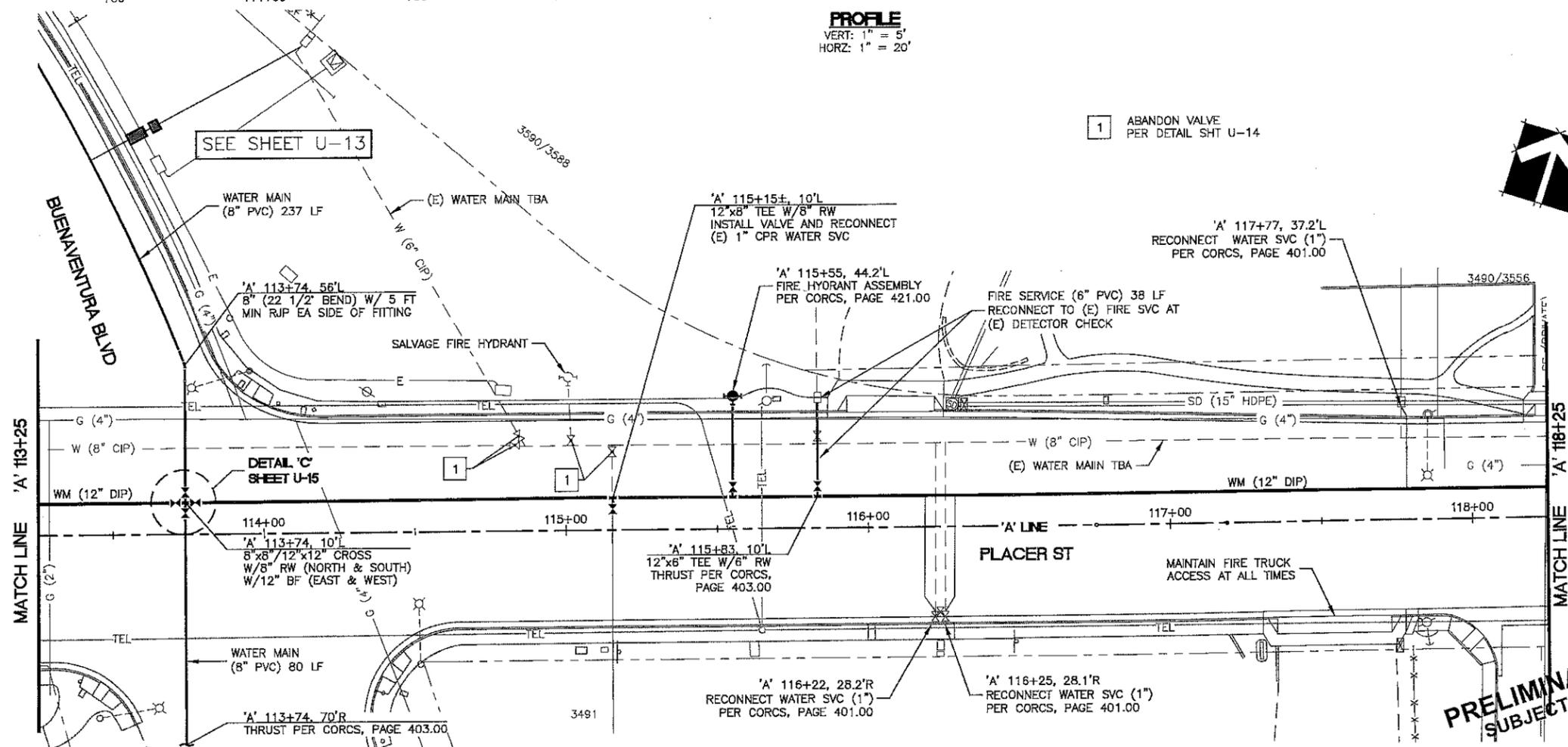
**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

REDUCED PLANS

DESIGNED BY: J. ABSHIER	DESIGNED BY: J. ABSHIER		ORIGINAL SCALE IN INCHES 
DRAWN BY: W. DANIELS	DRAWN BY: W. DANIELS		PROJECT ENGINEER
CITY OF REDDING PUBLIC WORKS DEPARTMENT			
PLACER STREET IMPROVEMENTS WATER			
JOB NO. 2336 EID. SCH. NO. XXXX			
A-40 ORIGINAL SCALE: 1" = 20'			
DATE: MAY 2014			
U-3 SHEET 40 OF 79			

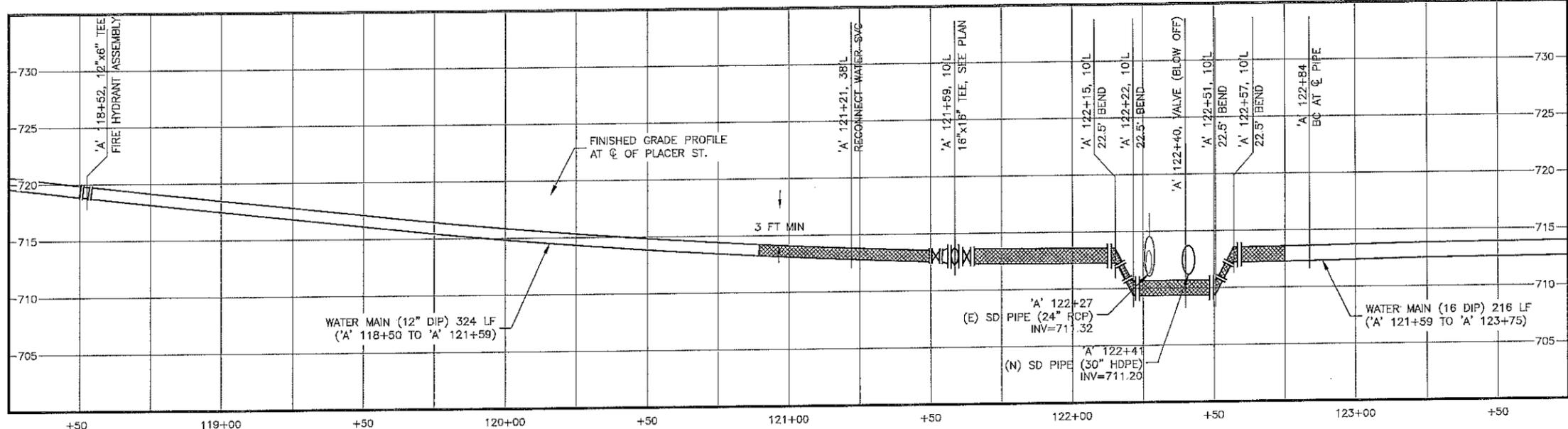


**PROFILE**  
 VERT: 1" = 5'  
 HORIZ: 1" = 20'

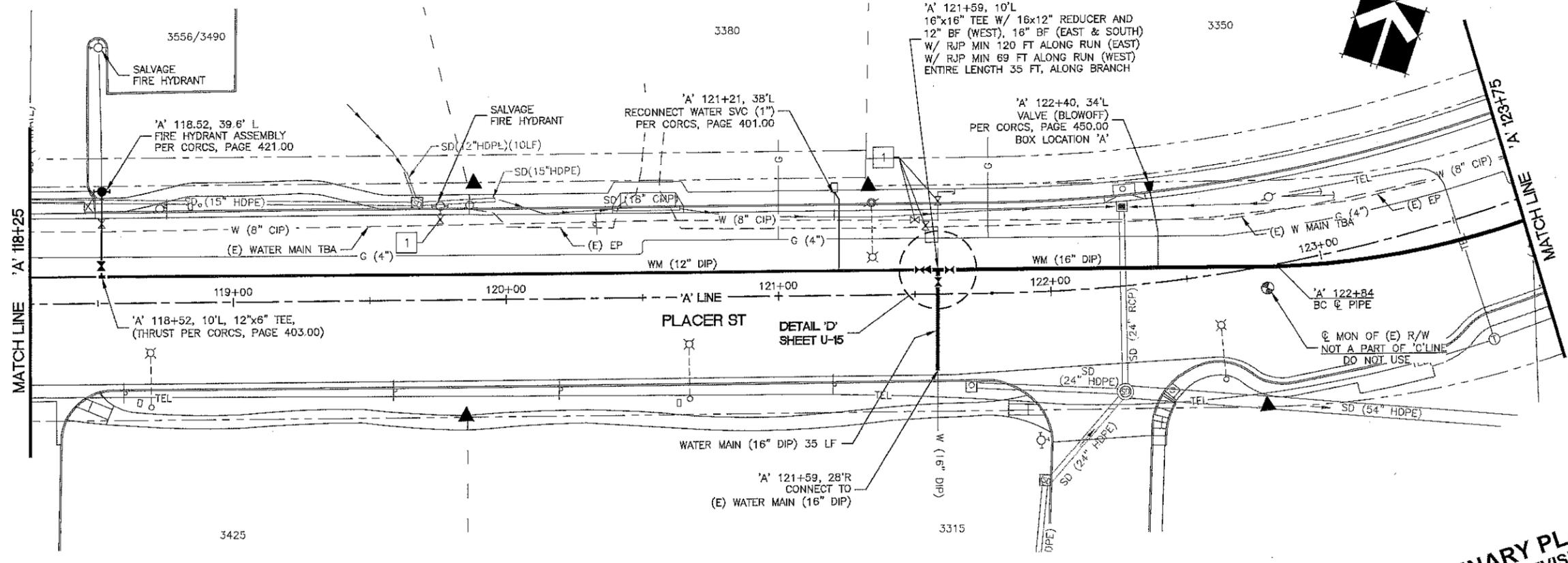


**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

DESIGNED BY: J ABSHIER	ORIGINAL SCALE IN INCHES: 0 1 2
DRAWN BY: W DANIELS	
REVIEWED BY:	
<b>CITY OF REDDING</b> <b>PUBLIC WORKS DEPARTMENT</b>	
<b>PLACER STREET IMPROVEMENTS</b> <b>WATER</b>	
JOB NO. 2336 BID. SQT. NO. XXXX	
<b>A-41</b> ORIGINAL SCALE: 1"=20' DATE: MAY 2014	
<b>U-4</b> SHEET 41 OF 79	



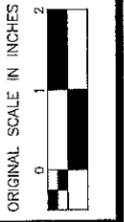
**PROFILE**  
 VERT. 1" = 5'  
 HORIZ. 1" = 20'



1 ABANDON VALVE  
 PER DETAIL SHT 47

**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

**REDUCED PLANS**



DESIGNED BY  
 J. ABSHIER

DRAWN BY  
 W. DANIELS

REVIEWED BY



DESIGNED BY  
 PROJECT ENGINEER

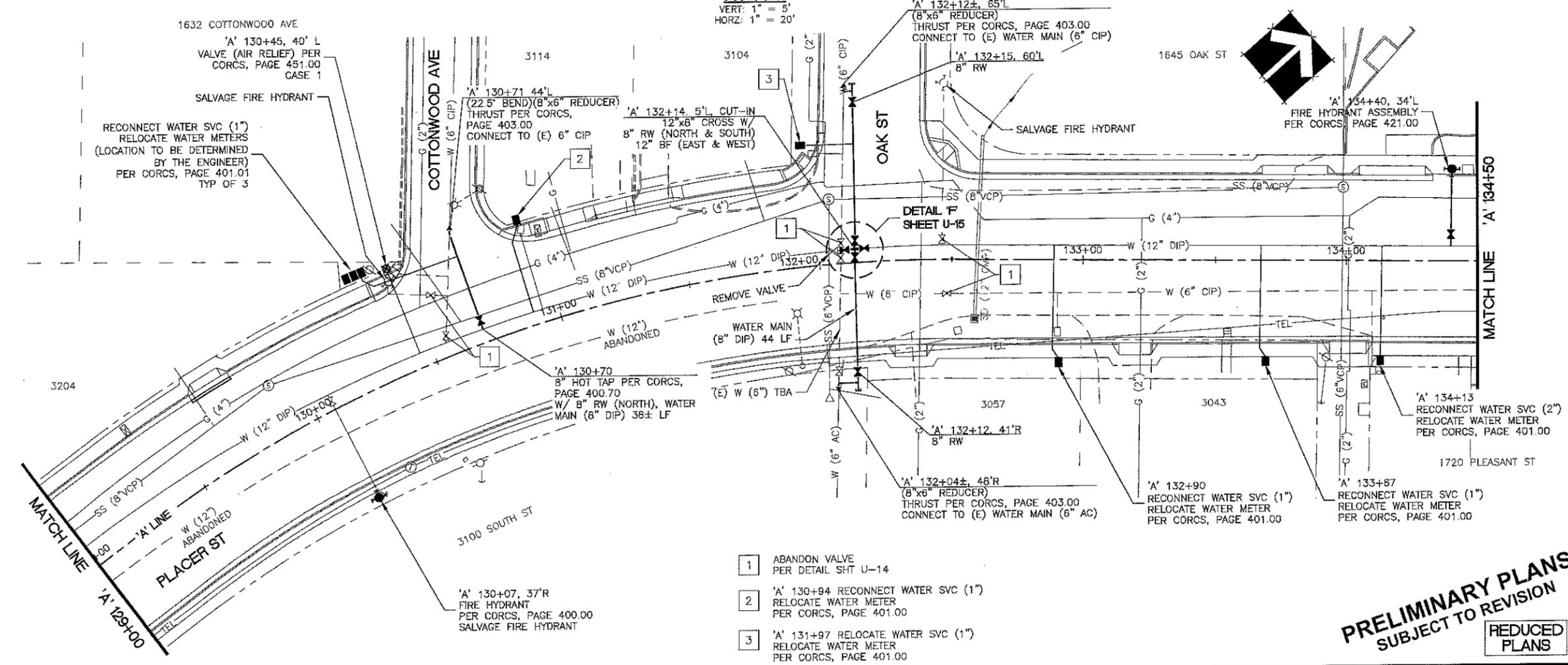
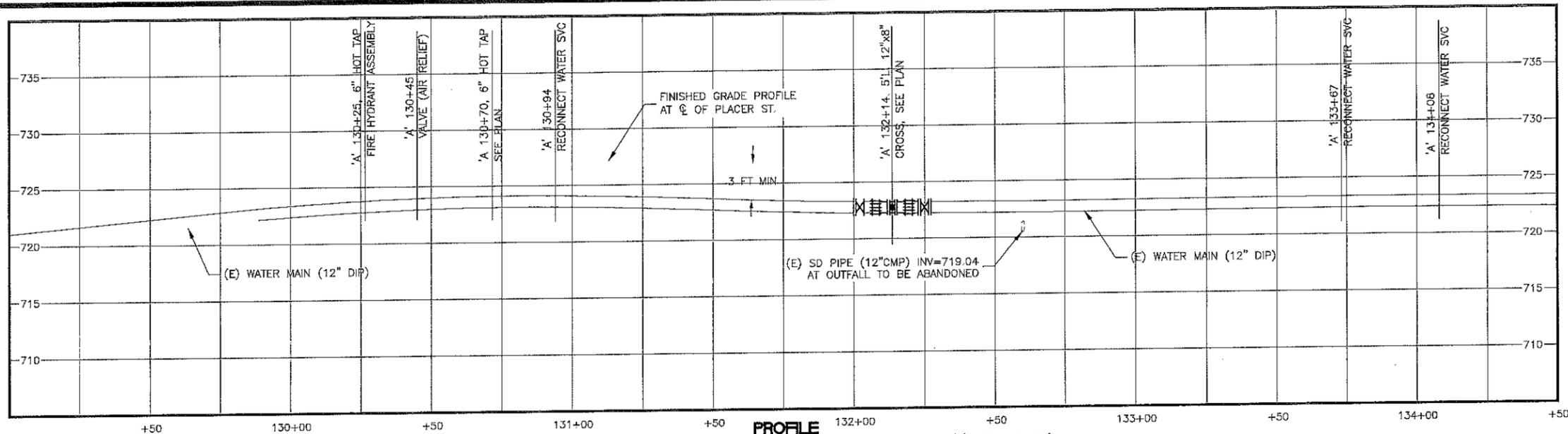
CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET  
 IMPROVEMENTS

JOB NO. 2336  
 BID. SCH. NO. XXXX  
 WATER

A-42  
 ORIGINAL SCALE:  
 1"=20'  
 DATE: MAY 2014  
 U-5  
 SHEET 42 OF 79





- 1 ABANDON VALVE PER DETAIL SHT U-14
- 2 'A' 130+94 RECONNECT WATER SVC (1") RELOCATE WATER METER PER CORCS, PAGE 401.00
- 3 'A' 131+97 RELOCATE WATER SVC (1") RELOCATE WATER METER PER CORCS, PAGE 401.00

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

REDUCED  
PLANS

ORIGINAL SCALE IN INCHES  
0 1 2

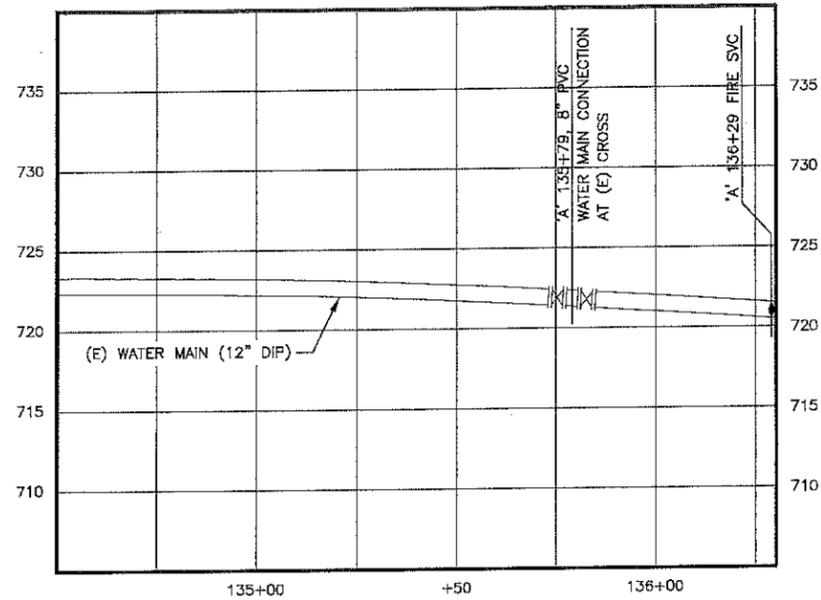
DESIGNED BY: J ABSHIER  
DRAWN BY: W DANIELS  
REVIEWED BY:

DESIGNED BY: [Professional Engineer Seal]  
PROJECT ENGINEER

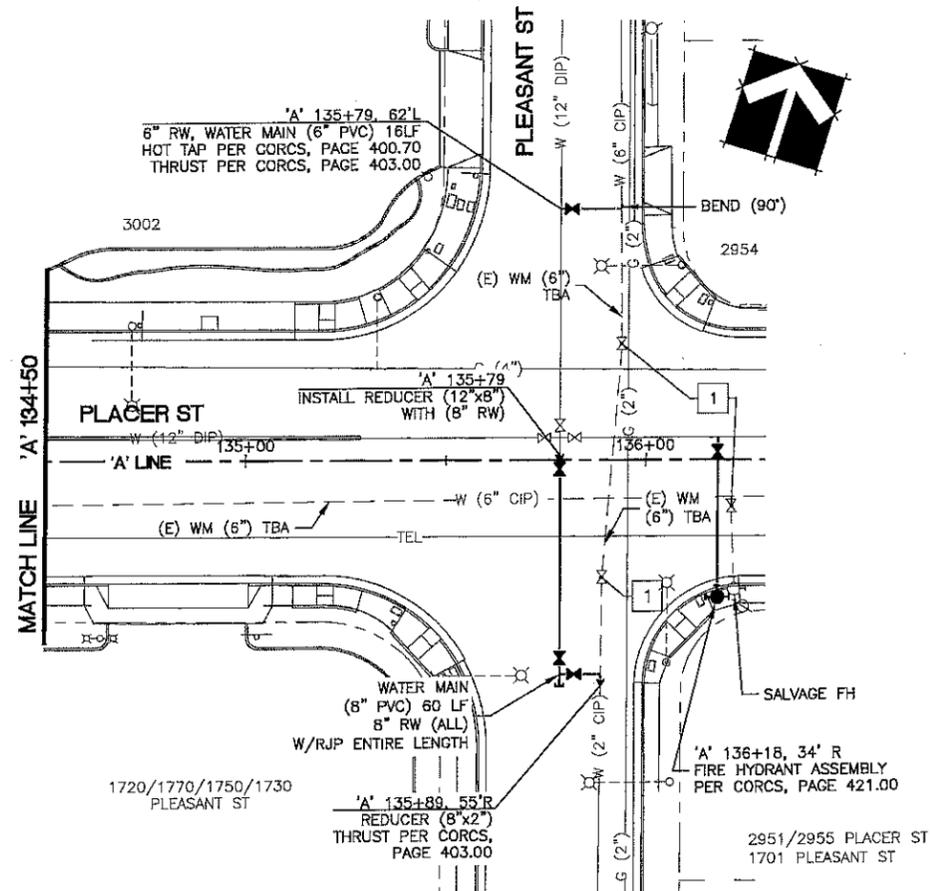
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
WATER  
JOB NO. 2335  
BID SCH. NO. XXXX

A-44  
ORIGINAL SCALE: 1"=20'  
DATE: MAY 2014  
U-7  
SHEET 44 OF 79



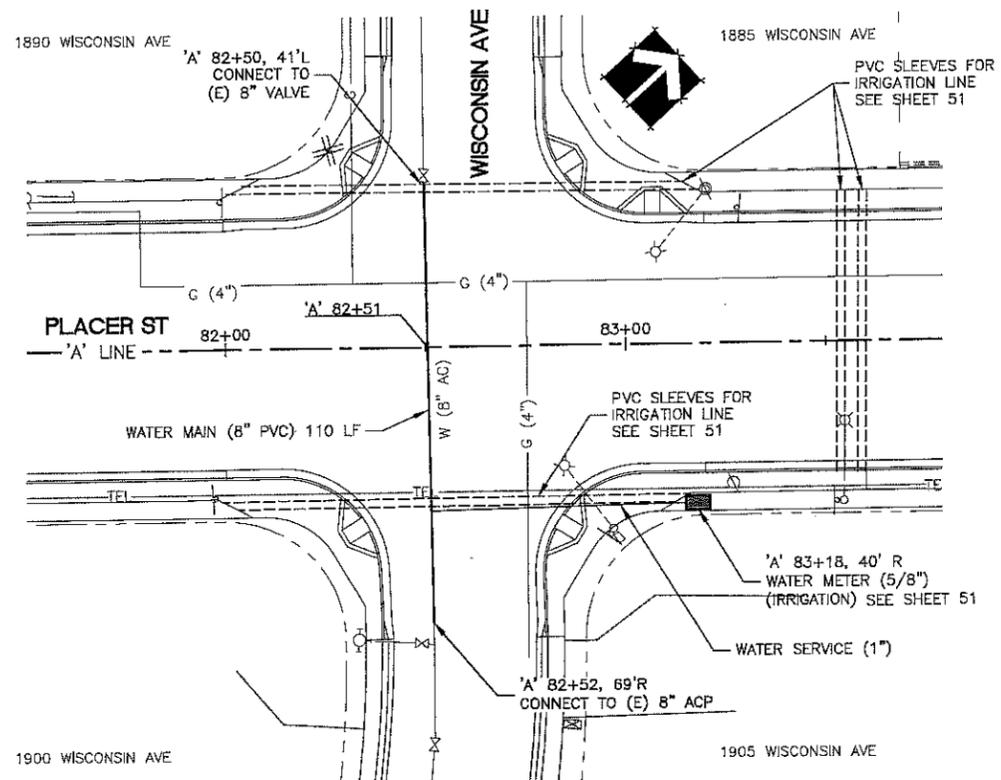
**PROFILE**  
 VERT: 1" = 5'  
 HORZ: 1" = 20'



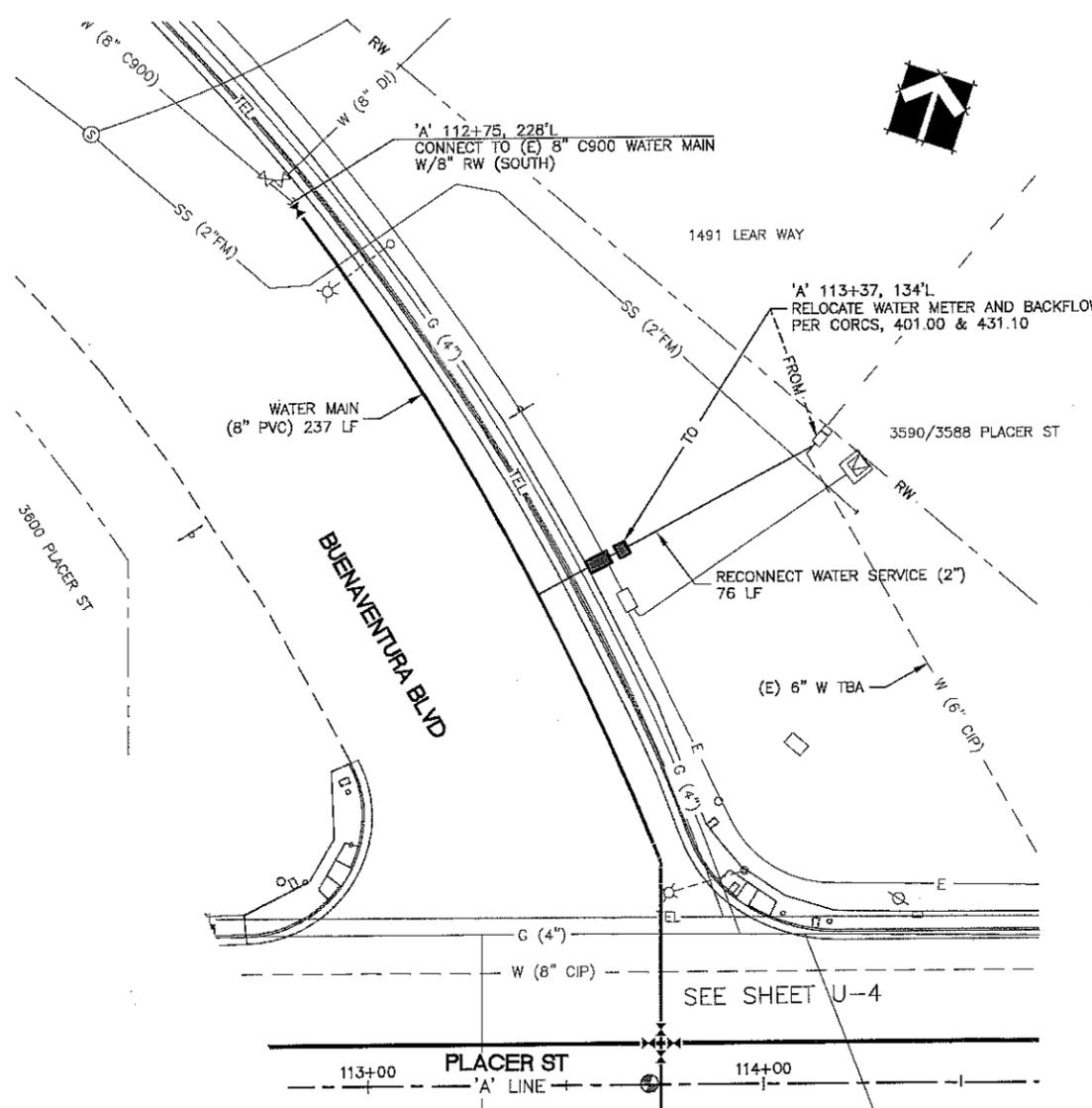
1 ABANDON VALVE  
 PER DETAIL SHT U

**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**  
 REDUCED  
 PLANS

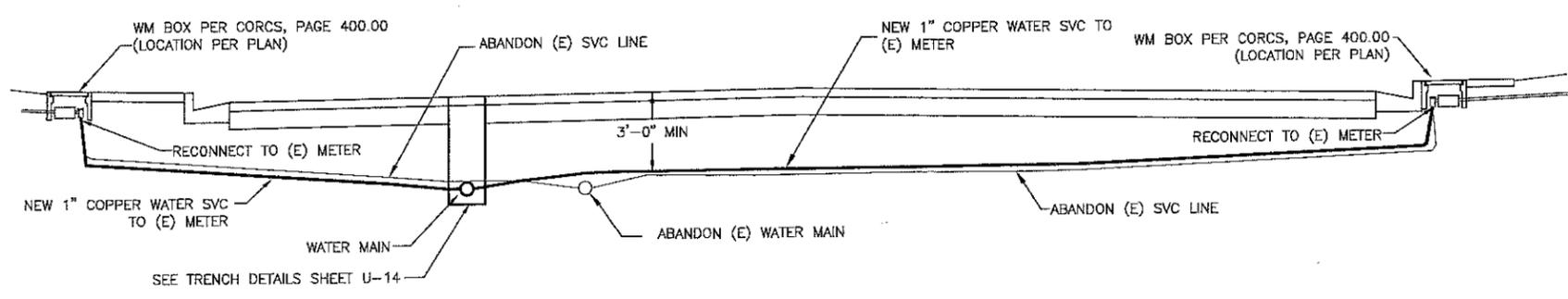
DESIGNED BY: J. ABSHIER	DESIGNED BY: J. ABSHIER		ORIGINAL SCALE IN INCHES 
DRAWN BY: W. DANIELS	DESIGNED BY: W. DANIELS		
REVIEWED BY:	PROJECT ENGINEER		
<b>CITY OF REDDING</b>			
<b>PUBLIC WORKS DEPARTMENT</b>			
<b>PLACER STREET IMPROVEMENTS</b>		BID SHT NO. XXXX	WATER
JOB NO. 2338		A-45	
		ORIGINAL SCALE: 1"=20'	
		DATE: MAY 2014	
		U-8	
		SHEET 45 OF 79	



**WISCONSIN AVE AND PLACER ST**  
SCALE: 1" = 20'



**BUENAVENTURA BLVD**  
SCALE: 1" = 20'



**RECONNECT WATER SERVICE - TYPICAL SECTION**



DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:



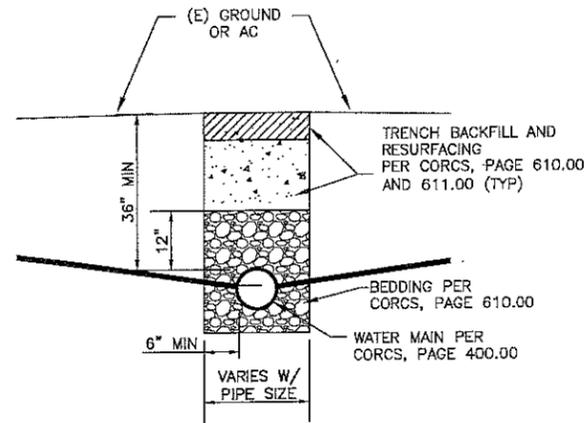
DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

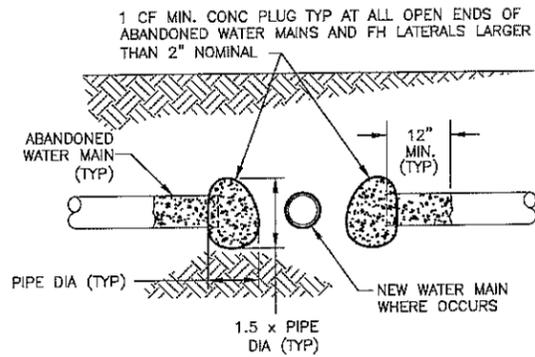
PLACER STREET IMPROVEMENTS  
WATER DETAILS  
JOB NO. 2335  
BID SCH. NO. XXXX

**PRELIMINARY PLANS**  
SUBJECT TO REVISION  
**REDUCED PLANS**

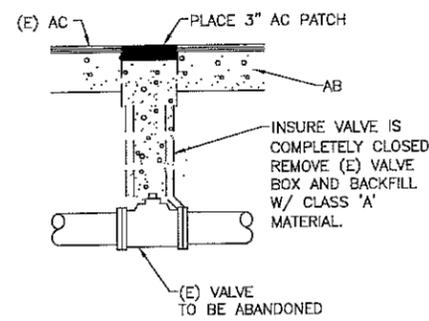
A-46  
ORIGINAL SCALE: 1"=20'  
DATE: MAY 2014  
U-13  
SHEET 46 OF 79



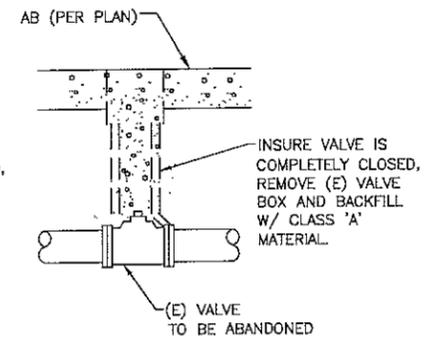
**TYPICAL TRENCH DETAIL**  
NO SCALE



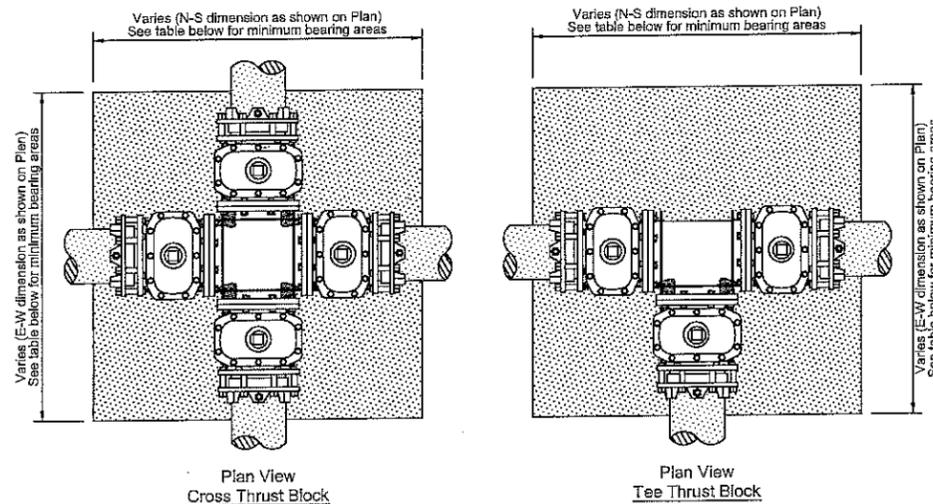
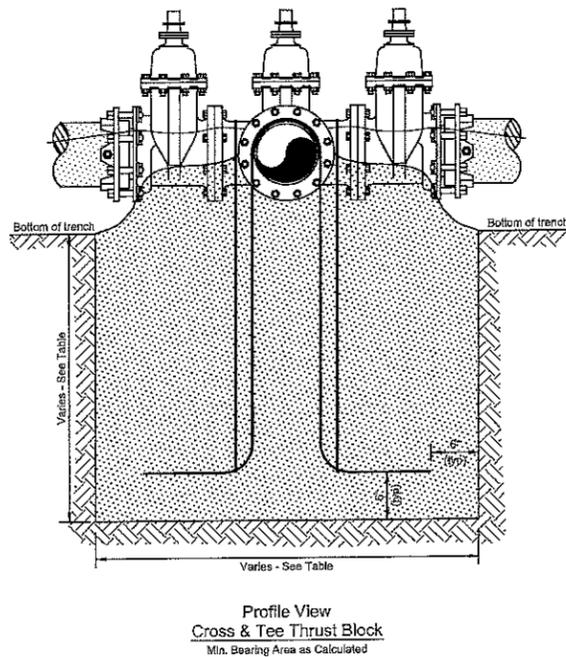
**TYP. ABANDON WATER MAIN DETAIL**  
NO SCALE



**ABANDON VALVE DETAIL**  
TYP PAVED AREAS NO SCALE



**ABANDON VALVE DETAIL**  
TYP NON-PAVED AREAS NO SCALE



**NOTES:**

- Bearing area is based upon a test pressure of 200 PSI and an allowable soil bearing stress of 1500 PSF.
- Concrete thrust blocks shall be poured against undisturbed earth, and shall consist of 3000 psi concrete mix. Sections of thrust block poured against disturbed earth do not count as part of the bearing area.
- All water main fittings shall have all exposed nuts and bolts completely covered with spray-on rubberized undercoating, and all fittings shall be wrapped with 5 mil polyethylene plastic prior to trench backfill.
- Joints and connections shall not be completely encased in thrust blocks.
- All anchor and tie bars shall be #5 rebar.
- Thrust blocking shall not be disturbed after it has been placed. The Contractor shall ensure that adequate lengths of piping are installed prior to the time of thrust block placement to make certain that excavation behind the thrust block is not necessary to make any connections.

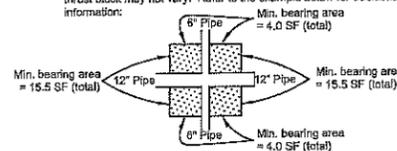
**THRUST BLOCK DETAILS**  
NO SCALE

**THRUST BLOCK SIZING:**

Thrust blocks shall be sized based upon the bearing area required by the diameter of the pipe as follows:

Pipe Dia.	Min. Bearing Area
6"	4.0 SF
8"	7.0 SF
12"	15.5 SF
16"	34.0 SF

Generally, the Contractor shall determine the pipe diameter, and size both walls of the thrust block that are perpendicular to the pipe axis based upon that diameter as listed in the above table. The depth of the thrust block may not vary. Refer to the example below for additional information:



**HORIZONTAL BENDS, DEAD ENDS, AND INLINE VALVES**

Pipe Size	1 1/2" Bend	2 1/2" Bend	4 1/2" Bend	90° Bend	Dead End & Inline Valve
3"	2'	3'	6'	13'	30'
4"	2'	4'	7'	16'	36'
6"	3'	5'	9'	22'	50'
8"	3'	6'	12'	28'	65'
10"	4'	7'	14'	33'	78'
12"	4'	8'	16'	38'	92'
14"	5'	9'	18'	44'	105'
16"	5'	10'	21'	49'	118'
18"	6'	11'	23'	54'	131'

Required Length of Restrained Pipe

**TEES**

Run Size

Branch Size	3"	4"	6"	8"	10"	12"	14"	16"	18"
3"	1'	1'	1'	1'	1'	1'	1'	1'	1'
4"	1'	1'	1'	1'	1'	1'	1'	1'	1'
6"	2'	1'	1'	1'	1'	1'	1'	1'	1'
8"	4'	4'	2'	1'	1'	1'	1'	1'	1'
10"	6'	6'	4'	3'	2'	1'	1'	1'	1'
12"	8'	8'	5'	4'	3'	2'	1'	1'	1'
14"	10'	10'	6'	5'	4'	3'	2'	1'	1'
16"	12'	11'	7'	6'	5'	4'	3'	2'	1'
18"	14'	13'	8'	7'	6'	5'	4'	3'	2'

Required Length of Restrained Pipe

Note: All tee runs shall have 10' minimum restrained length on each side of tee.

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

**REDUCED PLANS**



DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:

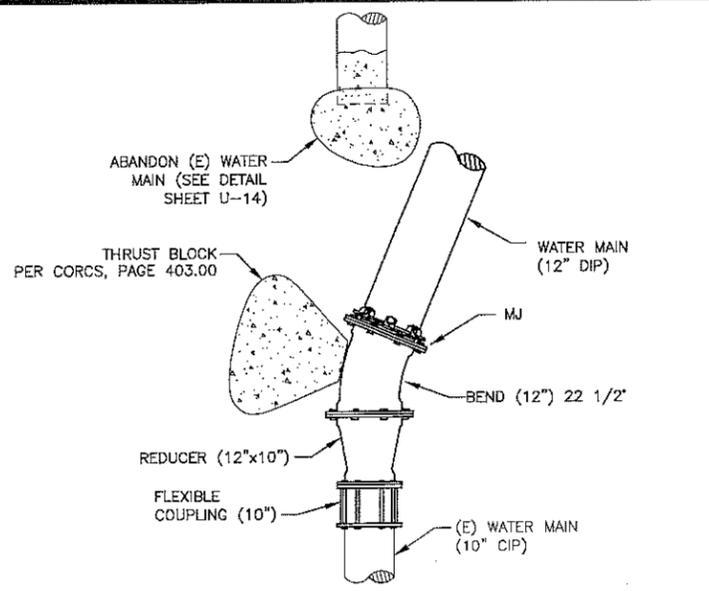
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

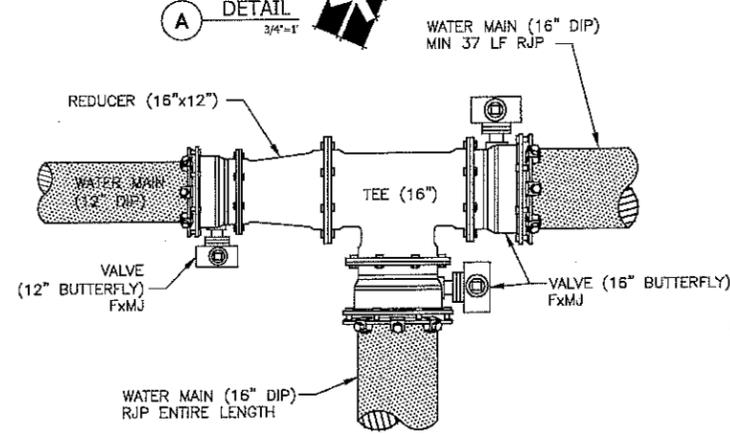
PLACER STREET IMPROVEMENTS  
WATER DETAILS

JOB NO. 2336  
BID. SCH. NO. XXXX

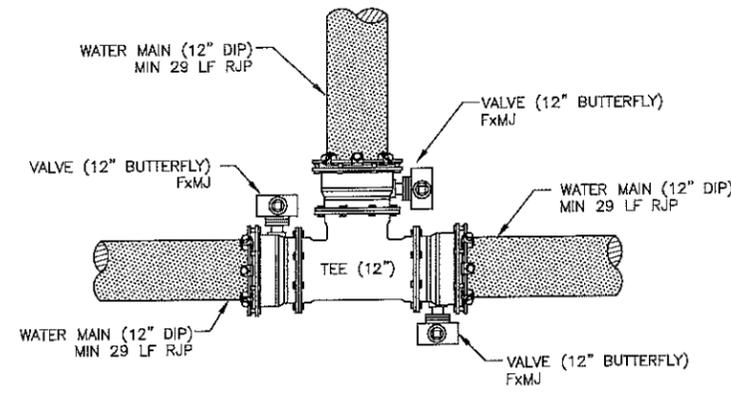
A-47  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
U-14  
SHEET 47 OF 79



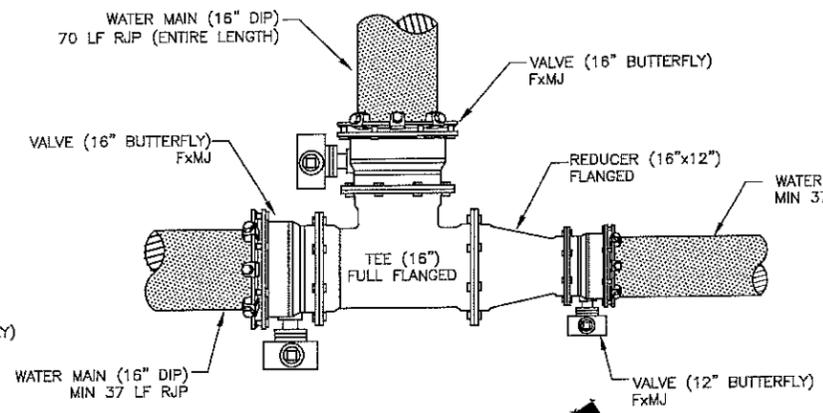
**A** DETAIL  
3/4"=1'



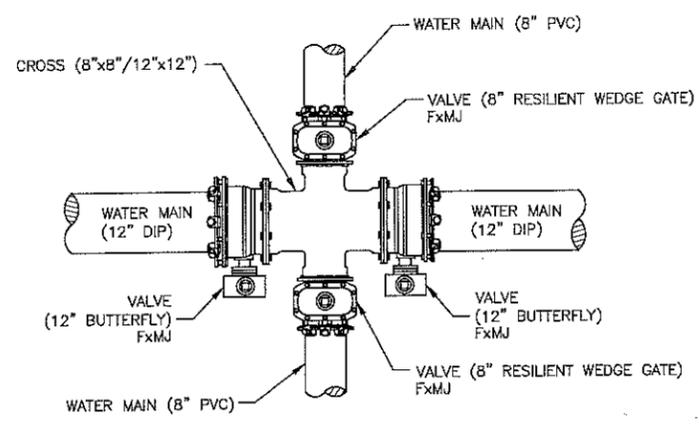
**D** DETAIL  
3/4"=1'



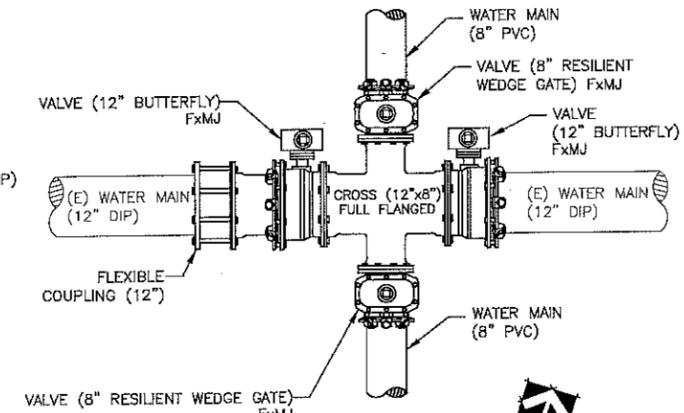
**B** DETAIL  
3/4"=1'



**E** DETAIL  
3/4"=1'



**C** DETAIL  
3/4"=1'



**F** DETAIL  
3/4"=1'



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
JOB NO. 2336  
WATER DETAILS

A-48  
ORIGINAL SCALE:  
NONE  
DATE: MAY 2014  
U-15  
SHEET 48 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

REDUCED  
PLANS

**IRRIGATION NOTES**

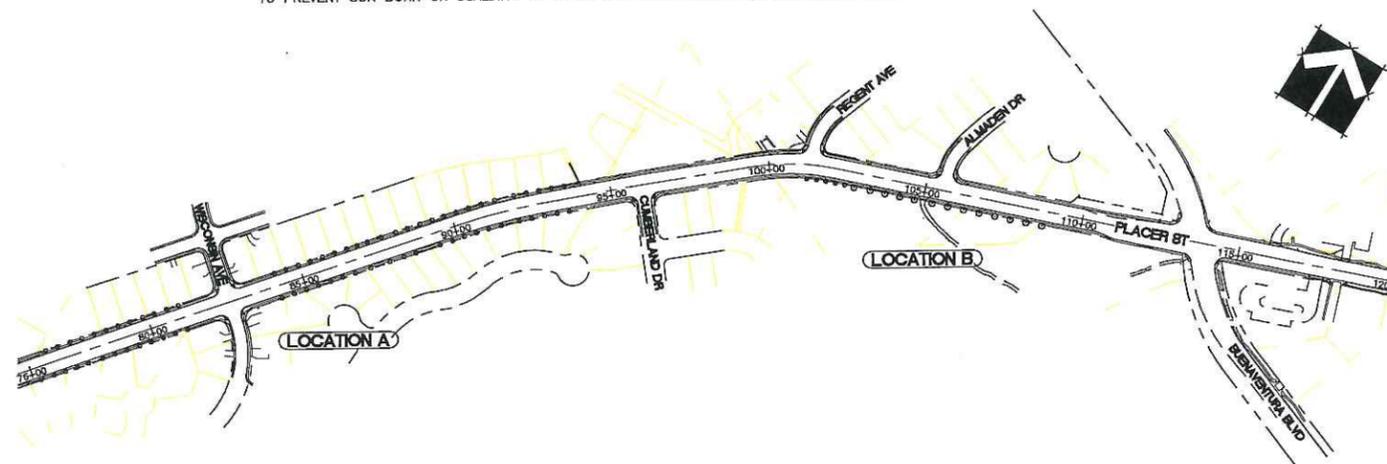
1. THE IRRIGATION DESIGN IS DIAGRAMMATIC. FITTINGS AND OTHER IRRIGATION CONNECTIONS ARE NOT SHOWN. ALL PIPE, VALVES AND OTHER IRRIGATION EQUIPMENT SHOWN WITHIN PAVED & NON LANDSCAPE AREAS ARE FOR GRAPHIC CLARITY ONLY. CROSS REFERENCE THE PLANTING PLAN TO AVOID CONFLICTS WITH THE IRRIGATION PIPE AND EQUIPMENT WITH THE PLANT MATERIALS. LOCATE IRRIGATION PIPE AND EQUIPMENT IN LANDSCAPE AREAS WHENEVER POSSIBLE.
2. THE SPRINKLER DESIGN IS BASED ON AN OPERATING PRESSURE AT THE SPRINKLER HEAD OF 30 PSI FOR RAINBIRD 1400 SERIES BUBBLERS. THE STATIC WATER PRESSURE AT THE POINT OF CONNECTION IS 90 PSI. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE A PRESSURE REGULATOR AT THE VALVE TO ENSURE OPTIMUM SPRINKLER PERFORMANCE. DO NOT EXCEED INLET PRESSURE TO BUBBLER.
3. PLACE IRRIGATION LINES IN COMMON TRENCH WHEN EVER POSSIBLE (SEE CORCS, PAGE 761.00).
4. IRRIGATION SLEEVES SHALL BE SCHEDULE 40 PVC PIPE. SIZE TO BE 4" MINIMUM UNLESS OTHERWISE NOTED. IRRIGATION PIPE & WIRE UNDER PAVEMENT SHALL BE INSTALLED IN A SEPARATE SLEEVE.
5. EXCAVATE TRENCHES AND INSTALL PIPING & FILL DURING THE SAME WORKING DAY. DO NOT LEAVE OPEN TRENCHES OR PARTIALLY FILLED TRENCHES OPEN OVERNIGHT.
6. CONCRETE THRUST BLOCKS SHALL BE INSTALLED ALONG THE MAIN (PRESSURE) LINE AT ALL ELBOW AND TEE CONNECTIONS. THRUST BLOCKS SHALL BE CONSTRUCTED SO THAT MAJOR BEARING SURFACE IS IN DIRECT LINE WITH WITH THE MAJOR FORCE CREATED BY THE PIPE OR FITTING. CONCRETE SHALL BE FLUID ENOUGH SO THAT IT MAY BE WORKED AROUND THE FITTING. CONCRETE SHALL BE KEPT BEHIND THE BELL OF THE FITTING.
7. NO PART OF THE VALVE BOX OR SHORING SHALL BEAR ON THE MAIN, LATERAL OR VALVE APPURTENANCES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL MATERIALS AND WORK TO INSTALL A COMPLETE AND FUNCTIONAL IRRIGATION SYSTEM.
9. ALL THREADED JOINTS SHALL BE COATED WITH TEFLON TAPE.
10. THE IRRIGATION WATER SHALL BE APPLIED AT A RATE WHICH DOES NOT EXCEED THE INFILTRATION RATE OF THE SOIL DURING THE COURSE OF THE CONTRACT.

**PLANTING NOTES**

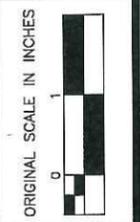
1. ALL PLANTS SHALL COMPLY WITH FEDERAL, STATE AND COUNTY LAWS REQUIRING INSPECTION FOR PLANT DISEASES & INFESTATIONS. INSPECTION CERTIFICATIONS REQUIRED BY LAW SHOULD ACCOMPANY EACH SHIPMENT OF PLANTS.
2. PLANT MATERIAL SHALL BE DELIVERED TO THE SITE WITH TAGS OR STAKES IDENTIFYING EACH PLANT SPECIES.
3. NO SUBSTITUTION OF PLANT MATERIAL WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE ENGINEER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES THAT THE SPECIFIED PLANT MATERIAL IS UNAVAILABLE. SUBSTITUTIONS WHICH ARE PERMITTED SHALL BE APPROVED BY THE AGENCY REPRESENTATIVE PRIOR TO INSTALLATION.
4. THE AGENCY REPRESENTATIVE MAY REJECT ANY DAMAGED, UNDERSIZED AND DISEASED PLANT MATERIAL DELIVERED TO THE PROJECT SITE. ALL PLANT MATERIAL SHALL BE UNIFORM & STANDARD SIZE FOR EACH SPECIES, WELL FORMED AND IN A HEALTHY, FULLY ROOTED, THRIVING CONDITION.
5. THE CONTRACTOR SHALL STAKE OR MARK WITH LINE, LOCATIONS FOR PLANTS AND OUTLINE FOR PLANTING BEDS ON THE GROUND FOR APPROVAL BY THE AGENCY REPRESENTATIVE PRIOR TO EXCAVATION OF PLANTING PITS.
6. ALL PLANTED AREAS SHALL BE FREE OF ALL CONSTRUCTION DEBRIS AND ROCKS OVER ONE INCH IN DIAMETER PRIOR TO AMENDING SOILS.
7. IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO PLANTING.
8. EXCESS SOIL GENERATED FROM THE PLANTING PITS THAT IS NOT USED AS BACKFILL OR IN ESTABLISHING THE FINAL GRADES, SHALL BE REMOVED FROM THE CONSTRUCTION SITE.
9. THE CONTRACTOR SHALL PERFORM ACTUAL PLANTING ONLY WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE. PLANTING SHALL NOT OCCUR WHEN SOILS ARE WATER SATURATED.
10. PLANTING SHALL BE PERFORMED ONLY BY EXPERIENCED WORKMEN FAMILIAR WITH PLANTING PROCEDURES.
11. NURSERY GROWN STOCK SHALL BE GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN LOCALITY OF PROJECT.
12. CONTAINER-GROWN STOCK SHALL HAVE A DEVELOPED ROOT SYSTEM THAT HOLDS ITS SOIL TOGETHER. CONTAINER SOIL SHALL BE FIRM AND WHOLE. CONTAINER STOCK SHALL NOT BE POT BOUND.
13. TREE TRUNK DIAMETER AND TAPER SHALL BE SUFFICIENT SO THAT ALL TREES REMAIN VERTICAL WITHOUT THE SUPPORT OF A NURSERY STAKE.
14. TREES AND SHRUBS SHALL BE FREE OF GIRDLING ROOTS (ROOTS THAT CIRCLE THE PERIPHERY OF THE ROOT BALL).
15. SHRUBS AND SMALL PLANTS SHALL HAVE GENEROUS SIDE BRANCHES, WELL-TWIGGED, AND WELL-BUSHED TO THE GROUND.
16. ALL PLANTED AREAS SHALL BE MULCHED WITH A 3" LAYER OF WALK-ON FIR MULCH. CONTRACTOR SHALL SUBMIT A SAMPLE TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.
17. NO MULCH SHALL BE PLACED WITHIN A TWO INCH RADIUS OF ANY NEW PLANTED TREE AND SHRUB MAIN TRUNK.
18. ALL PLANTED AREAS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE (RONSTAR G, TREFLAN, OR AN APPROVED EQUAL) AFTER PLANTING AND BEFORE PLACING MULCH.
19. TRUNKS OF ALL TREES SHALL BE PAINTED WITH A RECOGNIZED WATER BASED TREE PAINT IN EITHER WHITE OR OTHER LIGHT REFLECTING COLOR. PAINT SHALL REACH FROM SOIL LEVEL TO FIRST BRANCH STRUCTURES AND SHALL BE UNIFORM IN APPLICATION. APPLICATION SHALL BE DONE TO PREVENT SUN BURN OR SCALDING TO TRUNK STRUCTURE DURING ESTABLISHMENT PERIOD.

**LANDSCAPE NOTES**

1. ALL LANDSCAPE MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE PLAN DRAWINGS, DETAILS, SPECIFICATIONS, CITY OF REDDING CONSTRUCTION STANDARDS (CORCS) AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK). IF A CONFLICT OCCURS BETWEEN THE 'GREEN BOOK' AND THE PLAN DRAWINGS, DETAILS AND SPECIFICATIONS, THE PLAN DETAILS SHALL TAKE PRECEDENT.
2. ALL EXISTING VEGETATION TO BE CLEARED AND GRUBBED SHALL BE DISPOSED OFF SITE IN A LAWFUL MANNER. CLEARING AND GRUBBING OPERATIONS SHALL BE CONTAINED WITHIN THE CITY EASEMENT.
3. THE CONTRACTOR SHALL ADJUST ALL EXISTING PULL AND VALVE BOXES WITHIN THE WORK AREA TO FINISH GRADE.
4. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND INFORM THE ENGINEER OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS.
5. THE CONTRACTOR SHALL EXERCISE CARE IN EXCAVATING & WORKING NEAR VERIFIED EXISTING UNDER GROUND AND ABOVE GROUND UTILITIES.
6. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND/OR REPLACE ANY PLANT AND LANDSCAPE MATERIAL THAT IS DAMAGED BY HIS OR OTHER SUB-CONTRACTOR DURING THE CONSTRUCTION OPERATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE IRRIGATION WATER TO EXISTING LANDSCAPE FACILITIES THAT ARE TURNED OFF OR DISCONNECTED DURING THE DURATION OF THE CONSTRUCTION WORK. THE CONTRACTOR WILL BE REQUIRED TO REPLACE PLANT MATERIAL THAT DIE DUE TO A LACK OF WATER.
8. CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ALL IRRIGATION CONNECTIONS AT THE POINT OF CONNECTION (POC).
9. ALL LANDSCAPE WORK SHALL BE PERFORMED WITHIN THE CITY EASEMENT.
10. ALL LANDSCAPE AREAS SHALL BE GRADED TO OBTAIN A MINIMUM SLOPE OF 2% FROM THE RIGHT-A-WAY PERPENDICULAR TO THE BACK OF SIDEWALK FOR PROPER DRAINAGE.
11. ALL LANDSCAPE WORK SHALL CONFORM TO CORCS, PAGE 760.00.
12. REQUIRED TOP SOIL SHALL BE CLASS 'A' PER 'GREEN BOOK'.
13. REQUIRED ORGANIC SOIL AMENDMENT SHALL BE TYPE '1' PER 'GREEN BOOK'.
14. THE SUMMARY OF QUANTITIES ARE SHOWN FOR THE CONTRACTORS CONVENIENCE ONLY. THE CITY TAKES NO RESPONSIBILITY IF A CONFLICT OCCURS BETWEEN THE QUANTITIES AND THE PLAN. THE PLAN TAKES PRECEDENT.



**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED  
PLANS



DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:



DESIGNED BY:  
PROJECT ENGINEER

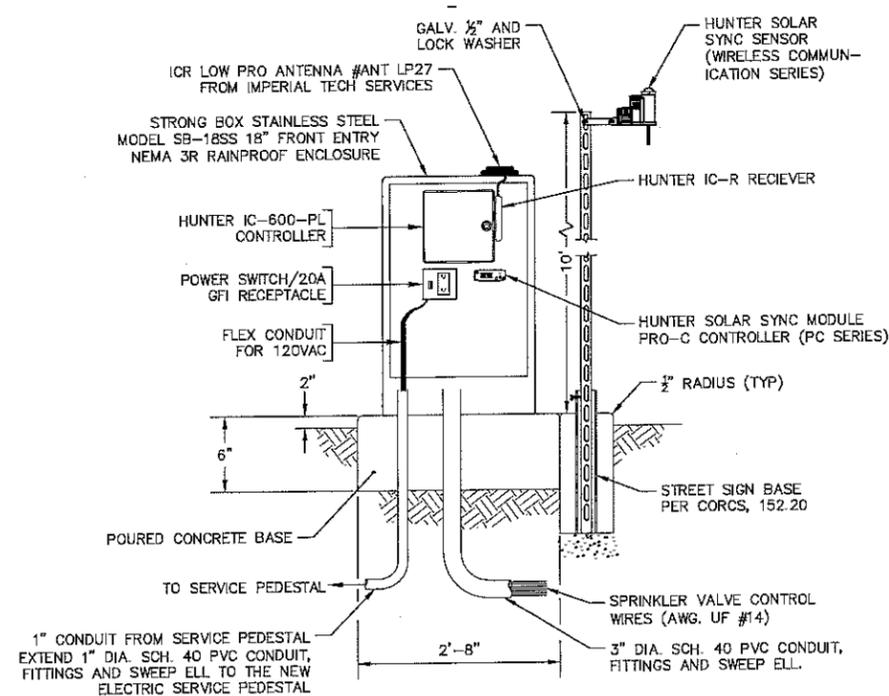
CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
LANDSCAPE AND IRRIGATION NOTES  
JOB NO. 2336  
BID. SCH. NO. XXXX

A-49  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
PL-1  
SHEET 49 OF 79

SUMMARY OF LANDSCAPE QUANTITIES							
SYMBOL	CODE NAME	BOTANICAL NAME (COMMON NAME)	SIZE	SIZE	QTY	COMMENTS	
○	QUER	QUERCUS C. 'SHUMARDI' (SCARLET OAK)	15 GAL	EA	2	PLANTING, STAKING PER CORCS 780.00, 780.10, 781.00	
	PIST	PISTACIA CHINENSIS 'KIETH DAVEY' (SEEDLESS CHINESE PISTACHE)	15 GAL	EA	9		
	ACER	ACER RUBRUM 'OCTOBER GLORY' (RED MAPLE)	15 GAL	EA	8		
○	ARBU	ARBUTUS UNEDO (STRAWBERRY TREE)	24" BOX	EA	28		
	CERC	CERIS CANADENSIS (EASTERN REDBUD)	24" BOX	EA	22		
	MALU	MALUS 'PRARIE FIRE' (CRAB APPLE)	24" BOX	EA	26		
	LAGER	LAGERSTROEMIA INDICA 'TWILIGHT' (CRAPE MYRTLE TREE)	24" BOX	EA	24		
		TOTAL	15 GAL	EA	17		
		TOTAL	24" BOX	EA	98		
		MULCH		CY	240		
		BARRIER (ROOT)	18"H x 24"L	EA	375	INSTALL NDS (OR APPROVED EQUAL) LINEAR ROOT BARRIER PANELS AT ALL TREES CLOSER THAN 4' FROM SIDEWALK (5 PANELS PER TREE) PER CORCS, PAGE 683.50	

SUMMARY OF IRRIGATION QUANTITIES						
SYMBOL	IRRIGATION EQUIPMENT (N)	UNIT	QTY	COMMENTS	CORCS/DETAIL	
↗	CHECK VALVE (IN-LINE)	EA	12	SPEARS S1102-10 OR EQUAL, 1" PVC IN-LINE ADJUSTABLE SPRING, CHECK VALVE		
■	MASTER CONTROL VALVE	EA	3	RAINBIRD 100-EFB-CP-R, 1 INCH, THREADED BRASS BODY, NORMALLY CLOSED, FLOW CONTROL, 24VAC SOLENOID	CORCS 768.10	
⊗	BALL VALVE	EA	3	LASCO V_101N-SC BALL VALVE, SCH 80 PVC, TRUE UNION, SLOW CLOSING, LINE SIZE	CORCS 768.20	
⊕	VALVE (QUICK COUPLING)	EA	3	RAINBIRD 44LRC, 1" OR APPROVED EQUAL, VALVE SHALL NOT BE INSTALLED WITHIN 12" OF SIDEWALK	CORCS 768.00	
⊞	REDUCED PRESSURE PRINCIPAL DEVICE (1")	EA	2	WILKINS 975XL, 1" RPP BACKFLOW PREVENTER AND ENCLOSURE OR EQUAL	CORCS 431.10 CORCS 432.25	
⊕	IRRIGATION CONTROLLER ASSEMBLY	EA	3	IRRIGATION CONTROLLER, SECURITY ENCLOSURE, AND POLE MOUNTED WEATHER SENSOR	DETAIL THIS SHEET	
⊗	IRRIGATION CONTROL VALVE	EA	6	RAINBIRD PEB OR EQUAL SIZE AS NOTED ON PLANS	CORCS 768.10	
○	IRRIGATION BUBBLER	EA	230	RAINBIRD 1400 SERIES .25 GPM FULL CIRCLE BUBBLER OR EQUAL. INSTALL BUBBLER THREE INCHES OFFSET AND CENTER FROM ROOTBALL AND ON THE UPHILL SIDE OF THE ROOTBALL	CORCS 765.10	
—	PVC PIPE (0.75")	LF	1,000	SCHEDULE 40 FITTINGS & COUPLINGS FOR ALL PVC PIPE UNLESS SHOWN ON THE CORCS	CORCS 761.00	
—	PVC PIPE (1")	LF	1,585			
—	PVC PIPE (1.5")	LF	2,300			
—	PVC PIPE (2")	LF	660			
====	PVC SLEEVE (6" SCH. 40)	LF	500			



IRRIGATION CONTROLLER ASSEMBLY DETAIL  
NOT TO SCALE

SEE CORCS, PAGE 760.00 FOR LANDSCAPE CONSTRUCTION CRITERIA

CALLOUT LEGEND:

- ↗ INDICATES FLOW IN GPM FOR ELECTRIC CONTROL VALVE
- ⊕ INDICATES AUTOMATIC IRRIGATION CONTROLLER
- ⊗ INDICATES ELECTRIC VALVE SIZE

ORIGINAL SCALE IN INCHES

DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:

DESIGNED BY: PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

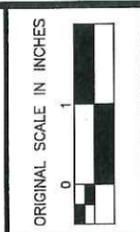
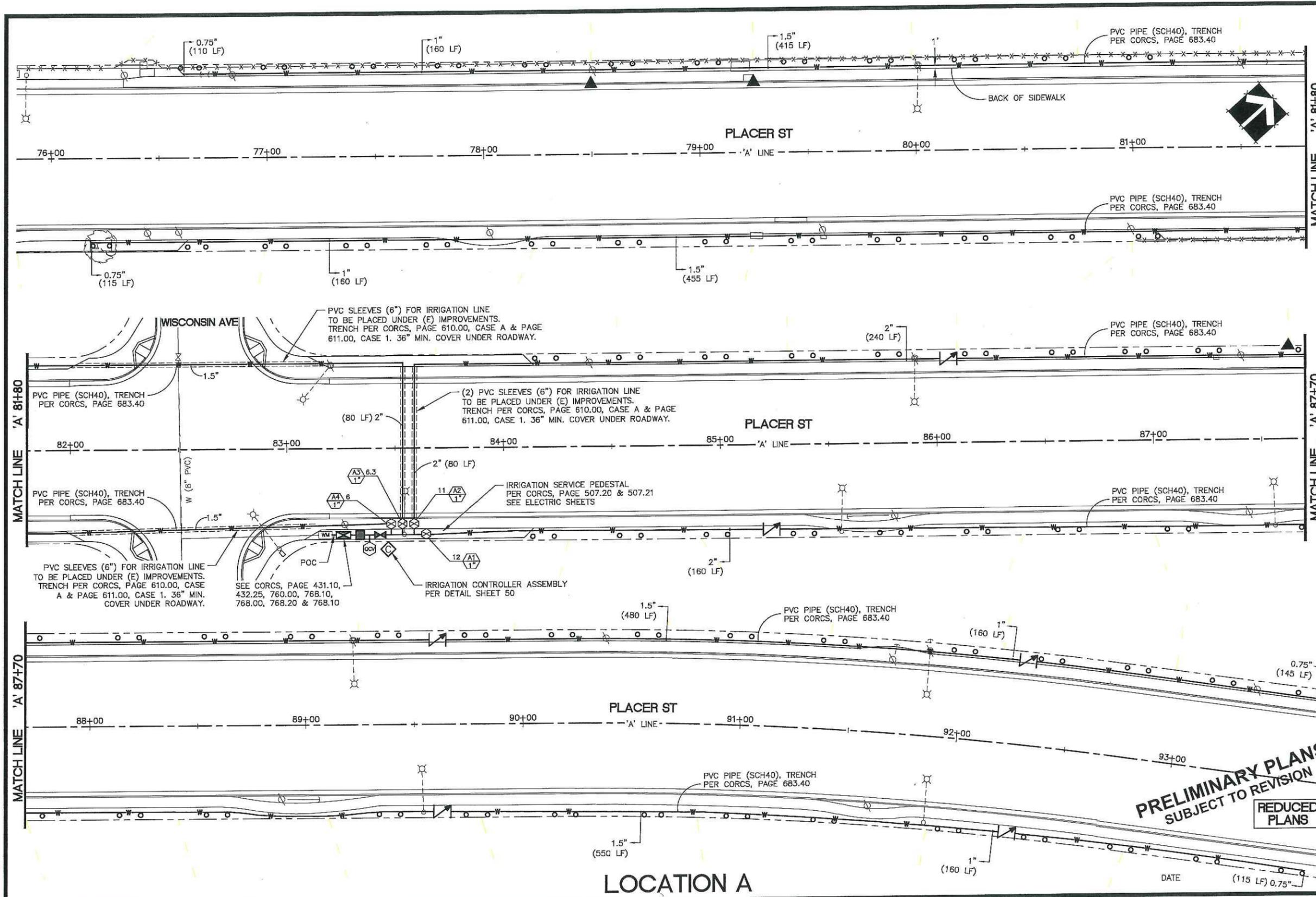
PLACER STREET IMPROVEMENTS  
LANDSCAPE AND IRRIG. DETAILS AND CITY'S

JOB NO. 2335  
BID. SCH. NO. XXXX

A-50  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
PL-2  
SHEET 50 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**



DESIGNED BY  
J ABSHIER

DRAWN BY  
W DANIELS

REVIEWED BY



DESIGNED BY

PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS

LANDSCAPE IRRIGATION - LOCATION A

JOB NO. 2336  
BID. SCH. NO. XXXX

A-51

ORIGINAL SCALE:  
1" = 20'

DATE: MAY 2014

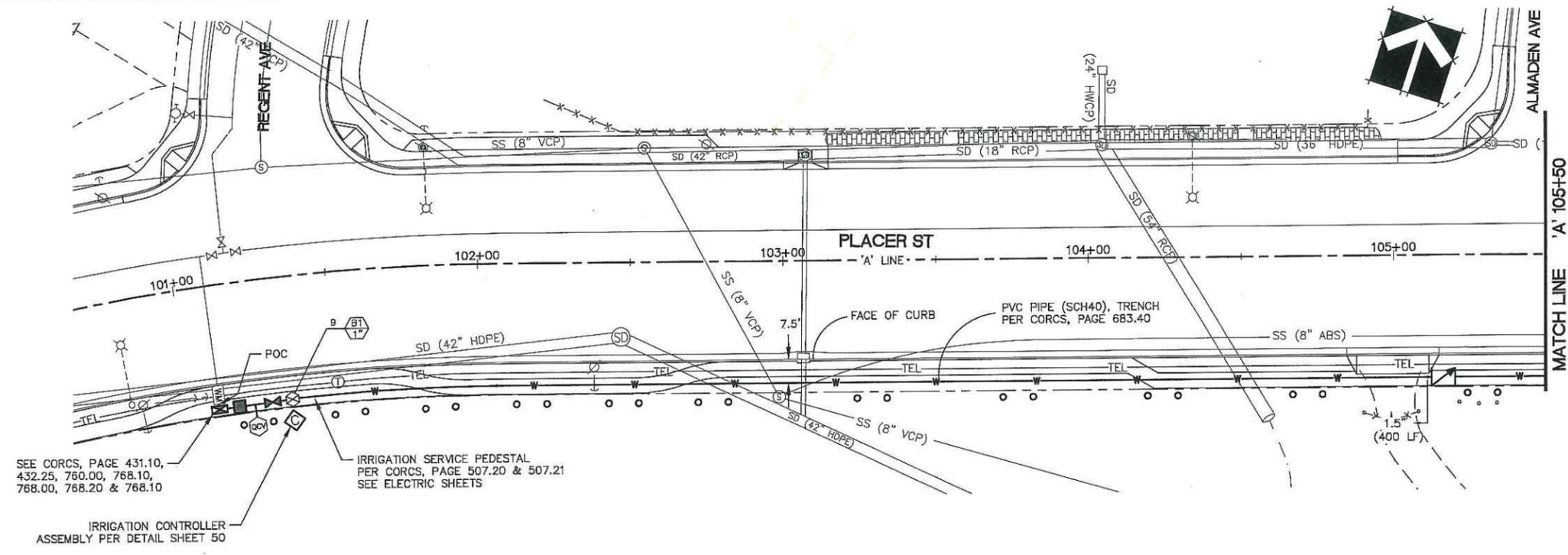
PL-3

SHEET 51 OF 79

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

REDUCED  
PLANS

LOCATION A

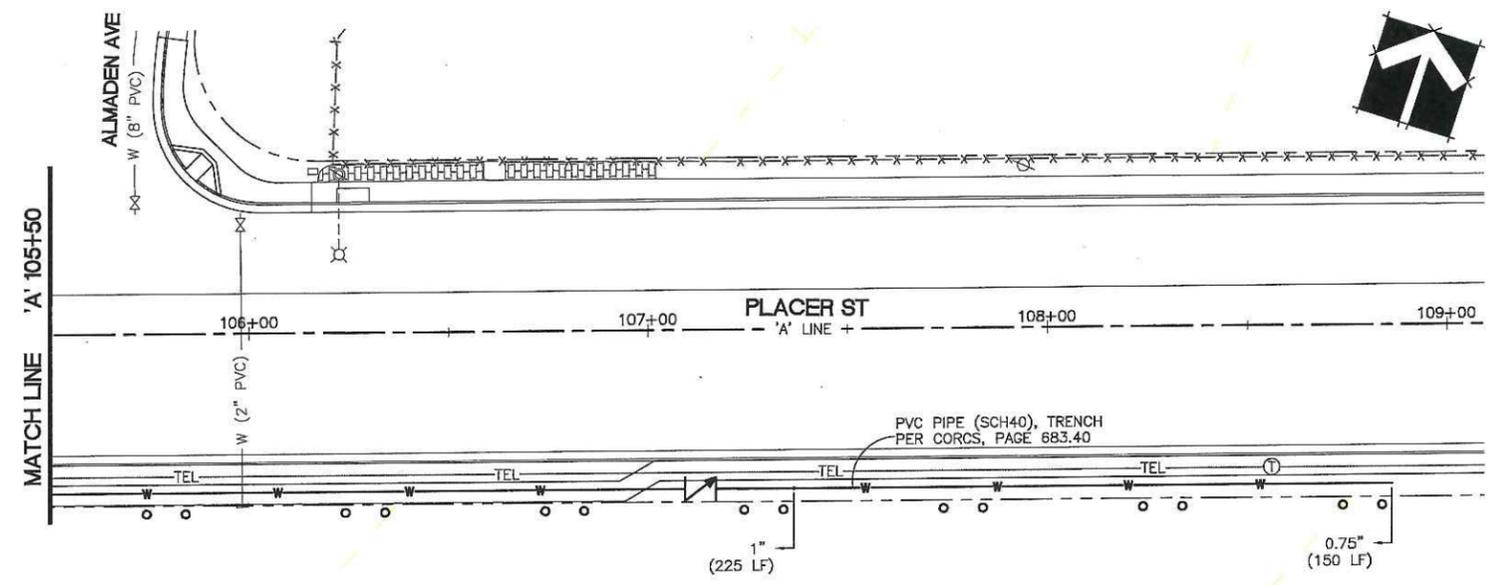


SEE CORCS, PAGE 431.10, 432.25, 760.00, 768.10, 768.00, 768.20 & 768.10

IRRIGATION SERVICE PEDESTAL PER CORCS, PAGE 507.20 & 507.21 SEE ELECTRIC SHEETS

IRRIGATION CONTROLLER ASSEMBLY PER DETAIL SHEET 50

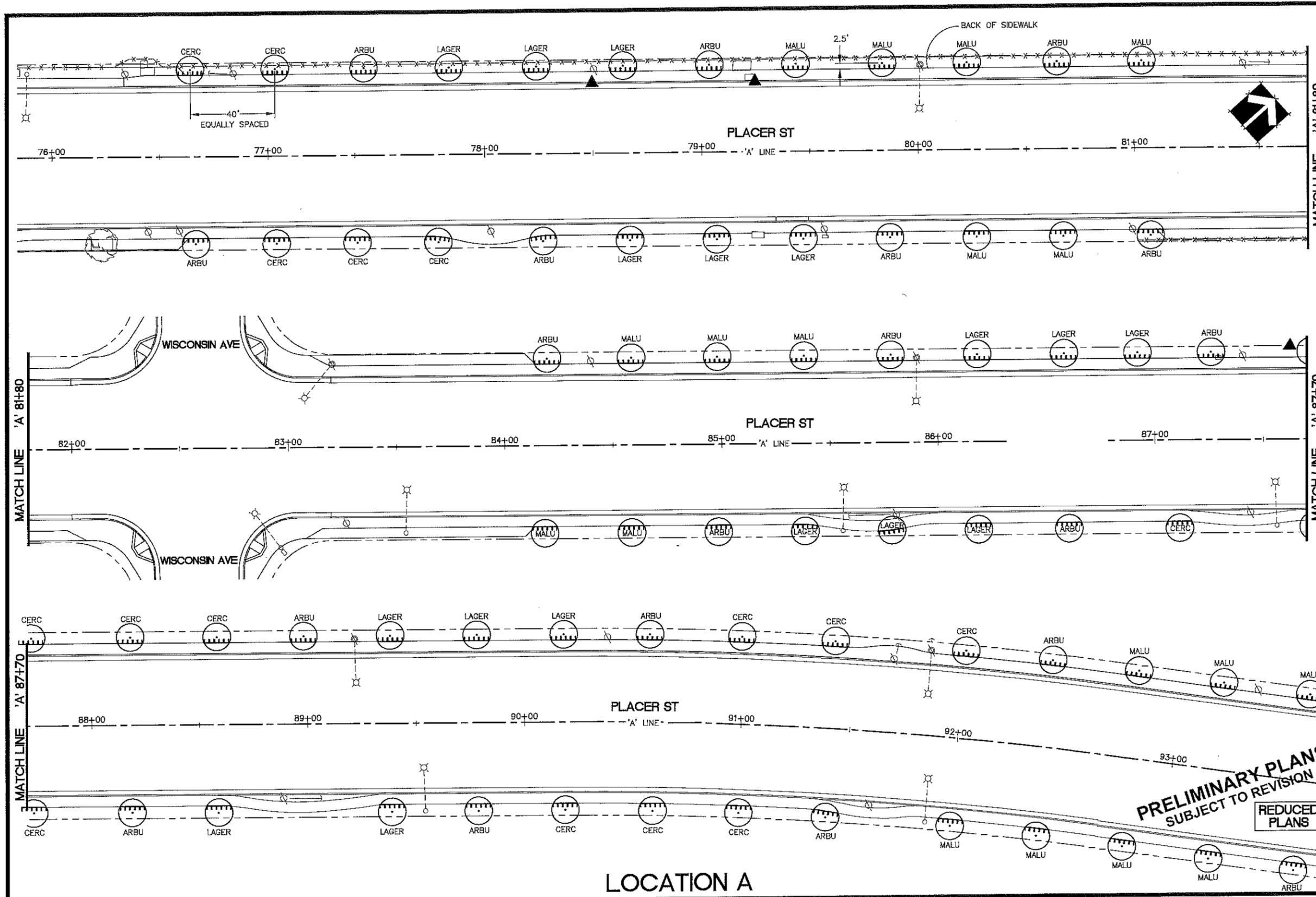
**LOCATION B**



**PRELIMINARY PLANS**  
SUBJECT TO REVISION

**REDUCED PLANS**

<p>DESIGNED BY: J. ABSHIER</p> <p>DRAWN BY: W. DANIELS</p> <p>REVIEWED BY:</p>	<p>ORIGINAL SCALE IN INCHES</p>
<p>DESIGNED BY:</p> <p>CITY OF REDDING</p> <p>PUBLIC WORKS DEPARTMENT</p>	<p>PLACER STREET IMPROVEMENTS</p> <p>LANDSCAPE IRRIGATION - LOCATION B</p>
<p>PROFESSIONAL ENGINEER</p> <p>STATE OF CALIFORNIA</p> <p>NO. 23356</p> <p>Exp. 8-30-14</p>	<p>JOB NO. 23356</p> <p>BID. SCH. NO. XXXX</p> <p>A-52</p> <p>ORIGINAL SCALE: 1" = 20'</p> <p>DATE: MAY 2014</p> <p>PL-4</p> <p>SHEET 52 OF 79</p>



DESIGNED BY: J ABSHIER  
 DRAWN BY: W DANIELS  
 REVIEWED BY:

PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA  
 LICENSE NO. 40088  
 EXPIRES 8-31-14

ORIGINAL SCALE IN INCHES  
 1" = 20'

CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
 LANDSCAPE PLANTING - LOCATION A

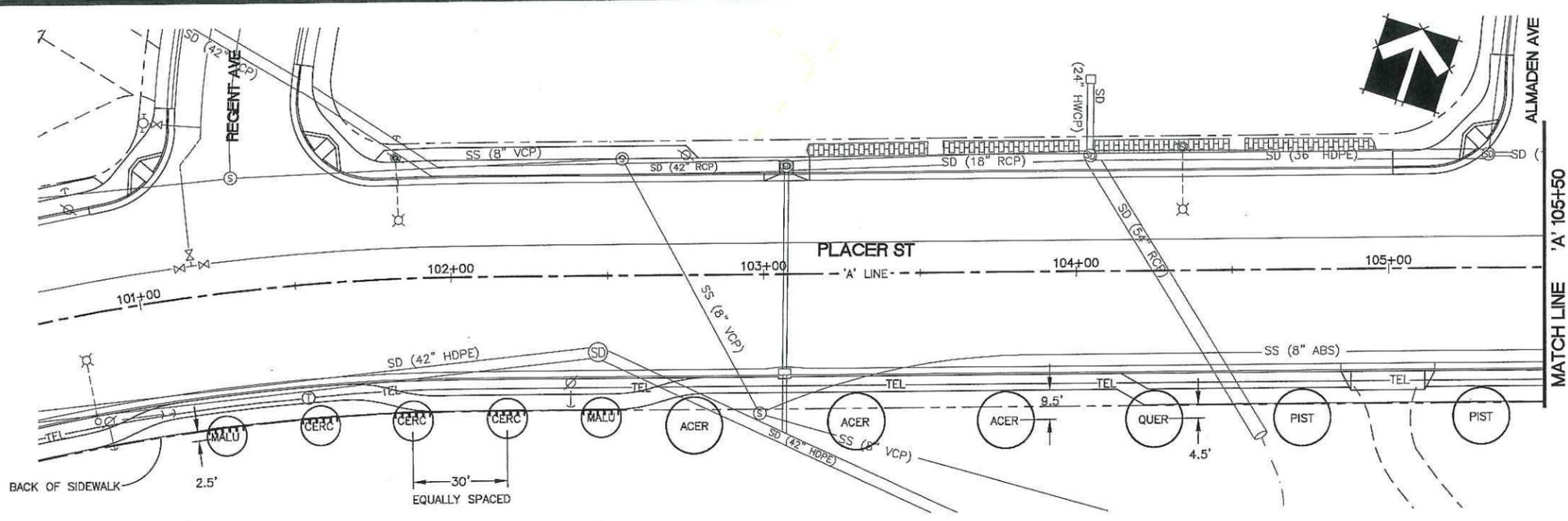
JOB NO. 2336  
 BID. SCH. NO. XXXX

A-53  
 ORIGINAL SCALE: 1" = 20'  
 DATE: MAY 2014  
 PL-6  
 SHEET 53 OF 79

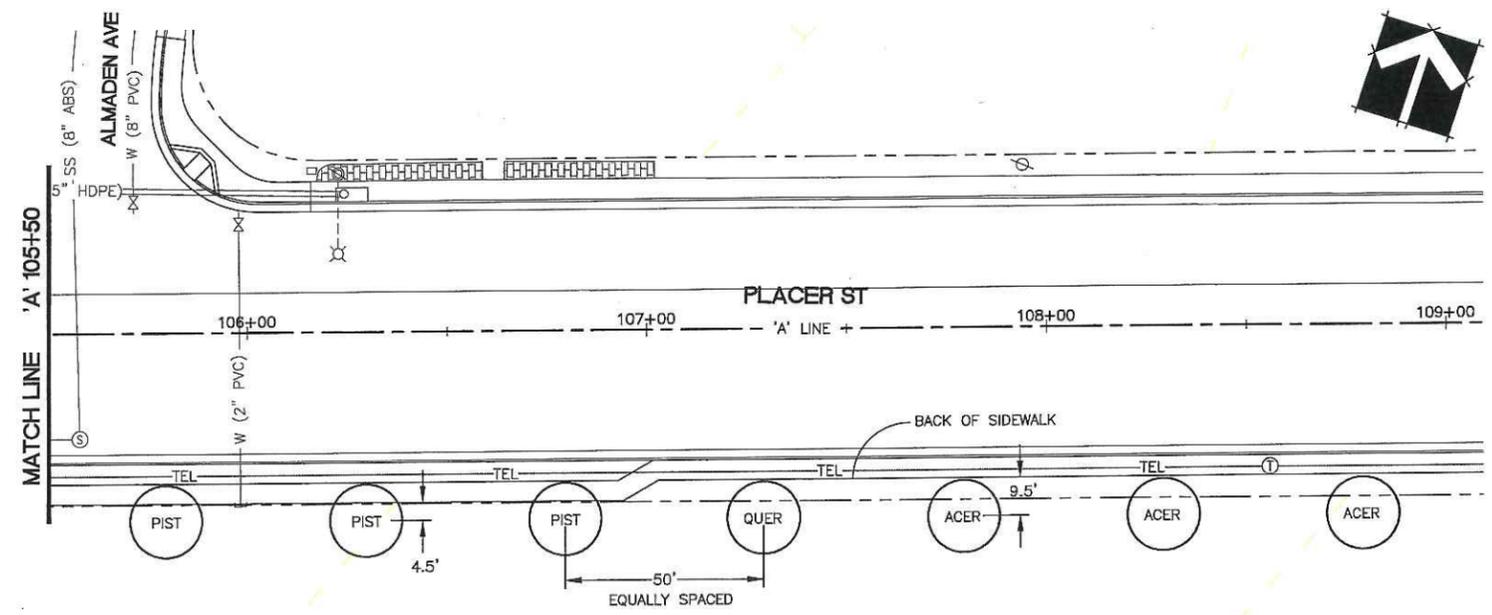
**PRELIMINARY PLANS  
 SUBJECT TO REVISION**

REDUCED PLANS

LOCATION A

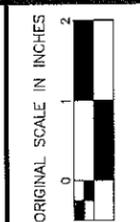
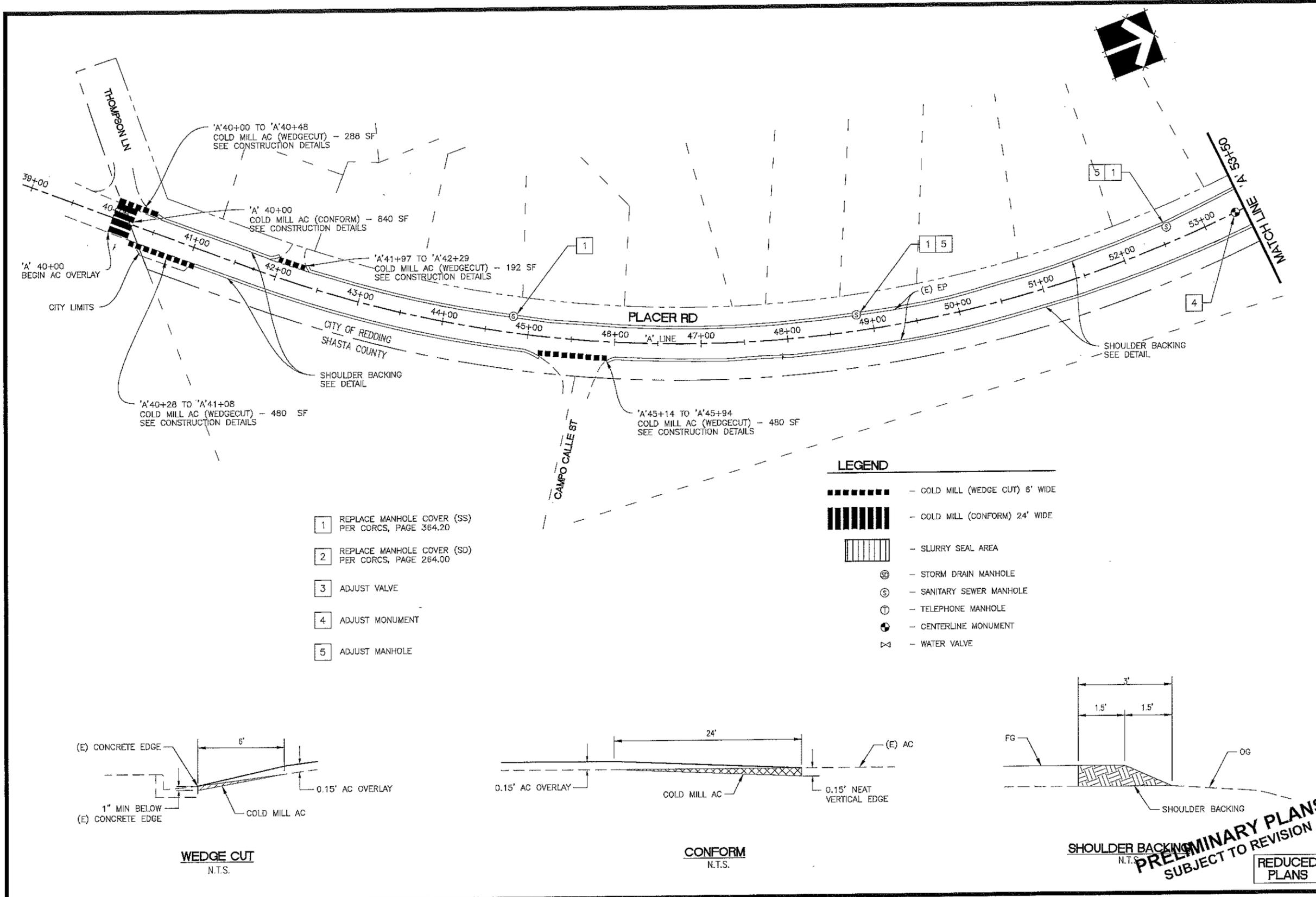


LOCATION B



**PRELIMINARY PLANS**  
 SUBJECT TO REVISION  
 REDUCED PLANS

DESIGNED BY: J. ABSHIER	DESIGNED BY: G. ANGELO	
DRAWN BY: W. DANIELS	REVIEWED BY:	
CITY OF REDDING PUBLIC WORKS DEPARTMENT		
PLACER STREET IMPROVEMENTS LANDSCAPE PLANTING - LOCATION B		
ORIGINAL SCALE IN INCHES 		
JOB NO. 2356 BID. SCH. NO. XXXX A-54 ORIGINAL SCALE: 1" = 20' DATE: MAY 2014 PL-7 SHEET 54 OF 79		



DESIGNED BY J. ABSHIER  
 DRAWN BY W. DANIELS  
 REVIEWED BY



DESIGNED BY  
 PROJECT ENGINEER

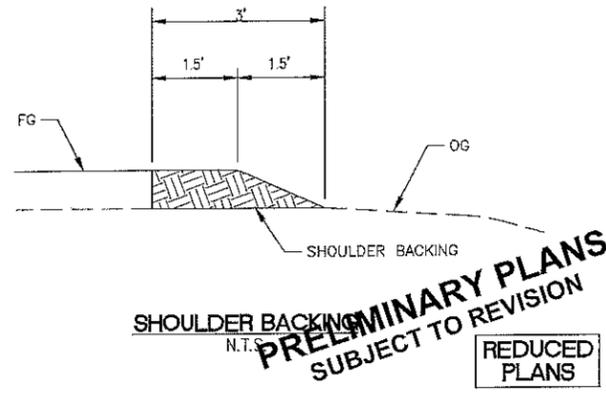
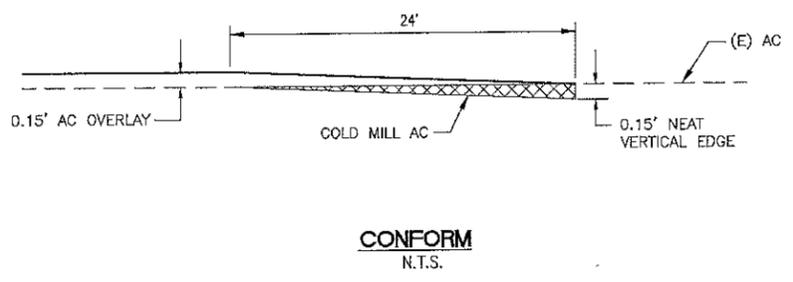
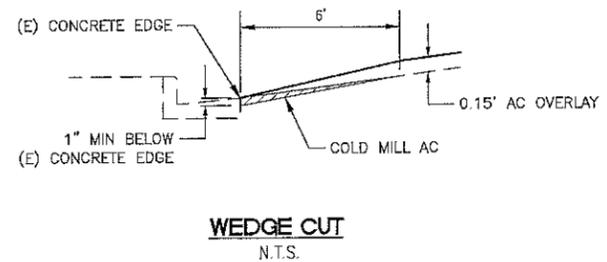
CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
 OVERLAY  
 JOB NO. 23558  
 BID. SCH. NO. XXXX

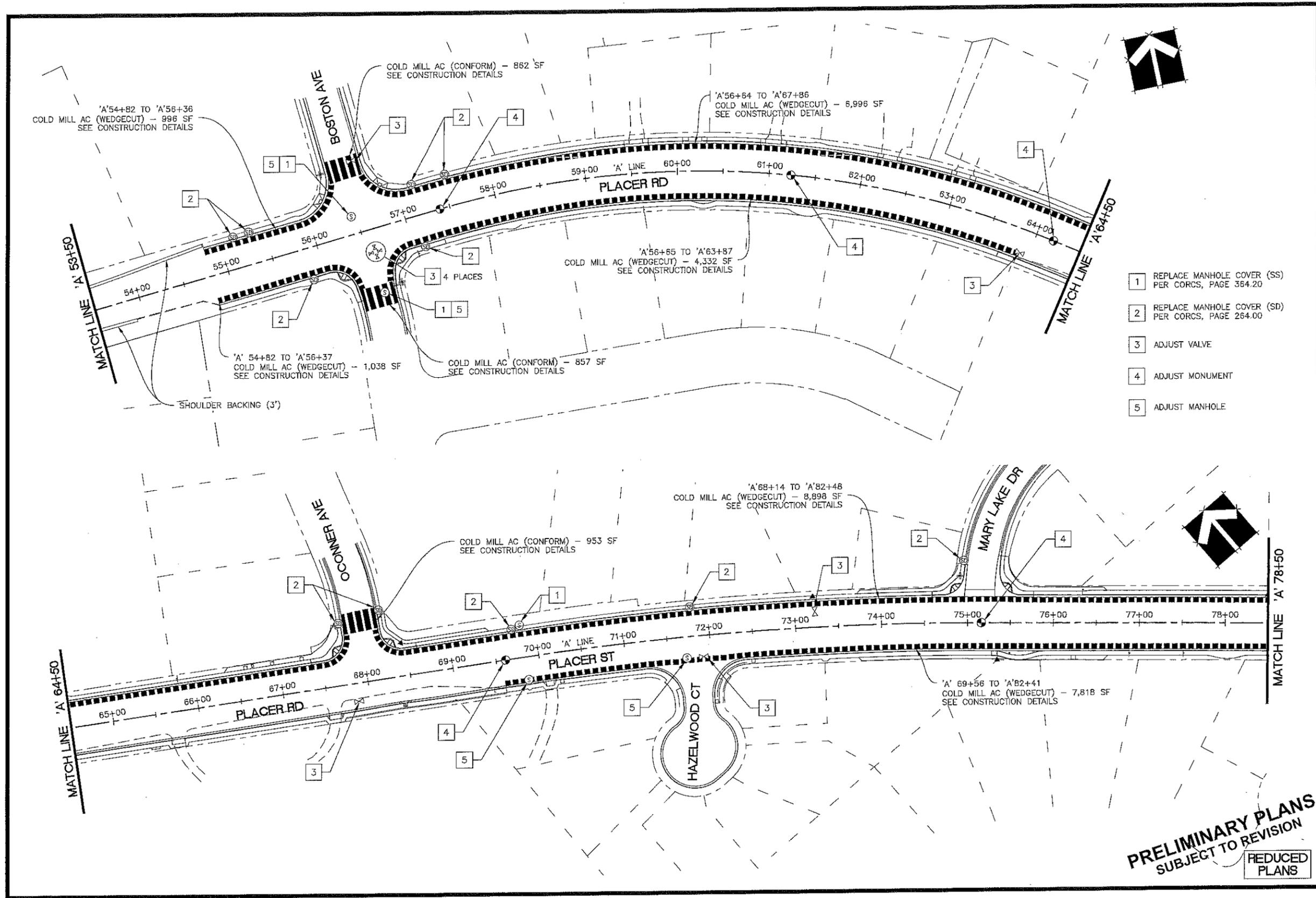
A-55  
 ORIGINAL SCALE: 1"=50'  
 DATE: MAY 2014  
 OL-1  
 SHEET 55 OF 78

- 1 REPLACE MANHOLE COVER (SS) PER CORCS, PAGE 364.20
- 2 REPLACE MANHOLE COVER (SD) PER CORCS, PAGE 264.00
- 3 ADJUST VALVE
- 4 ADJUST MONUMENT
- 5 ADJUST MANHOLE

- LEGEND**
- ██████████ - COLD MILL (WEDGE CUT) 6' WIDE
  - ▨▨▨▨▨▨ - COLD MILL (CONFORM) 24' WIDE
  - ▤▤▤▤▤▤ - SLURRY SEAL AREA
  - ⊕ - STORM DRAIN MANHOLE
  - ⊙ - SANITARY SEWER MANHOLE
  - ⊙ - TELEPHONE MANHOLE
  - ⊙ - CENTERLINE MONUMENT
  - ⊗ - WATER VALVE



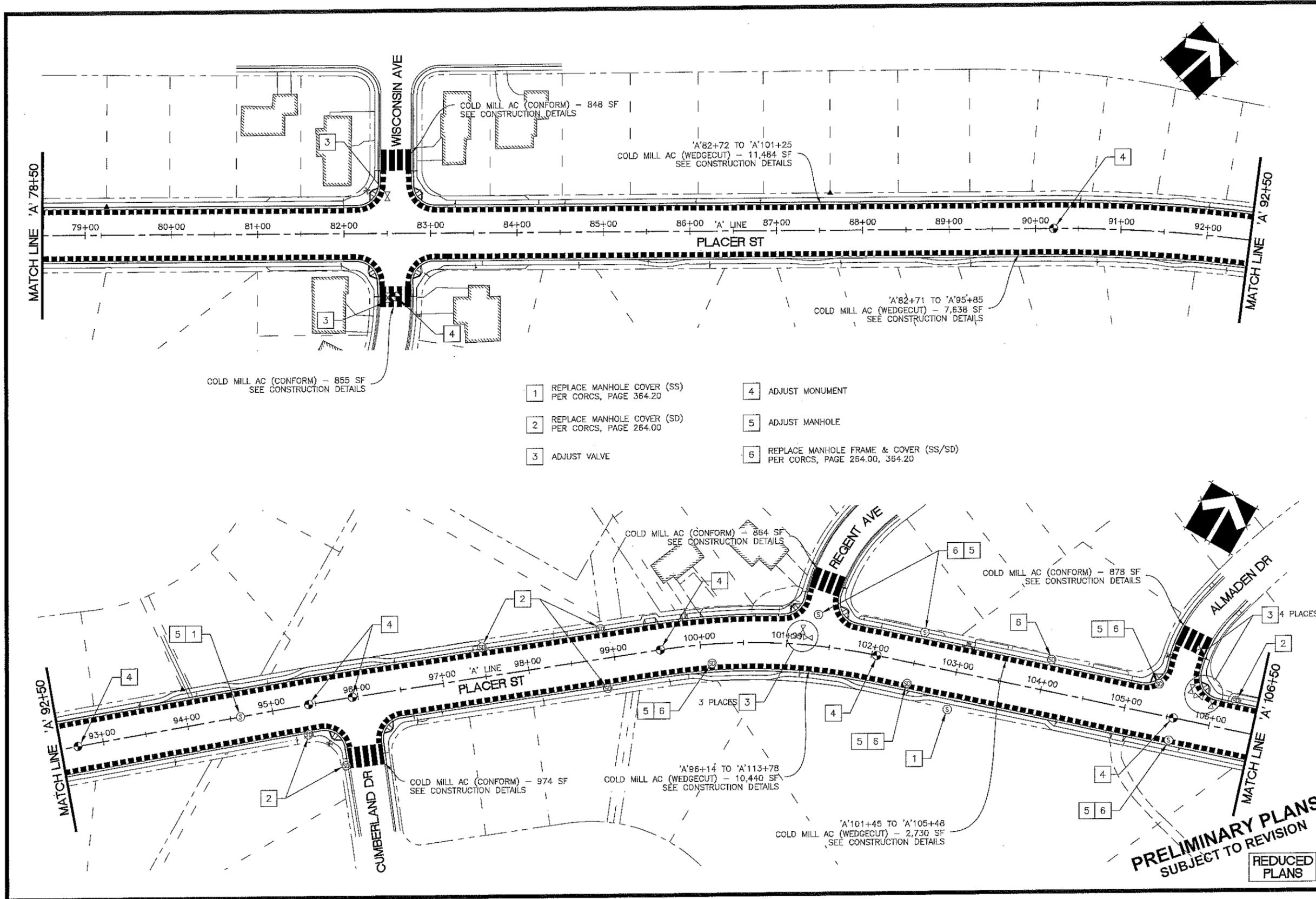
PRELIMINARY PLANS  
 SUBJECT TO REVISION  
 REDUCED PLANS



**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**  
 REDUCED PLANS

- 1 REPLACE MANHOLE COVER (SS) PER CORCS, PAGE 364.20
- 2 REPLACE MANHOLE COVER (SD) PER CORCS, PAGE 264.00
- 3 ADJUST VALVE
- 4 ADJUST MONUMENT
- 5 ADJUST MANHOLE

DESIGNED BY: J. ABSHIER DRAWN BY: W. DANIELS REVIEWED BY:	ORIGINAL SCALE IN INCHES: 2" 
	
PROJECT ENGINEER:	
<b>CITY OF REDDING</b> <b>PUBLIC WORKS DEPARTMENT</b>	
<b>PLACER STREET IMPROVEMENTS</b> BID. SCH. NO. XXXX OVERLAY	
JOB NO. 2335	
A-56 ORIGINAL SCALE: 1"=50' DATE: MAY 2014	
<b>OL-2</b> SHEET 56 OF 79	



- 1 REPLACE MANHOLE COVER (SS) PER CORCS, PAGE 364.20
- 2 REPLACE MANHOLE COVER (SD) PER CORCS, PAGE 264.00
- 3 ADJUST VALVE
- 4 ADJUST MONUMENT
- 5 ADJUST MANHOLE
- 6 REPLACE MANHOLE FRAME & COVER (SS/SD) PER CORCS, PAGE 264.00, 364.20



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



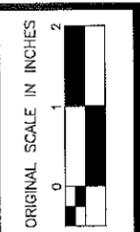
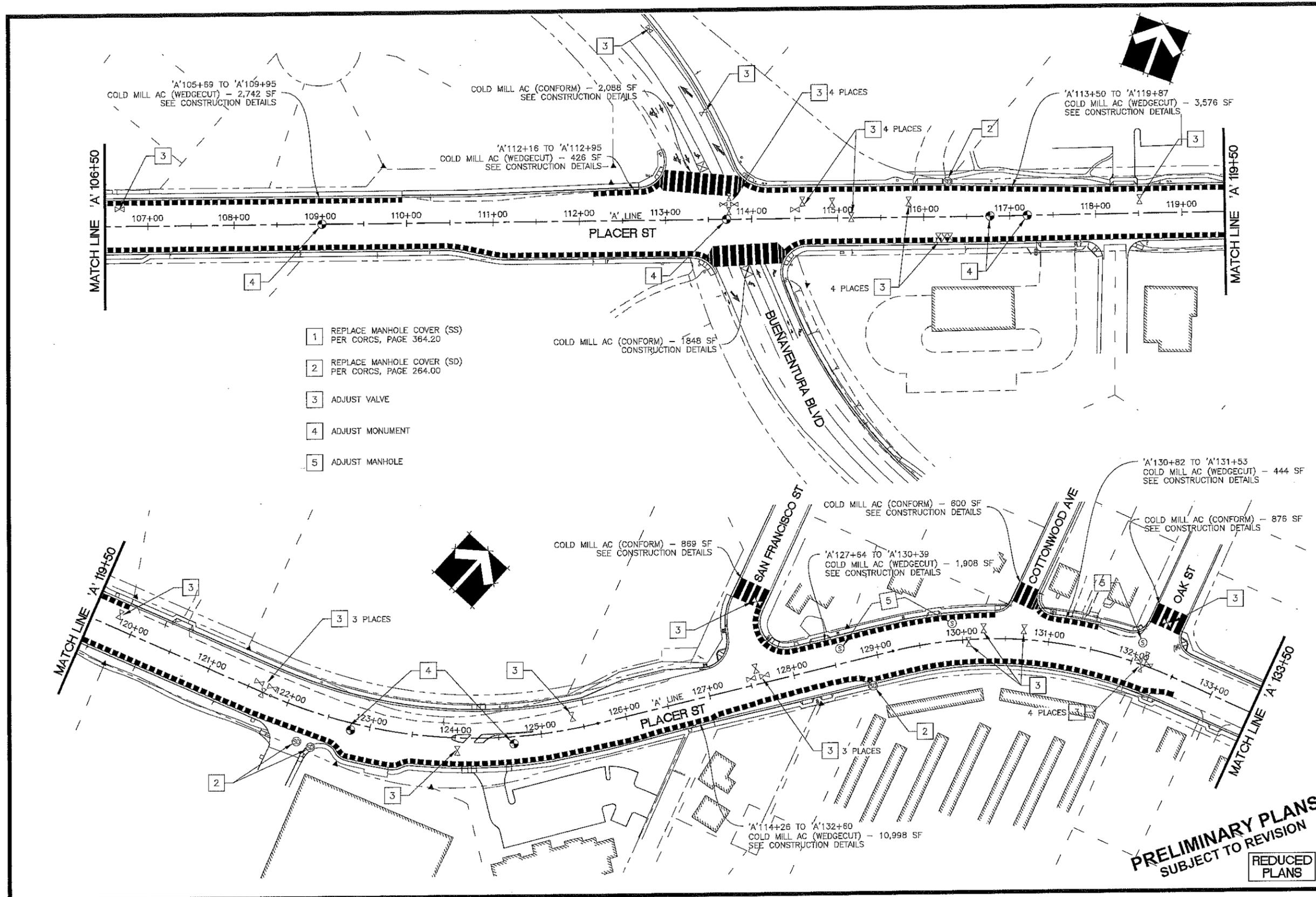
DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
OVERLAY  
JOB NO. 2326  
BID SCH. NO. XXXX

A-57  
ORIGINAL SCALE  
1"=50'  
DATE: MAY 2014  
OL-3  
SHEET 57 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED PLANS



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



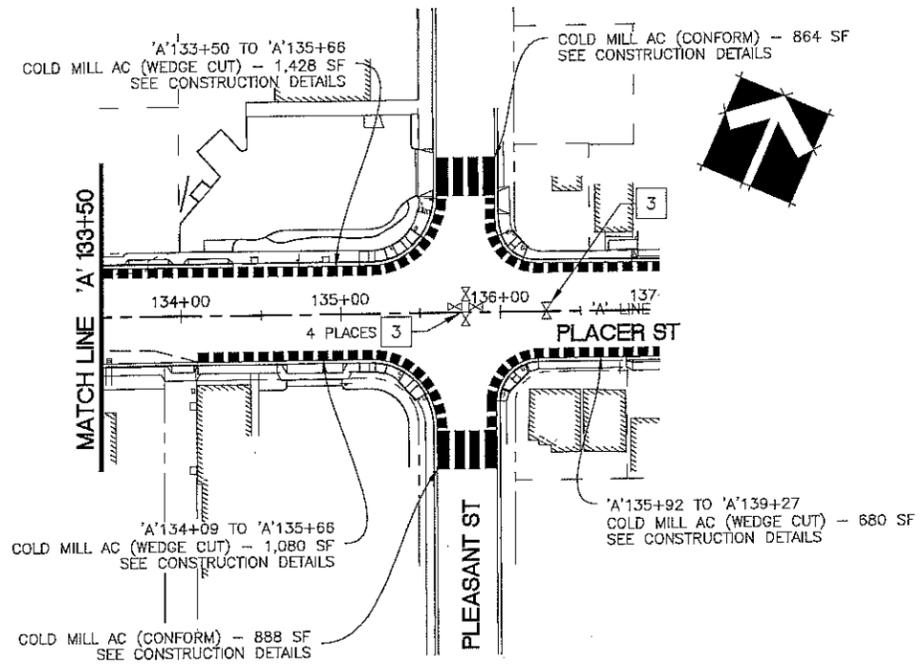
DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
OVERLAY  
JOB NO. 2336  
BID. SCH. NO. XXXX

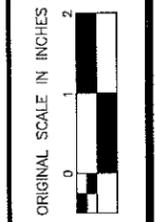
A-58  
ORIGINAL SCALE:  
1"=90'  
DATE: MAY 2014  
OL-4  
SHEET 58 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED  
PLANS



**LEGEND**

-  - SLURRY SEAL ARLA
- 1 REPLACE MANHOLE COVER (SS)  
PER CORCS, PAGE 364.20
- 2 REPLACE MANHOLE COVER (SD)  
PER CORCS, PAGE 264.00
- 3 ADJUST VALVE
- 4 ADJUST MONUMENT
- 5 ADJUST MANHOLE



DESIGNED BY  
 J ABSHIER  
 DRAWN BY  
 W DANIELS  
 REVIEWED BY



DESIGNED BY:  
 PROJECT ENGINEER

CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET  
 IMPROVEMENTS  
 JOB NO. 2336 BID SCH. NO. XXXX  
 OVERLAY

**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**

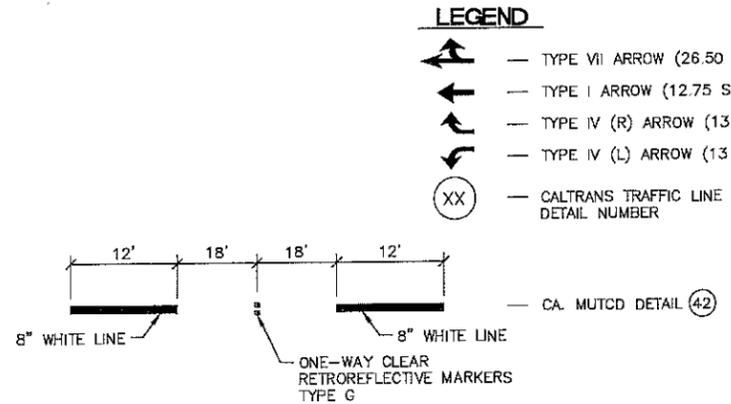
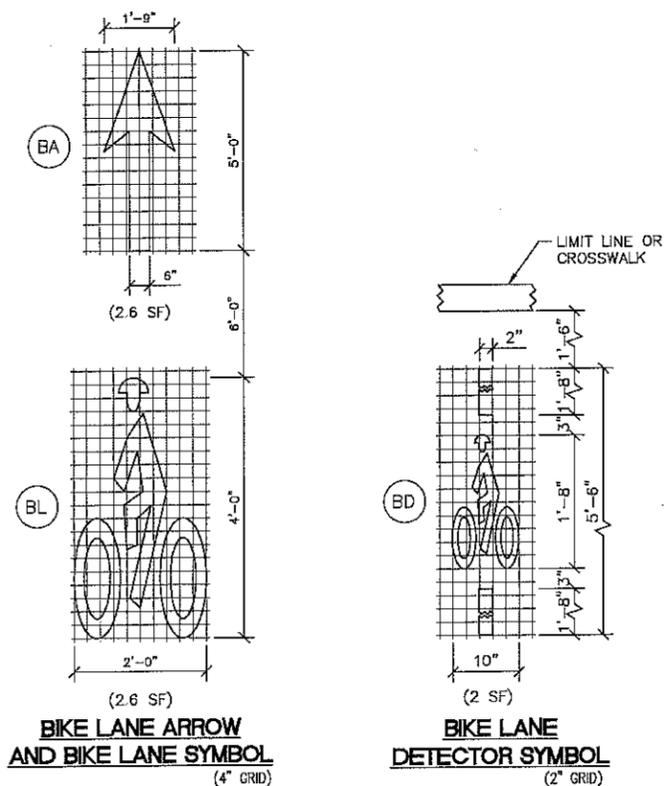
REDUCED  
 PLANS

A-59  
 ORIGINAL SCALE:  
 1"=50'  
 DATE: MAY 2014  
**OL-5**  
 SHEET 59 OF 79

THERMOPLASTIC TRAFFIC STRIPE													THERMOPLASTIC PAVEMENT MARKING							PAVEMENT MARKERS									
9M	12	22	27B	29	32	39A	39	40	37B	38	38A	42	12" CROSS HATCH	BIKE LANE SYMBOLS & ARROWS	ARROW SYMBOLS	STOP BOX LINES X-WALK BARS LIMIT LINES YIELD LINE	CHEVRONS	STOP SYMBOLS	ONLY SYMBOL	12	22	29	32	37B	38	42	9M	MEDIAN	BLUE HYDRANT
4" SKIP	4" SKIP	4" SOLID DOUBLE	4" SOLID	4" SOLID DOUBLE	4" SOLID 4" SKIP	6" SKIP	6" SOLID	4" SKIP	8" SKIP	8" SOLID	8" SOLID	8" SKIP	YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	TYPE G	TYPE D	TYPE D	TYPE D	TYPE G					
WHITE	WHITE	YELLOW	WHITE	YELLOW	YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	ONE-WAY	TWO-WAY	TWO-WAY	TWO-WAY	ONE-WAY	ONE-WAY	ONE-WAY	ONE-WAY	TWO-WAY	TWO-WAY
LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SF	SF	SF	SF	SF	SF	SF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
8,368	3,748	11,397	283	3,968	19,584	1,843	13,195	110	700	2,603	9,860	1,080	27	162	754	2,396	930	396	22	78	473	83	517	23	109	23	179	43	16
76,739 LF													4687 SF							1,544 EA									

SIGN QUANTITIES														
CALTRANS CODE	R81(CA)	R81A(CA)	R81B(CA)	R4-4	R3-7	W73A (CA)	R3-2	W4-7	R-26	R1-5a	W11-2	W16-7P	R28C (CA)	
DESCRIPTION	BIKE LANE	BEGIN	END	BEGIN RIGHT TURN LANE YIELD TO BIKES	RIGHT LANE MUST TURN RIGHT	RIGHT LANE TURNS RIGHT AHEAD	NO LEFT SYMBOL	THRU TRAFFIC MERGE LEFT	NO PARKING	YIELD HERE TO PEDS	PED WALKING SYMBOL	DOWN ARROW	NO STOPPING BUS ONLY	RABA
QUANTITY	4	2	2	2	1	1	2	1	12	2	2	2	2	1
36 EA														

NOTE: SIGNS SHALL BE INSTALLED IN QUICK-CHANGE BASES PER CORCS, PAGE 152.10  
NO PARKING SIGN PER CORCS, PAGE 152.02



- STRIPING NOTES:**
- PAVEMENT ARROWS SHALL BE CENTERED IN LANES.
  - PAVEMENT ARROWS SHALL CONFORM TO CORCS, PAGE 172.00.
  - STRIPING DETAIL NUMBERS REFER TO CALTRANS STANDARD PLANS A20A, A20B, A20C AND A20D.
  - CROSSWALKS AND STOP BARS SHALL BE 12" THERMOPLASTIC. (10' FROM INSIDE STRIPE TO INSIDE STRIPE)

**PRELIMINARY PLANS**  
SUBJECT TO REVISION  
REDUCED PLANS



DESIGNED BY: J. ABSHIER  
DRAWN BY: W. DANIELS  
REVIEWED BY:

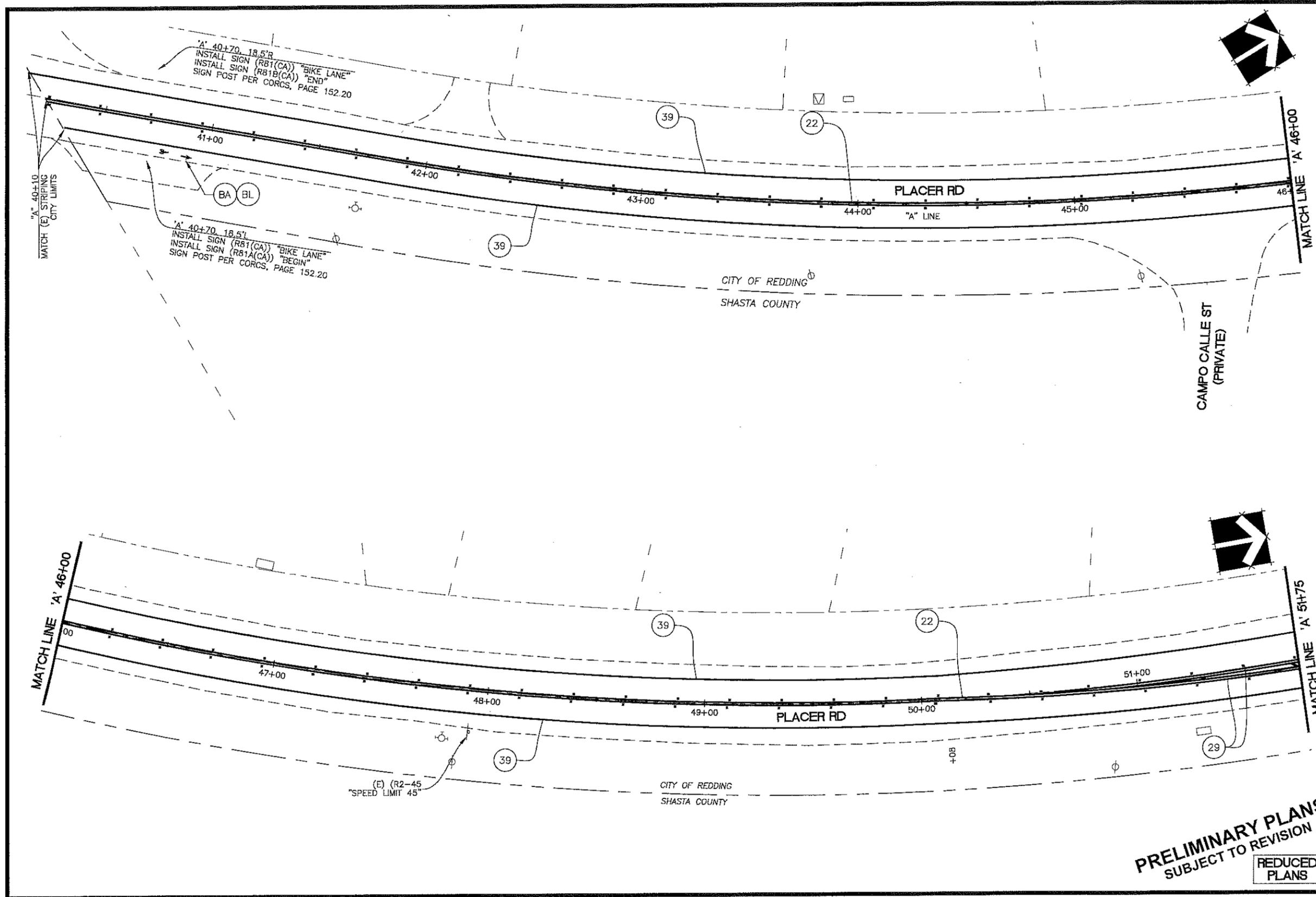


DESIGNED BY: J. ABSHIER  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
PAVEMENT DELINEATION AND SIGNING  
JOB NO. 2336  
BID. SCH. NO. XXXX

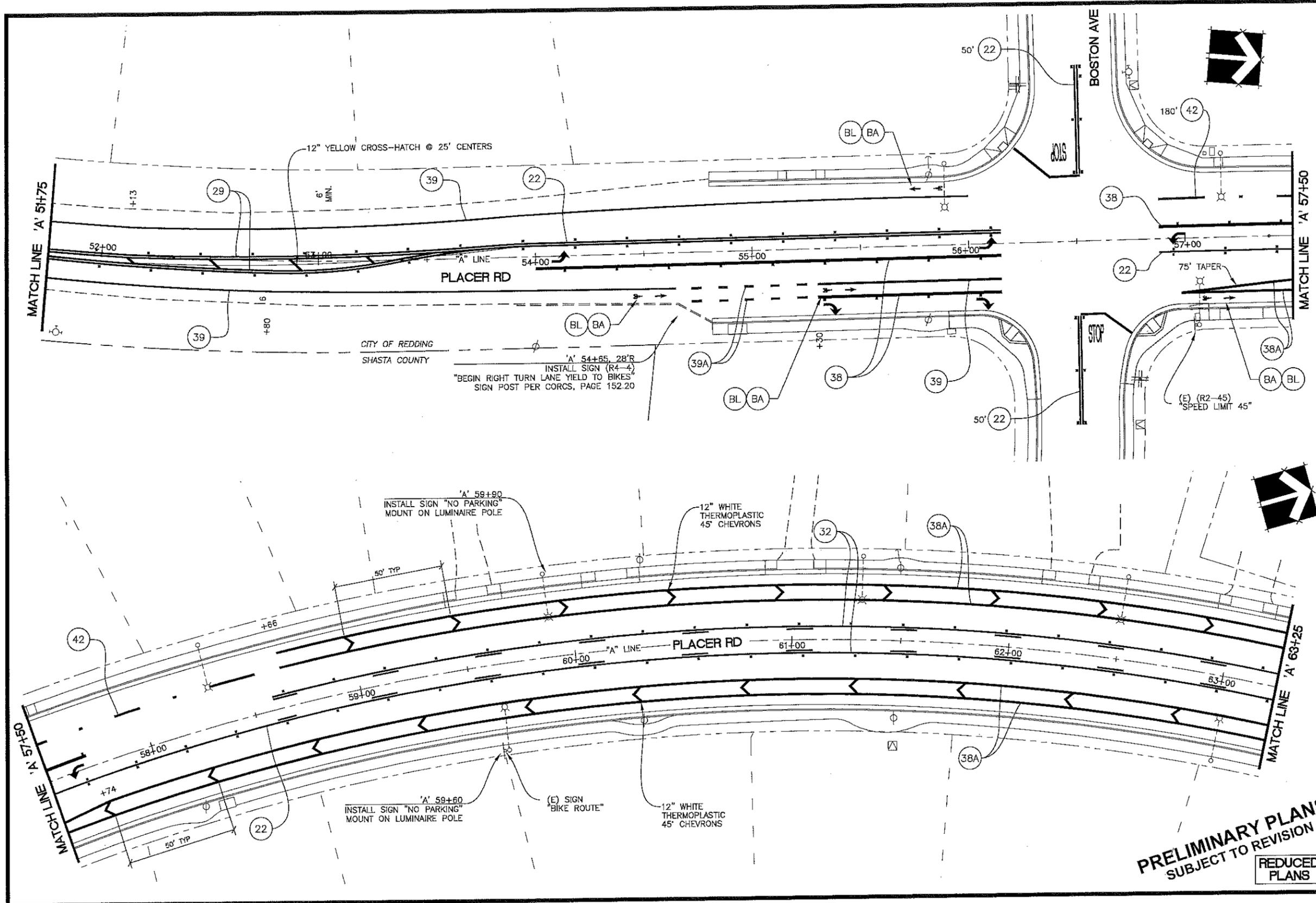
A-60  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
PD-1  
SHEET 60 OF 79



DESIGNED BY: J. ABSHIER	DESIGNED BY: J. ABSHIER	DESIGNED BY: J. ABSHIER
DRAWN BY: W. DANIELS	DRAWN BY: W. DANIELS	DRAWN BY: W. DANIELS
REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
CITY OF REDDING PUBLIC WORKS DEPARTMENT		
PLACER STREET IMPROVEMENTS PAVEMENT DELINEATION AND SIGNING		
A-61 ORIGINAL SCALE: 1"=20' DATE: MAY 2014		
PD-2 SHEET 61 OF 79		

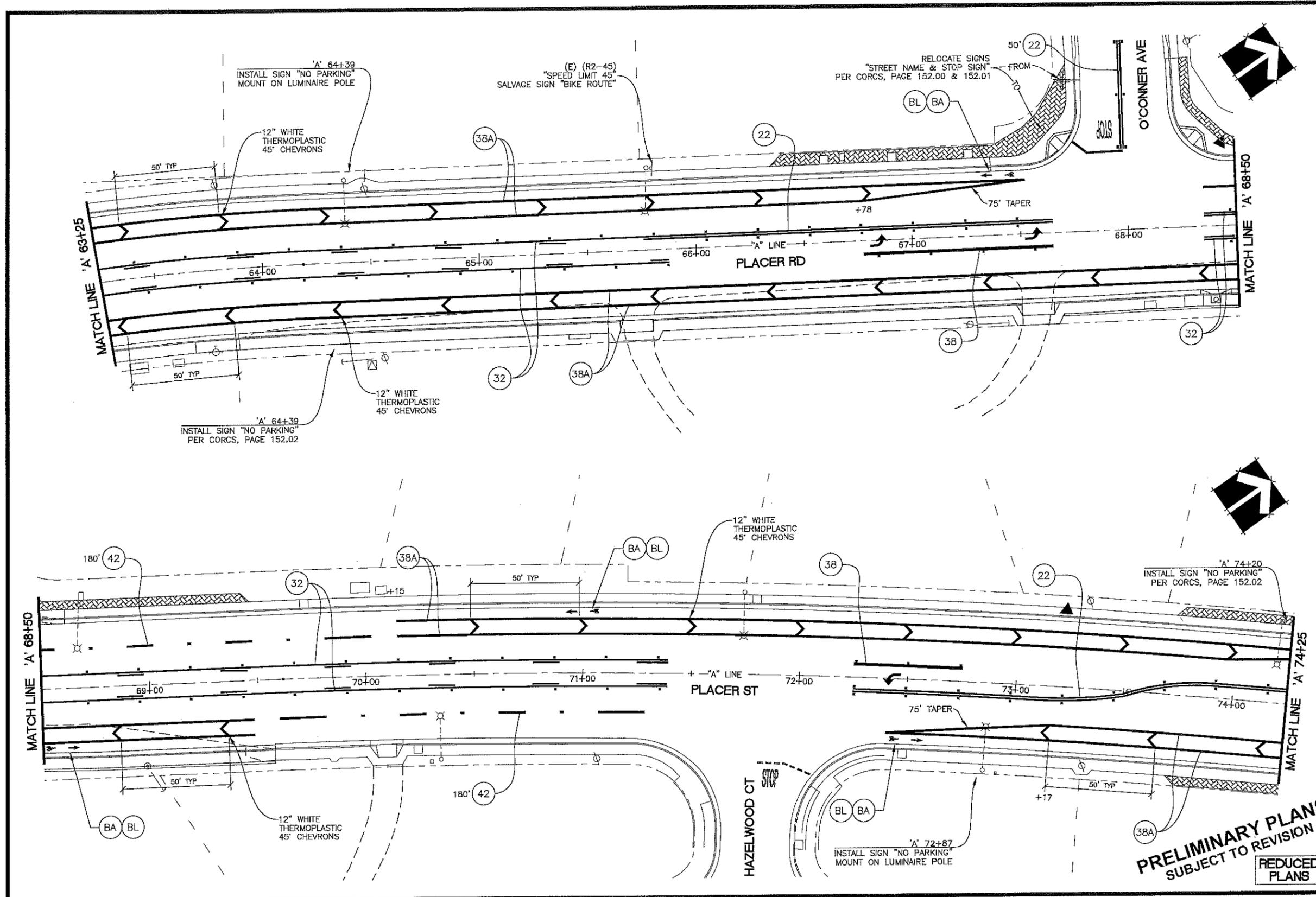
**PRELIMINARY PLANS**  
 SUBJECT TO REVISION

REDUCED  
 PLANS



DESIGNED BY J. ABSHIER	DESIGNED BY CITY OF REDDING
DRAWN BY W. DANIELS	PROJECT ENGINEER
REVIEWED BY	
ORIGINAL SCALE IN INCHES 	
<b>CITY OF REDDING</b> <b>PUBLIC WORKS DEPARTMENT</b>	
<b>PLACER STREET IMPROVEMENTS</b> BID. SCH. NO. XXXX <b>PAVEMENT DELINEATION AND SIGNING</b>	
JOB NO. 2356 <b>A-62</b> ORIGINAL SCALE: 1"=20' DATE: MAY 2014 <b>PD-3</b> SHEET 62 OF 79	

**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**  
**REDUCED PLANS**



ORIGINAL SCALE IN INCHES  
  
 0 1 2

DESIGNED BY: J. ABSHIER  
 DRAWN BY: W. DANIELS  
 REVIEWED BY:

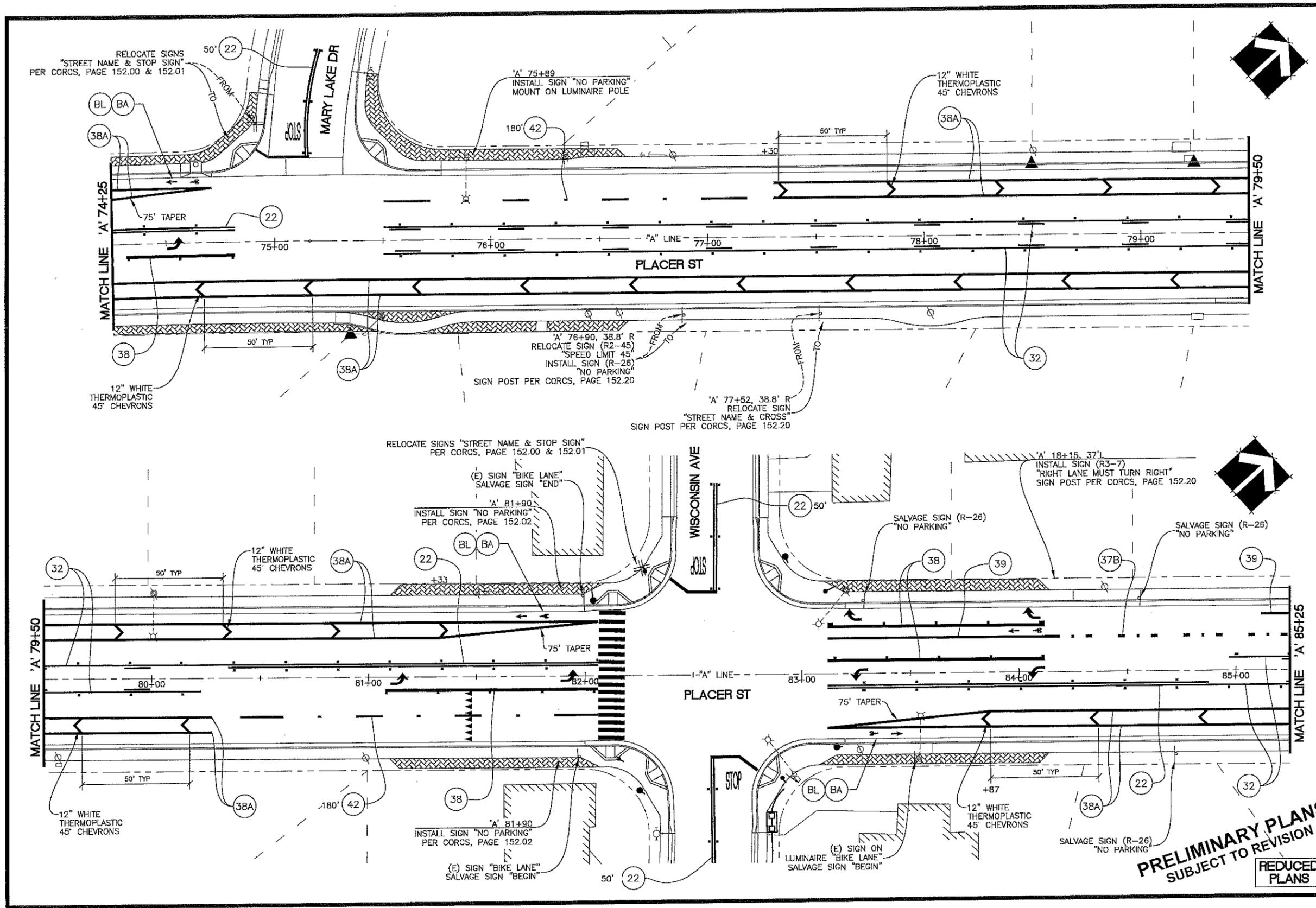
DESIGNED BY:  
 PROJECT ENGINEER

CITY OF REDDING  
 PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
 PAVEMENT DELINEATION AND SIGNING  
 JOB NO. 2336  
 BID SCH. NO. XXXX

A-63  
 ORIGINAL SCALE: 1"=20'  
 DATE: MAY 2014  
 PD-4  
 SHEET 63 OF 79

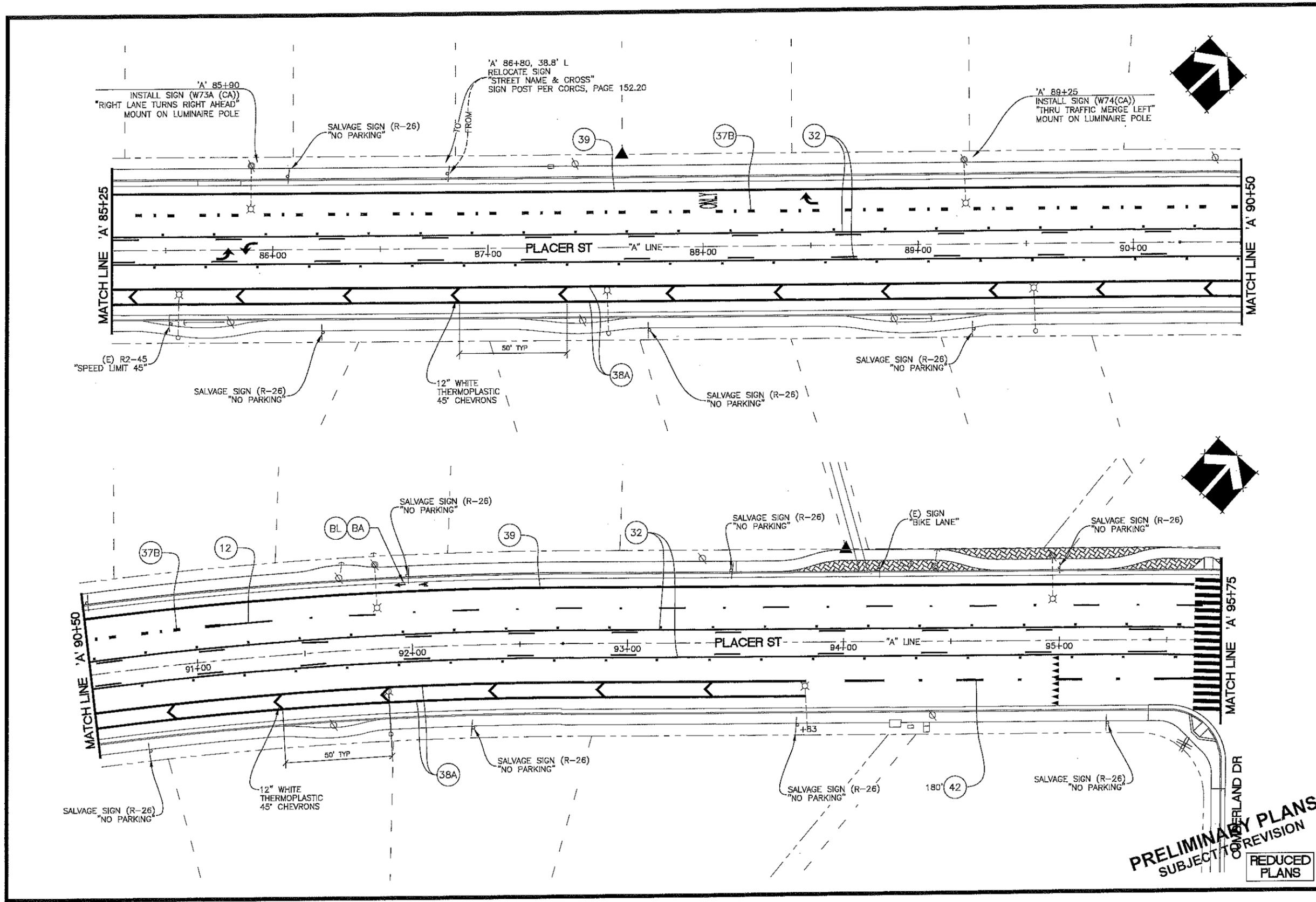
**PRELIMINARY PLANS**  
 SUBJECT TO REVISION  
 REDUCED PLANS



DESIGNED BY: J. ASHIER	DESIGNED BY: J. ASHIER		
DRAWN BY: W. DANIELS	DRAWN BY: W. DANIELS		
REVIEWED BY:	REVIEWED BY:	PROJECT ENGINEER:	
<b>CITY OF REDDING</b>			
<b>PUBLIC WORKS DEPARTMENT</b>			
<b>PLACER STREET IMPROVEMENTS</b>			
<b>PAVEMENT DELINEATION AND SIGNING</b>			
JOB NO. 2336    BID. SCH. NO. XXXX			
<b>A-64</b>			
ORIGINAL SCALE: 1"=20'			
DATE: MAY 2014			
<b>PD-5</b>			
SHEET 64 OF 79			

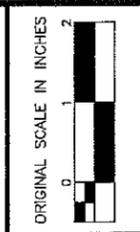
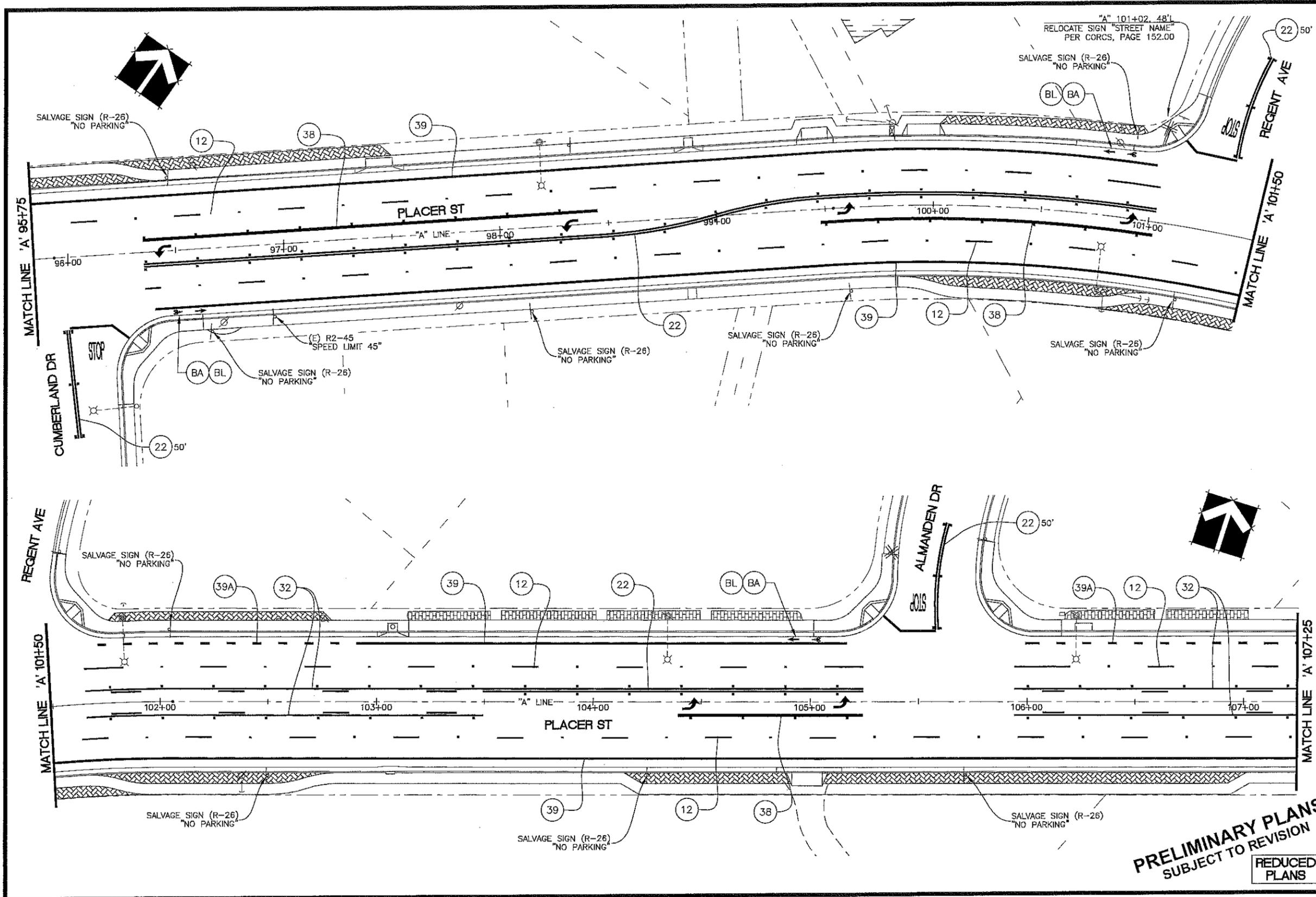
**PRELIMINARY PLANS  
SUBJECT TO REVISION**

**REDUCED  
PLANS**



**PRELIMINARY PLANS**  
 SUBJECT TO REVISION  
 REDUCED PLANS

 ORIGINAL SCALE IN INCHES 	
DESIGNED BY J. ABSEHIER	DRAWN BY W. DANIELS
	
DESIGNED BY J. ABSEHIER	PROJECT ENGINEER W. DANIELS
CITY OF REDDING PUBLIC WORKS DEPARTMENT	
PLACER STREET IMPROVEMENTS PAVEMENT DELINEATION AND SIGNING	
JOB NO. 2356 BID. SCH. NO. XXXX	
A-65 ORIGINAL SCALE: 1"=20' DATE: MAY 2014	
PD-6 SHEET 65 OF 79	



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY



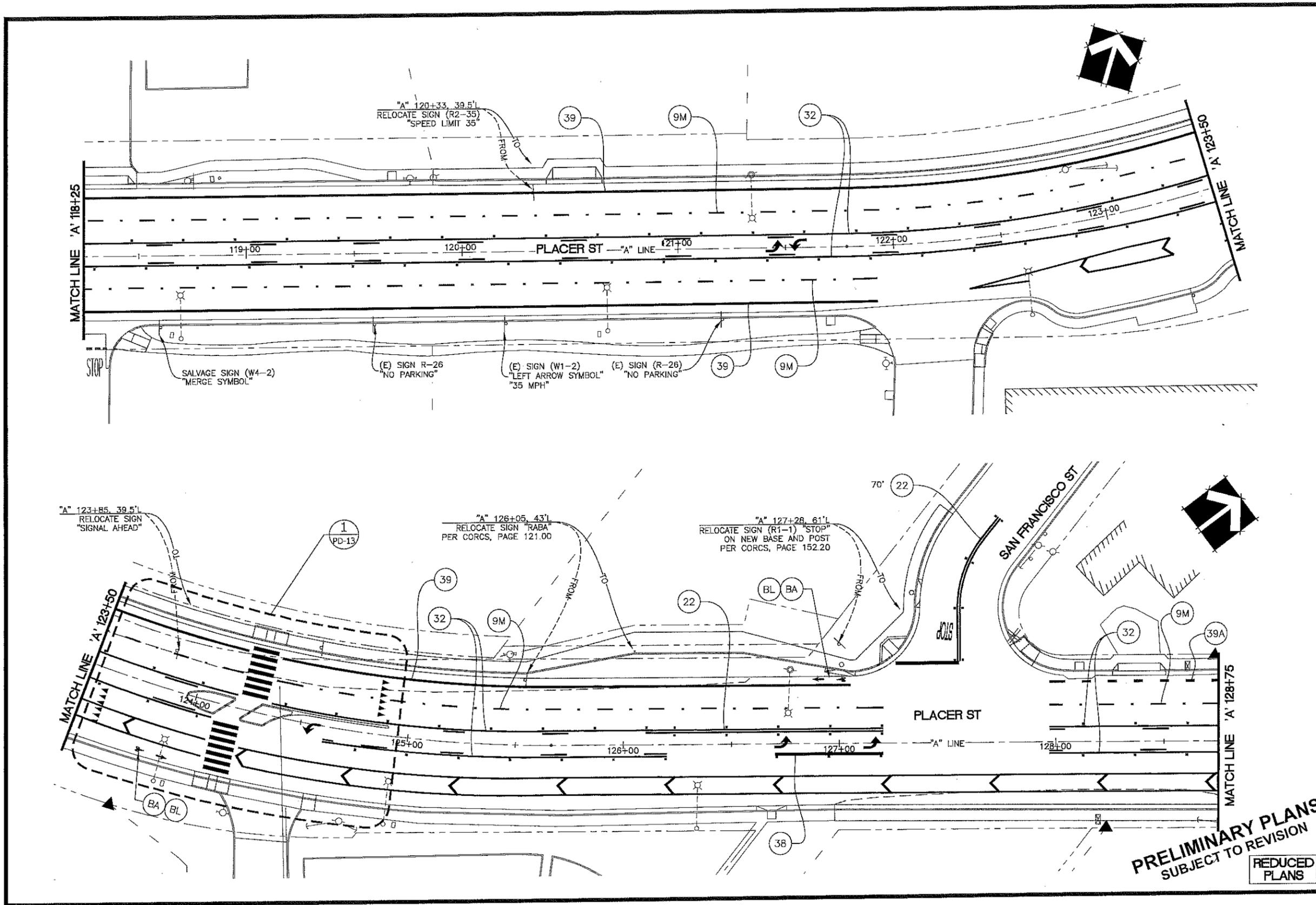
DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
PAVEMENT DELINEATION AND SIGNING  
JOB NO. 2336  
A-66  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
PD-7  
SHEET 66 OF 79

**PRELIMINARY PLANS**  
SUBJECT TO REVISION  
REDUCED PLANS

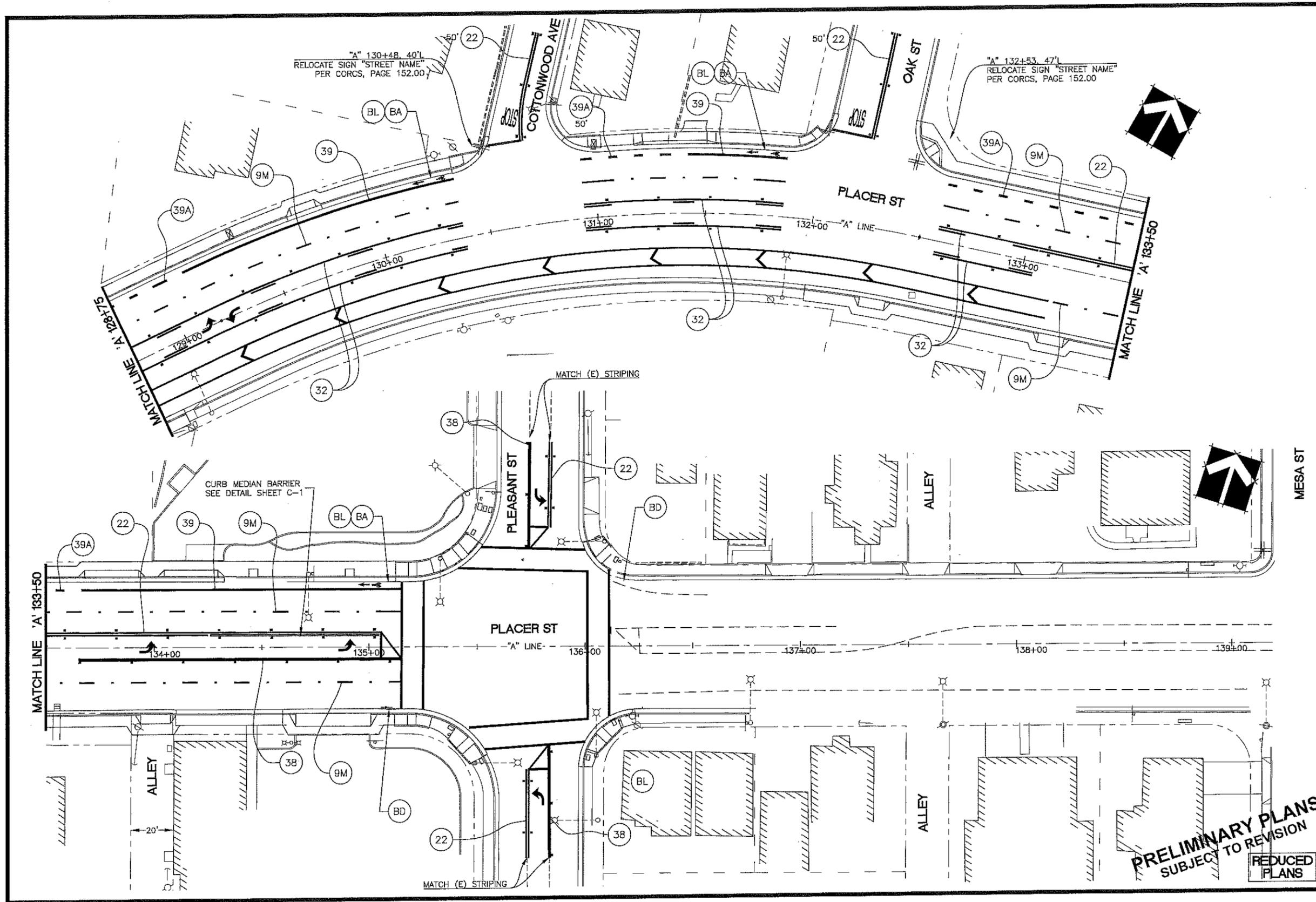




DESIGNED BY J. ABSHIER	ORIGINAL SCALE IN INCHES 0 1 2
DRAWN BY W. DANIELS	
REVIEWED BY	
DESIGNED BY	PROJECT ENGINEER
CITY OF REDDING PUBLIC WORKS DEPARTMENT	
PLACER STREET IMPROVEMENTS PAVEMENT DELINEATION AND SIGNING	
JOB NO. 2336	BID. SCH. NO. XXXX
A-68	
ORIGINAL SCALE 1"=20'	
DATE: MAY 2014	
PD-9	
SHEET 68 OF 79	

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

**REDUCED PLANS**



DESIGNED BY  
J ABISHER  
DRAWN BY  
W DANIELS  
REVIEWED BY



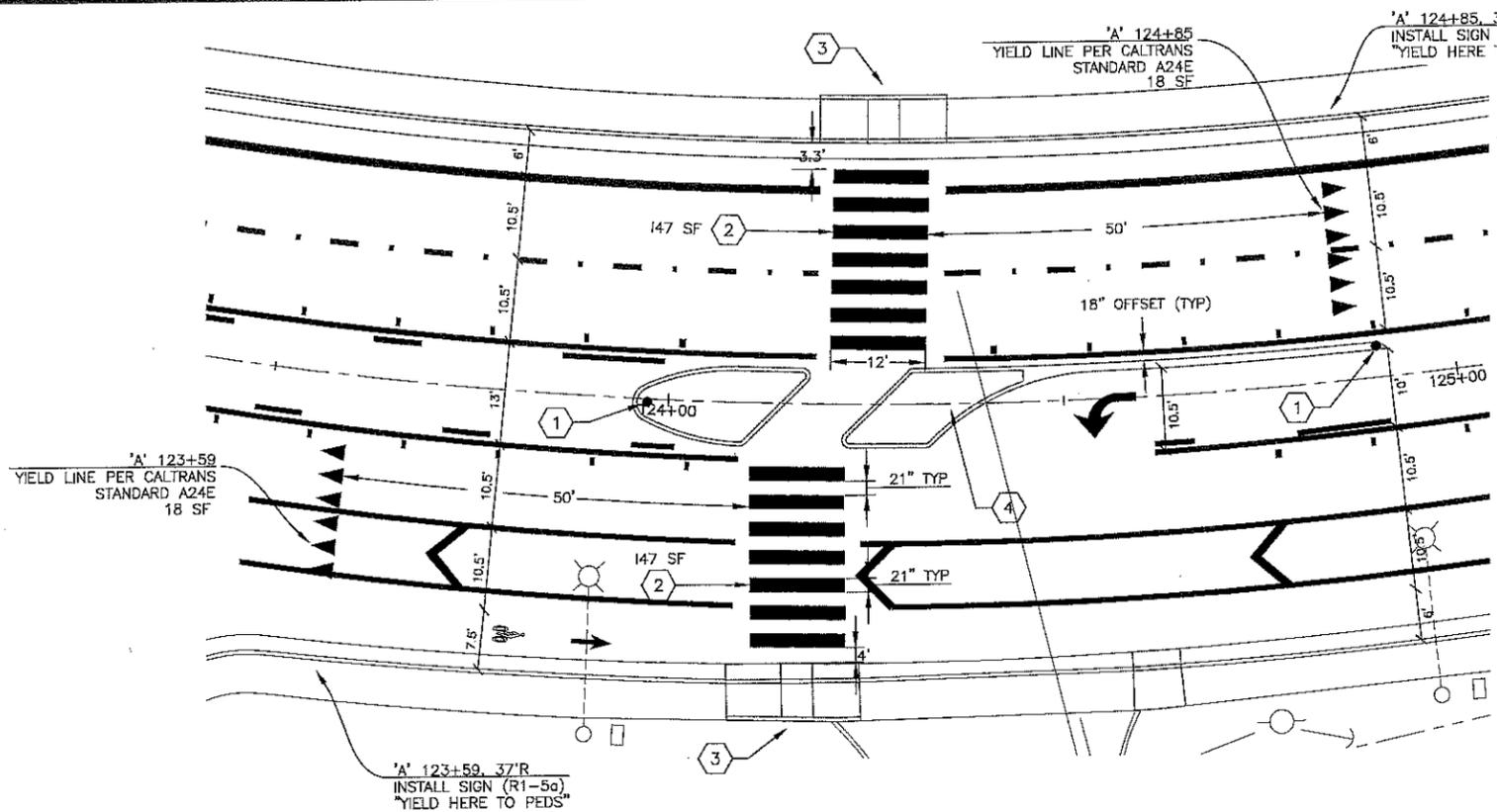
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

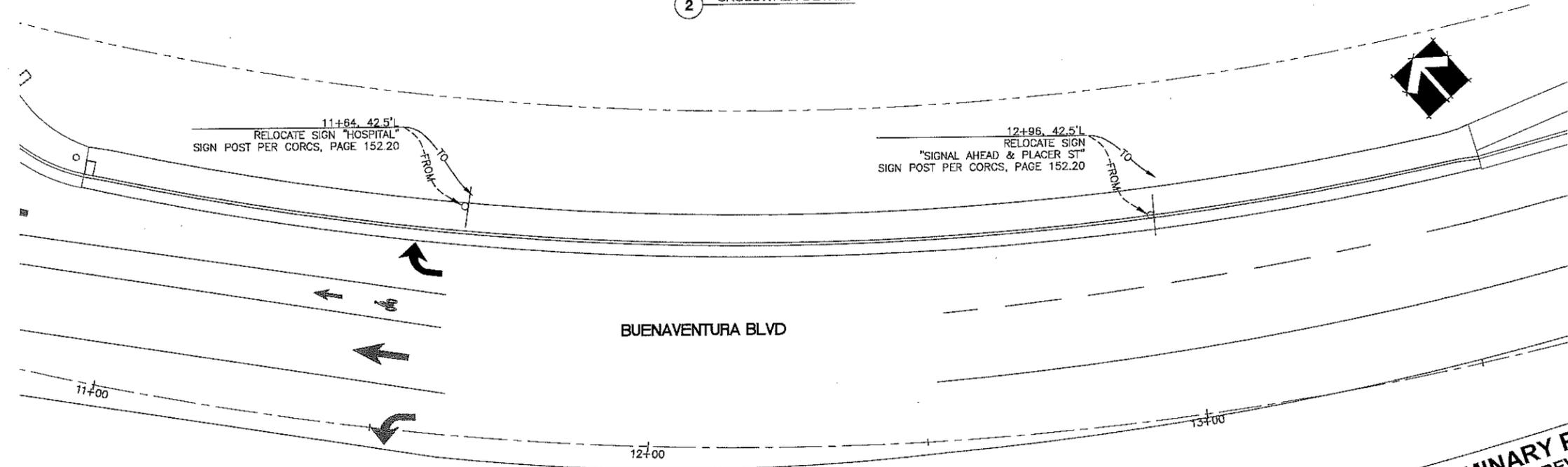
PLACER STREET  
IMPROVEMENTS  
PAVEMENT DELINEATION AND SIGNING  
JOB NO. 2336  
BID SCH. NO. XXXX

A-69  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
PD-10  
SHEET 69 OF 79

**PRELIMINARY PLANS  
SUBJECT TO REVISION**  
REDUCED  
PLANS



2 CROSSWALK DETAIL



1 BUENAVENTURA BLVD DETAIL

NOTES:

- 1 INSTALL OBJECT MARKER (TYPE K-1)
- 2 ALL CROSSWALK MARKINGS SHALL BE 120 MIL (MIN) THICK THERMOPLASTIC. THE MARKINGS TO BE PLACED SO THAT (3) EQUAL-SPACED MARKERS WILL BE CENTERED IN EACH LANE.
- 3 INSTALL SIGNS W11-2 AND W16-7P. INSTALL BEACON (RECTANGULAR RAPID FLASHING) SYSTEM ON NEW PEDESTRIAN PUSH BUTTON POST.
- 4 INSTALL SIGN (R3-2) "NO LEFT SYMBOL"



DESIGNED BY  
J ABSHIER  
DRAWN BY  
W DANIELS  
REVIEWED BY



DESIGNED BY  
PROJECT ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET  
IMPROVEMENTS  
PAVEMENT DELINEATION DETAILS  
JOB NO. 2136  
BID SCH. NO. XXXX

A-70  
ORIGINAL SCALE:  
1"=10'  
DATE: MAY 2014  
PD-13  
SHEET 70 OF 79

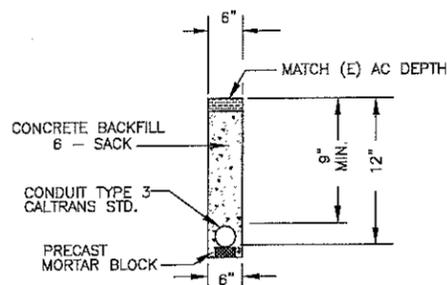
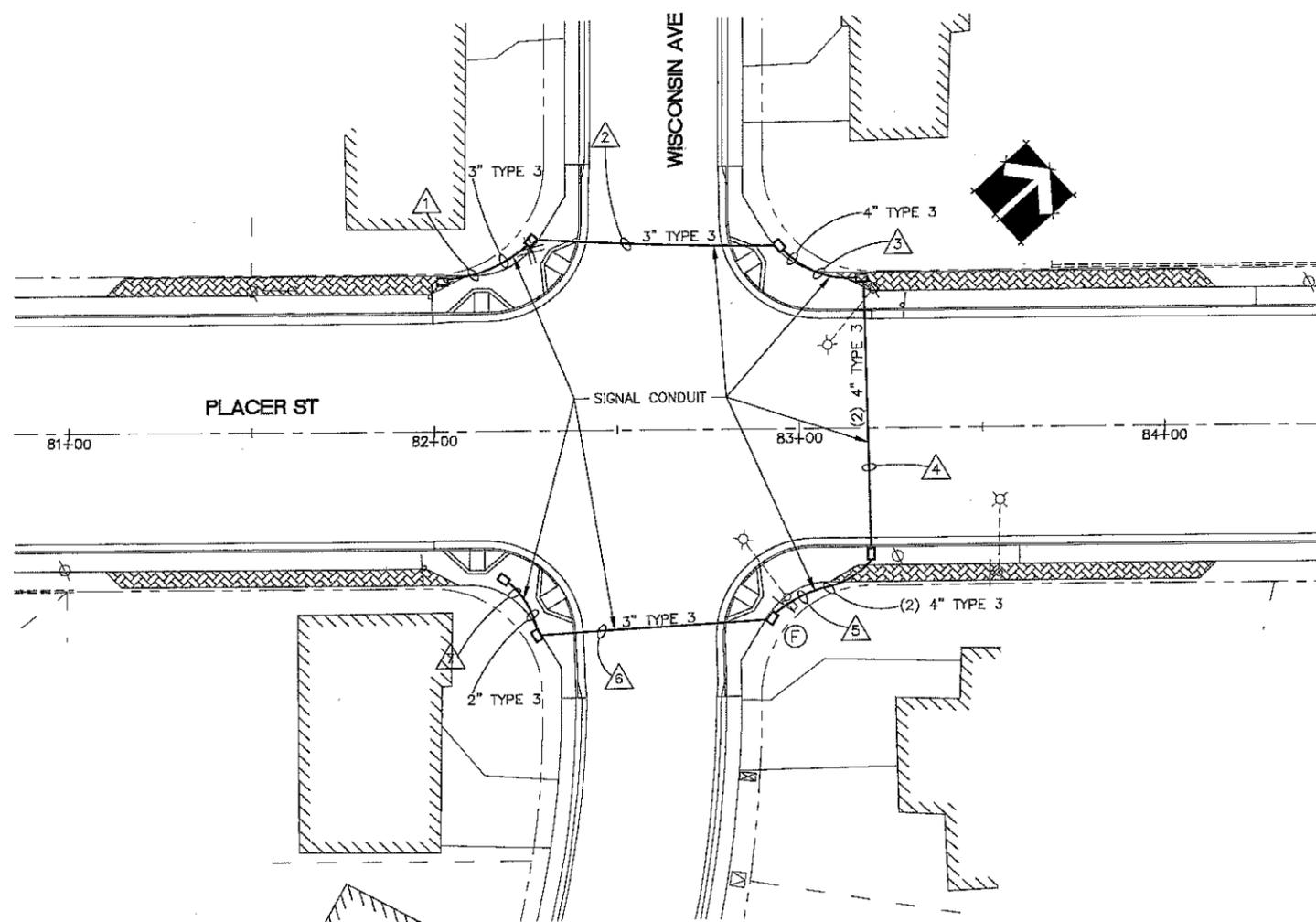
PRELIMINARY PLANS  
SUBJECT TO REVISION  
REDUCED  
PLANS

**GENERAL NOTES:**

1. THIS PLAN SHALL BE USED FOR ELECTRICAL WORK ONLY.
2. EXACT LOCATIONS OF PULL BOXES SHALL BE ESTABLISHED BY THE ENGINEER IN THE FIELD AND AS SHOWN ON THE PLANS.
3. LOCATION OF EXISTING UTILITIES, AS SHOWN ON THE PLANS, ARE APPROXIMATE ONLY.
4. ALL WORK SHALL BE CONFINED TO EXISTING RIGHT OF WAY UNLESS THE CONTRACTOR RECEIVES PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS.
5. ALL WORK TO BE DONE AND MATERIALS SUPPLIED TO BE PER LATEST EDITION OF THE "CITY OF REDDING CONSTRUCTION STANDARDS" AND "CALTRANS STANDARD PLANS" & SPECIFICATIONS.

**LEGEND**

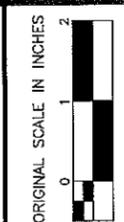
-  - CONDUIT RUN
-  - PULL BOX (2E)



**STREET TRENCH DETAIL**  
NO SCALE

**PRELIMINARY PLANS**  
SUBJECT TO REVISION

**REDUCED PLANS**



DESIGNED BY  
J. ABSHIER  
DRAWN BY  
W. DANIELS  
REVIEWED BY

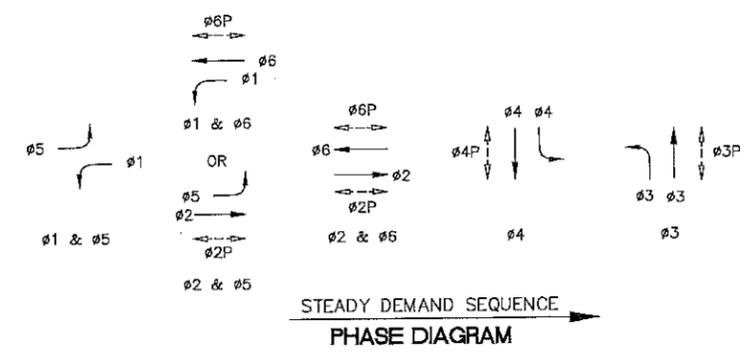
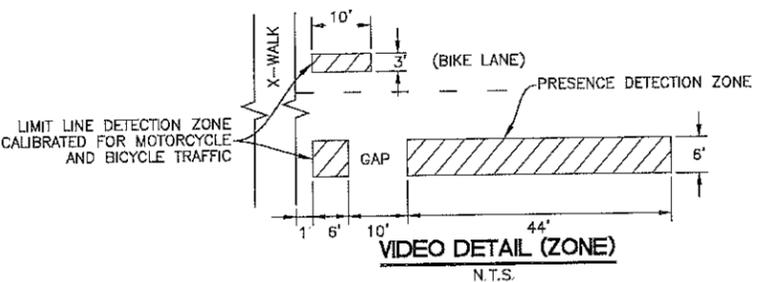
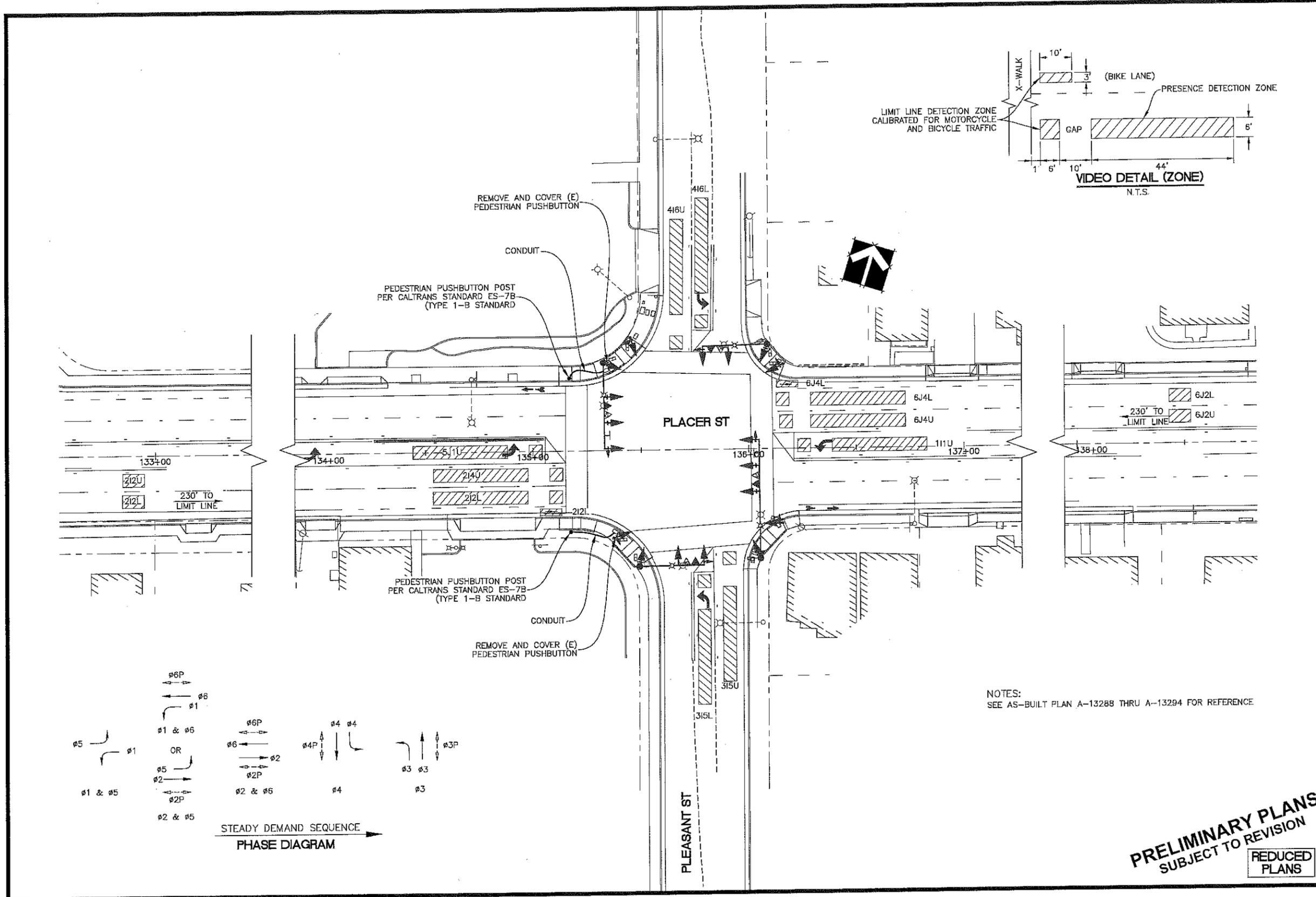


DESIGNED BY  
PROJECT ENGINEER

**CITY OF REDDING**  
**PUBLIC WORKS DEPARTMENT**

**PLACER STREET IMPROVEMENTS**  
JOB NO. 2336  
BID. SCH. NO. XXXX  
**SIGNAL PLANS**

A-71  
ORIGINAL SCALE:  
1"=20'  
DATE: MAY 2014  
**E-1**  
SHEET 71 OF 79



NOTES:  
SEE AS-BUILT PLAN A-13288 THRU A-13294 FOR REFERENCE

DESIGNED BY J. ABSHIER	DESIGNED BY PROJECT ENGINEER
DRAWN BY W. DANIELS	
REVIEWED BY	
<b>CITY OF REDDING</b> <b>PUBLIC WORKS DEPARTMENT</b>	
<b>PLACER STREET IMPROVEMENTS</b> BID. SCH. NO. XXXX SIGNAL MODIFICATION PLEASANT ST.	
A-72 ORIGINAL SCALE: 1"=20' DATE, MAY 2014	
<b>E-2</b> SHEET 72 OF 79	

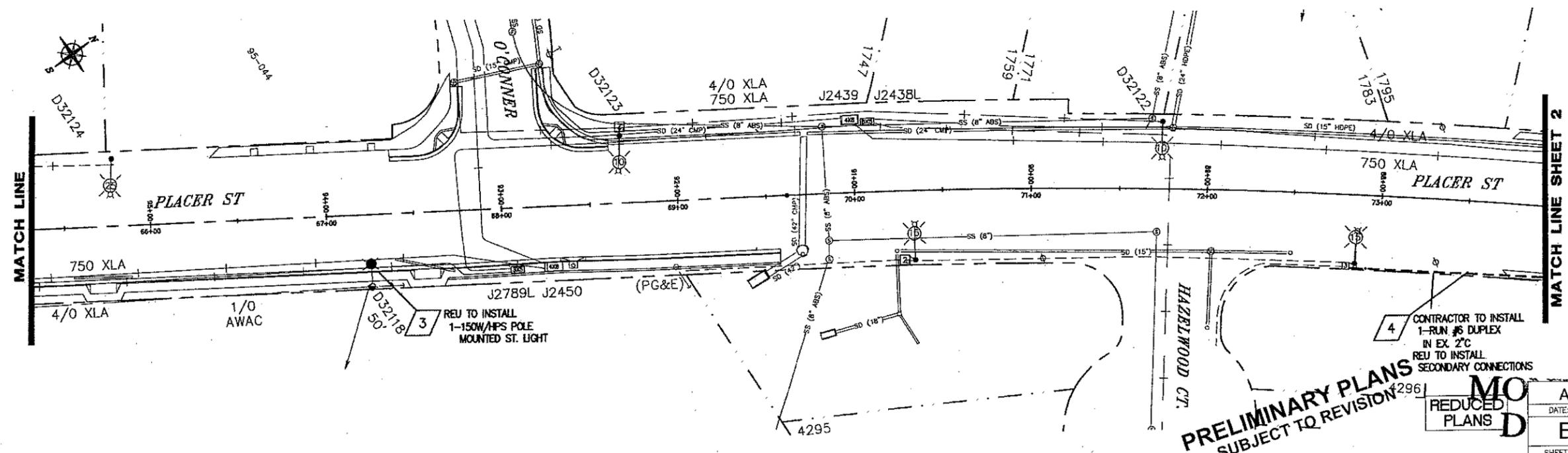
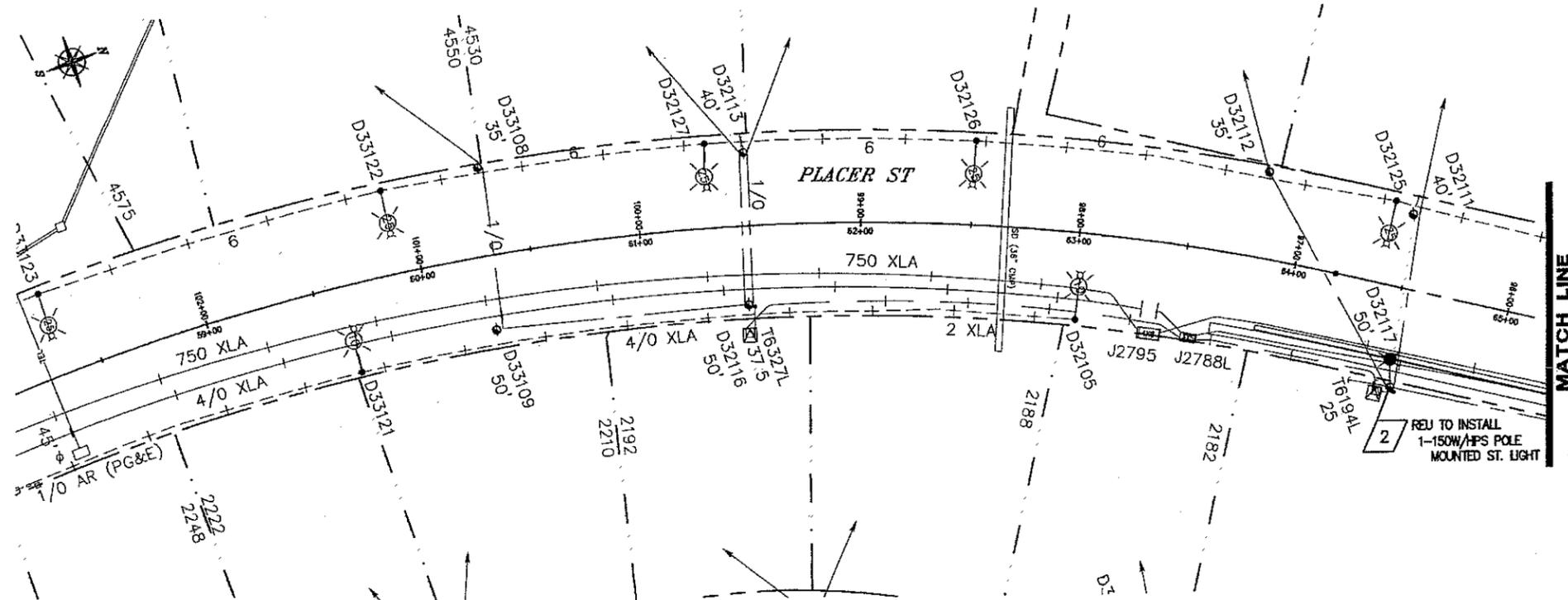
**PRELIMINARY PLANS**  
**SUBJECT TO REVISION**  
**REDUCED PLANS**



COMMON CONSTRUCTION SYMBOLS FOR CUSTOMER/DEVELOPER			
SYMBOL	DESCRIPTION	REFERENCE DWG.	
		ELECTRIC	PUBLIC WORKS
+	X 4" CONDUIT (SECONDARY)	CS1010	521.00, 620.00, 622.00
+	X 2" CONDUIT (SECONDARY)	CS1010	521.00, 620.00, 622.00
■	X SPLICE BOX (SE/4E/3E)	CS1109, CS1110	524.00, 525.00
■	X SPLICE BOX (2E)	CS1109, CS1110	524.00, 525.00
☉	X ST. LT. STD., HEIGHT AS NOTED ST. LT. SHALL BE 248 VOLTS AND 150 WATTS (UNLESS NOTED OTHERWISE) ST. LIGHTS TO BE INSTALLED B.O.W. (UNLESS NOTED OTHERWISE)	CS5110, CS5111, CS5112	554.00, 555.00, 556.00
☉	X REU SUPPLIED AND INSTALLED POLE MOUNTED ST. LIGHT.		

The installation requirements for these electric supply facilities are shown in the City of Redding Public Works Construction Standards book and are also available online at [www.ci.redding.ca.us](http://www.ci.redding.ca.us) <http://www.ci.redding.ca.us>. From the "City Department" drop down, go to "Electric Utility" and find the "Service Planning" on the lower right side of the page. From there go to "Construction Standards" also located on the lower right. Use the Public Works Reference Dwg. number(s) that are X-marked on this drawing. If you do not have access to the web, you may call (530) 339-7314 for assistance.

SEE ADDITIONAL PROJECT SPECIFIC REFERENCE DRAWINGS:



**PRELIMINARY PLANS**  
SUBJECT TO REVISION 296

**MO**  
REDUCED  
PLANS  
**D**

A-74  
DATE: MAY 2014  
EL-2  
SHEET 74 OF 79

WORK-ORDER NO.  
**13-026**  
DWG. SIZE **B**  
SHEET **1** OF **5**

REVISIONS		
NO.	DATE	DESCRIPTION

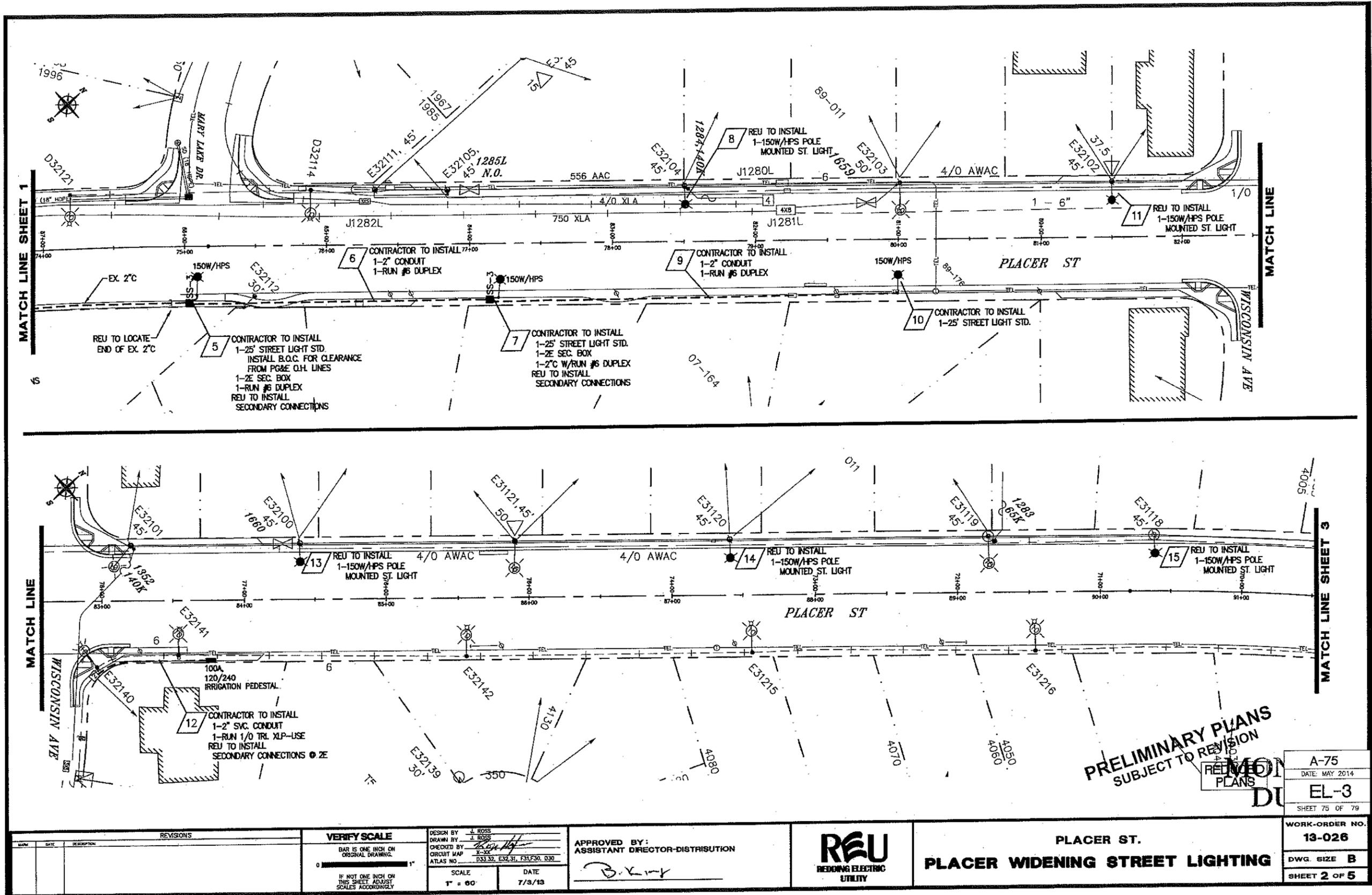
**VERIFY SCALE**  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DESIGN BY: J. ROSS  
DRAWN BY: J. ROSS  
CHECKED BY: [Signature]  
CIRCUIT MAP ATLAS NO. 033-32, E92-31, F31F50, 030  
SCALE: 1" = 60'  
DATE: 7/3/13

APPROVED BY: ASSISTANT DIRECTOR-DISTRIBUTION  
[Signature: B. King]



**PLACER ST.**  
**PLACER WIDENING STREET LIGHTING**



**PRELIMINARY PLANS**  
 SUBJECT TO REVISION  
 REVISION PLANS  
 REVISION DU

A-75
DATE: MAY 2014
<b>EL-3</b>
SHEET 75 OF 79
WORK-ORDER NO.
<b>13-026</b>
DWG. SIZE <b>B</b>
SHEET <b>2</b> OF <b>5</b>

NO.	DATE	DESCRIPTION

**VERIFY SCALE**  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

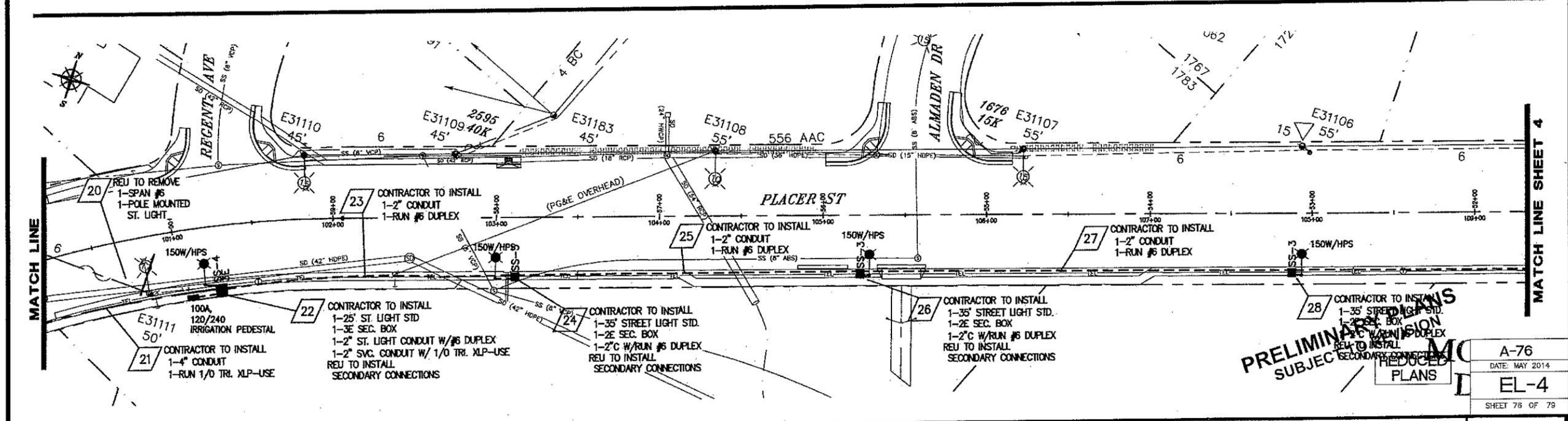
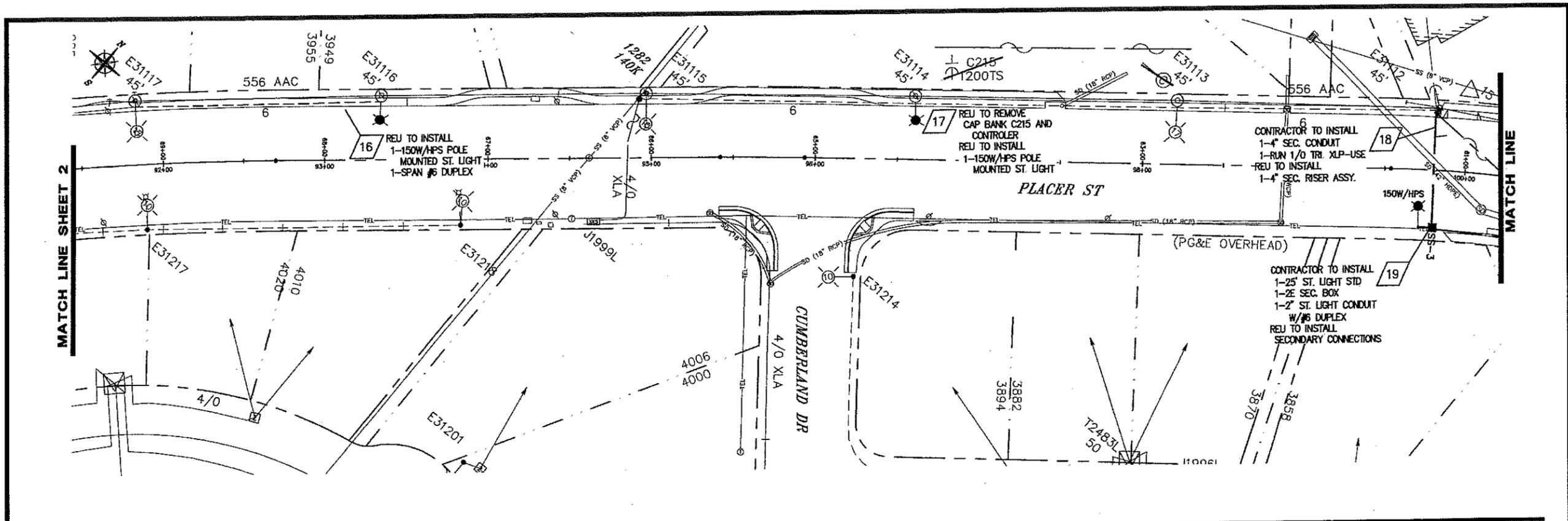
DESIGN BY: J. ROSS  
 DRAWN BY: J. ROSS  
 CHECKED BY: [Signature]  
 CIRCUIT MAP: [Signature]  
 ATLAS NO.: 03332, E32-31, E31F30, 030

SCALE: 1" = 60'  
 DATE: 7/3/13

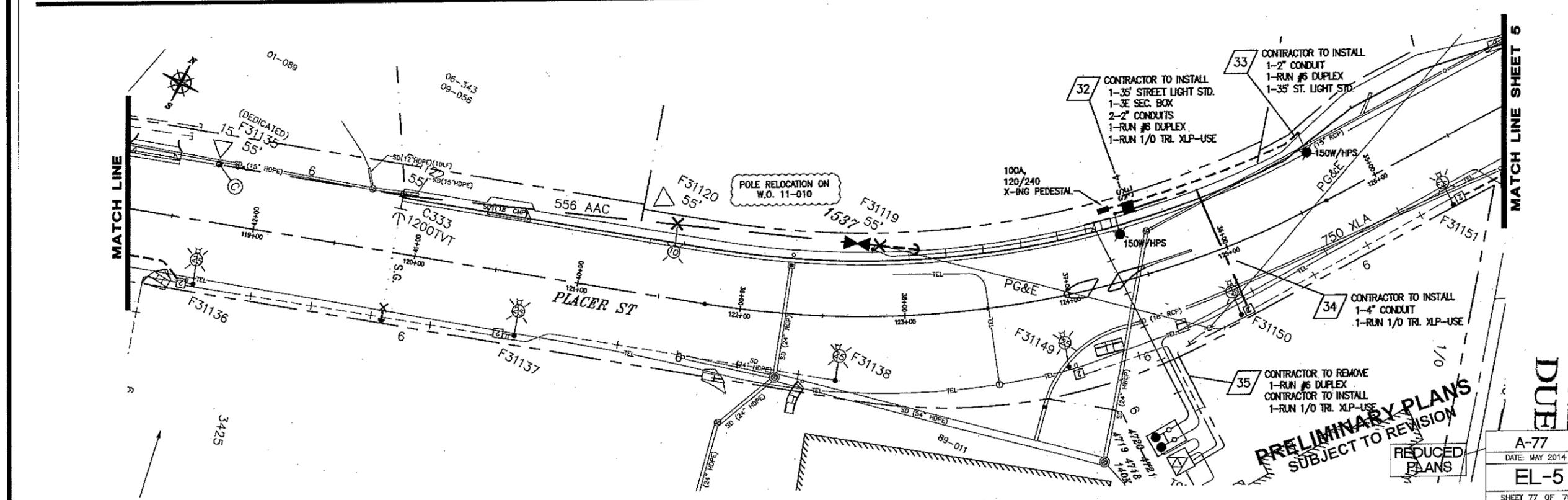
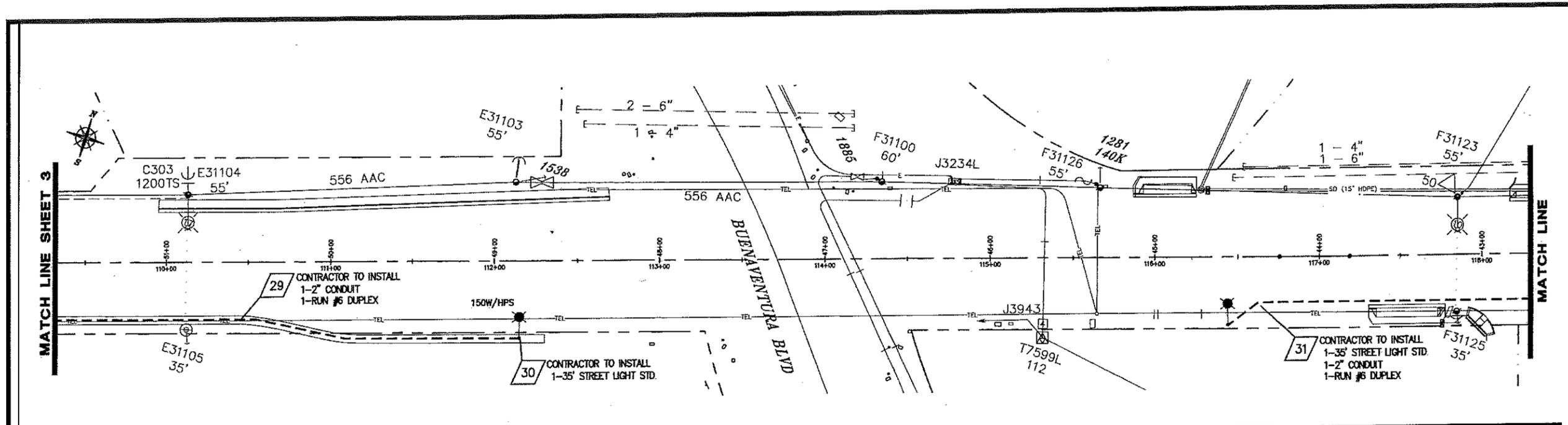
APPROVED BY:  
 ASSISTANT DIRECTOR-DISTRIBUTION  
 [Signature]

**REU**  
 REDDING ELECTRIC UTILITY

**PLACER ST.**  
**PLACER WIDENING STREET LIGHTING**

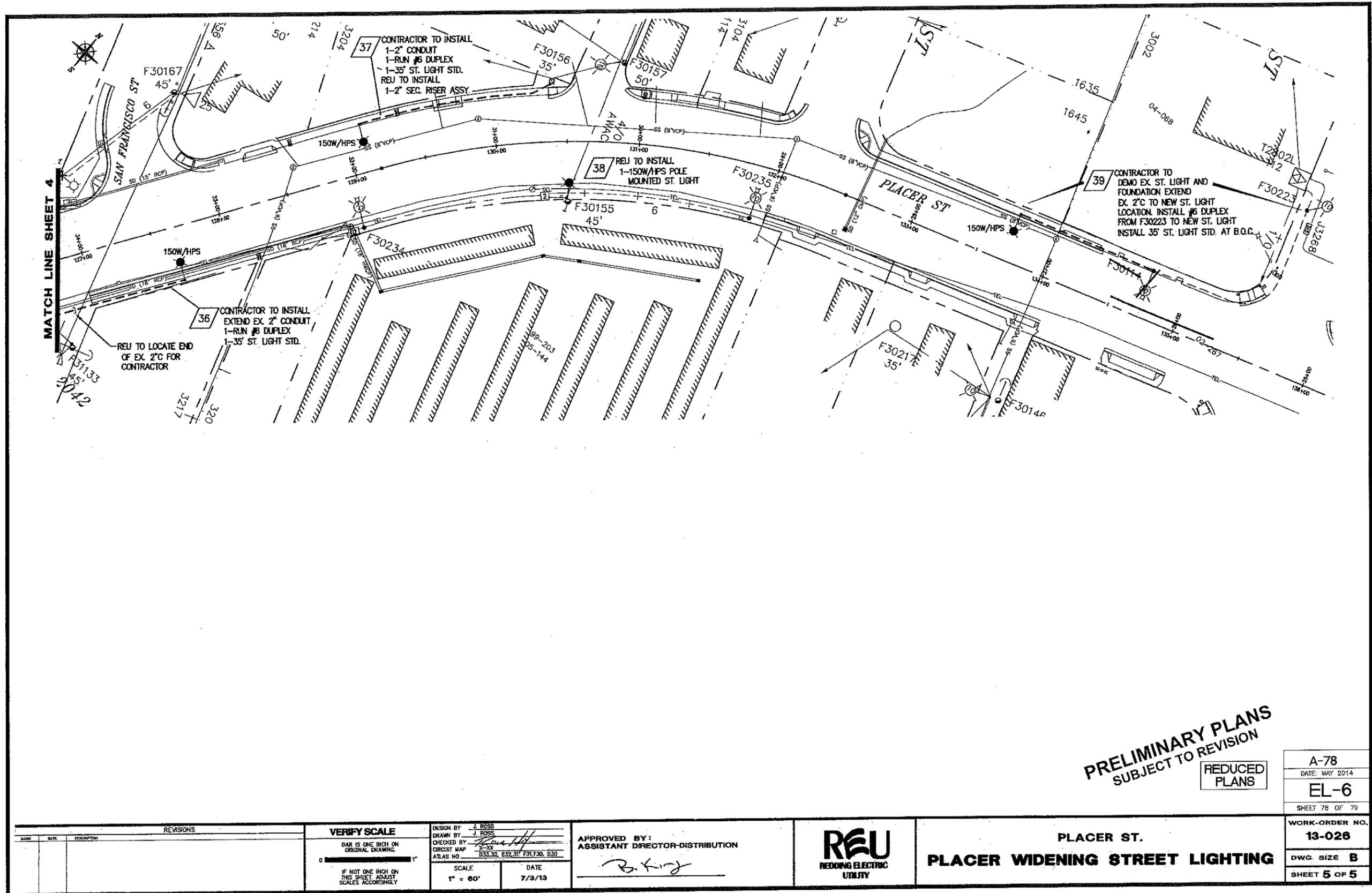


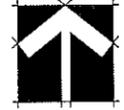
<b>REVISIONS</b> NO. DATE DESCRIPTION		<b>VERIFY SCALE</b> BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY	DESIGN BY: J. ROSS DRAWN BY: J. ROSS CHECKED BY: [Signature] ATLAS NO: D33.32, E32.31, F31.F30, D30	APPROVED BY: ASSISTANT DIRECTOR-DISTRIBUTION [Signature]	<b>REU</b> REDDING ELECTRIC UTILITY	<b>PLACER ST.</b> <b>PLACER WIDENING STREET LIGHTING</b>	WORK-ORDER NO. <b>13-026</b>
		SCALE: 1" = 60' DATE: 7/9/13	PRELIMINARY DIVISION SUBJECT TO REVISION REDUCED PLANS	DATE: MAY 2014 <b>EL-4</b> SHEET 76 OF 79			DWG. SIZE <b>B</b> SHEET <b>3</b> OF <b>5</b>



<b>REVISIONS</b> WORK DATE DESCRIPTION		<b>VERIFY SCALE</b> BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.		DESIGN BY J. ROSS DRAWN BY J. ROSS CHECKED BY X-Y CIRCUIT MAP ATLAS NO. D33.32, E32.31, F31.30, D30		APPROVED BY: ASSISTANT DIRECTOR-DISTRIBUTION 				<b>PLACER ST.</b> <b>PLACER WIDENING STREET LIGHTING</b>		A-77 DATE: MAY 2014 EL-5 SHEET 77 OF 79 WORK-ORDER NO. 13-026 DWG. SIZE B SHEET 4 OF 5	
---	--	--	--	--	--	---	--	--	--	---	--	--	--

**PRELIMINARY PLANS**  
 SUBJECT TO REVISION  
 REDUCED PLANS





DESIGNED BY  
J. ABSHIER

DRAWN BY  
W. DANIELS

REVIEWED BY



DESIGNED BY

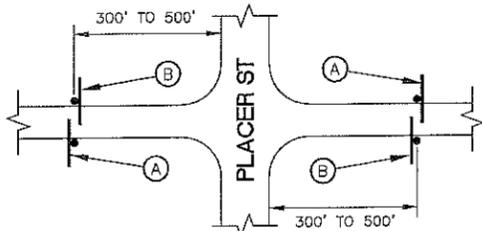
CITY ENGINEER

CITY OF REDDING  
PUBLIC WORKS DEPARTMENT

PLACER STREET IMPROVEMENTS  
CONSTRUCTION AREA SIGNS

BID. NO. XXXX  
JOB NO. 2336

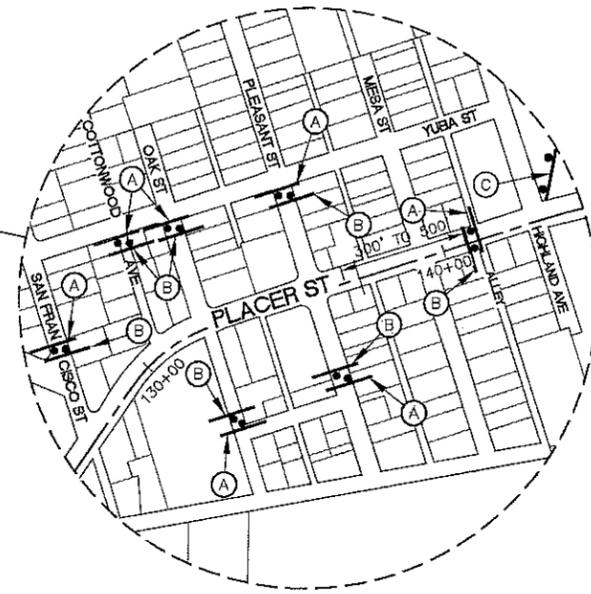
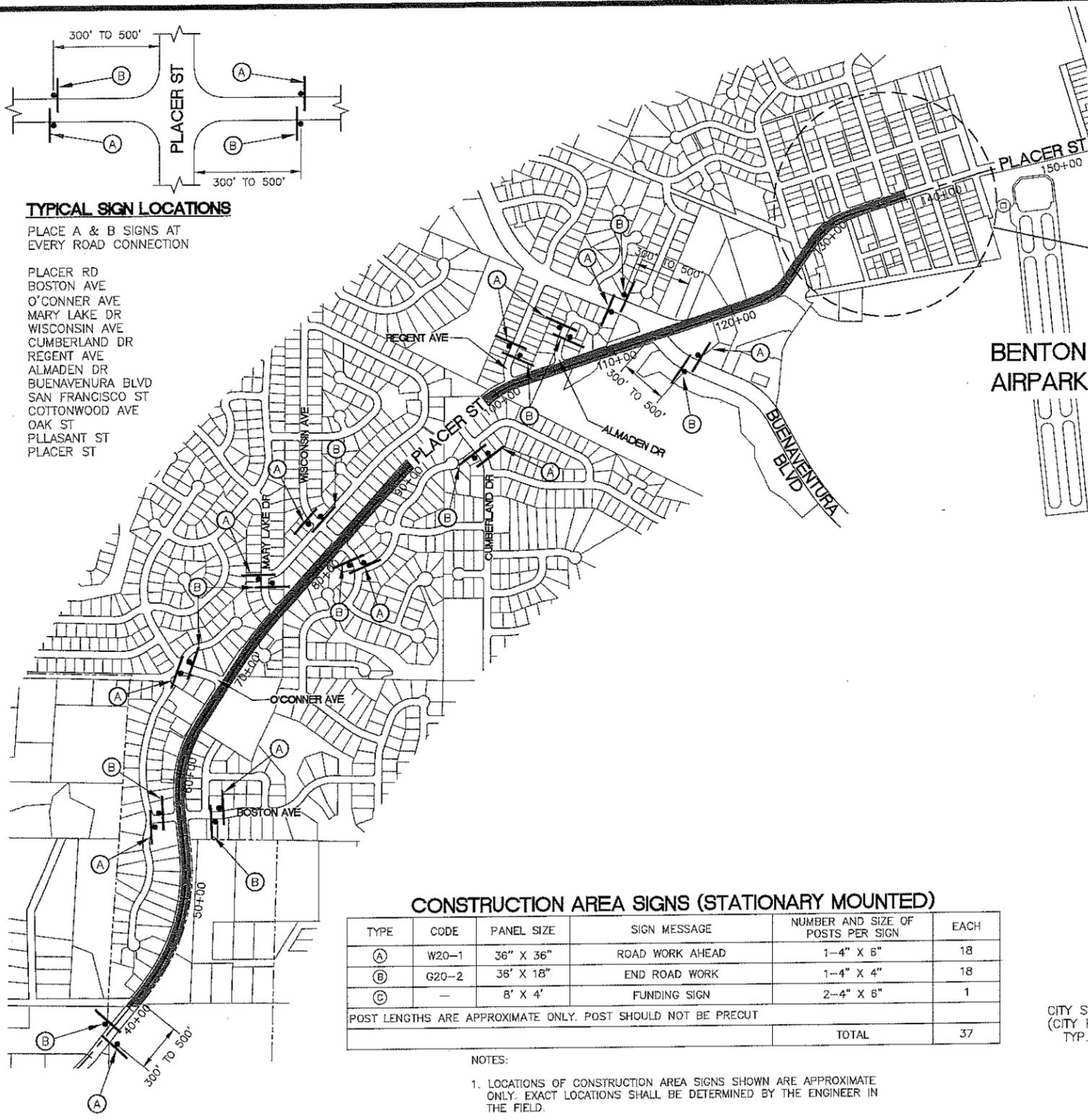
A-79  
ORIGINAL SCALE: NONE  
DATE: MAY 2014  
CS-1  
SHEET 79 OF 79



**TYPICAL SIGN LOCATIONS**

PLACE A & B SIGNS AT EVERY ROAD CONNECTION

- PLACER RD
- BOSTON AVE
- O'CONNER AVE
- MARY LAKE DR
- WISCONSIN AVE
- CUMBERLAND DR
- REGENT AVE
- ALMADEN DR
- BUENAVENURA BLVD
- SAN FRANCISCO ST
- COTTONWOOD AVE
- OAK ST
- PLASANT ST
- PLACER ST



BENTON AIRPARK

**PROJECT FUNDING SIGN**

EXACT LOCATION TO BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER

NOTE:

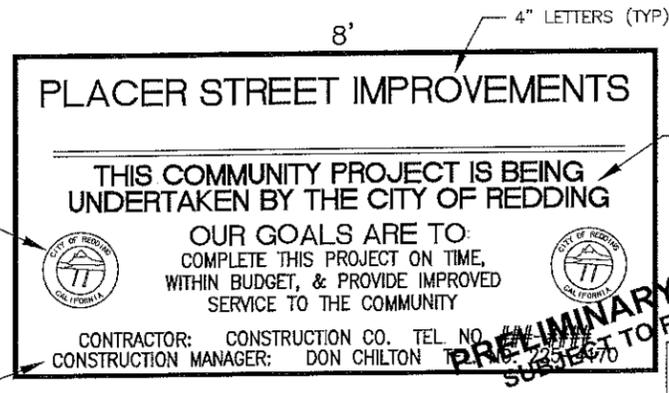
- 1) EXACT LOCATION TO BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER
- 2) SIGN PANEL SHALL BE 3/4" EXTERIOR GRADE PLYWOOD OR CITY APPROVED EQUAL
- 3) SPACE BETWEEN LINES AS INDICATED
- 4) CUT VINYL BLACK LETTERING WITH A BLACK EDGE BOARDER ON WHITE BACKGROUND
- 5) MOUNT SIGN ON 2-4"x6" WOOD POSTS

**CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)**

TYPE	CODE	PANEL SIZE	SIGN MESSAGE	NUMBER AND SIZE OF POSTS PER SIGN	EACH
(A)	W20-1	36" X 36"	ROAD WORK AHEAD	1-4" X 6"	18
(B)	G20-2	36" X 18"	END ROAD WORK	1-4" X 4"	18
(C)	-	8' X 4'	FUNDING SIGN	2-4" X 6"	1
POST LENGTHS ARE APPROXIMATE ONLY. POST SHOULD NOT BE PRECUT					
TOTAL					37

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. ALL SIGNS SHALL HAVE 7-FT VERTICAL CLEARANCE TO BOTTOM OF SIGN PANEL.



**CITY OF REDDING**

**PRELIMINARY PROJECT COST ESTIMATE**

<b>PROJECT NAME</b>	<b>Placer Street Improvement ATP Grant</b>	<b>ALTERNATE NO.</b>	<b>DATE: 05/20/2014</b>
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<b>PROJECT DESCRIPTION:</b>
Placer Street Improvements from East of Pleasant Street to City Limits.

<b>CLIENT:</b>		<b>QUANTITIES BY:</b> W. Daniels
<b>JOB ORDER NO:</b> 2336-10		<b>QTY CHECKED BY:</b> J. Abshier
		<b>UNIT PRICES BY:</b> J. Abshier

CONTRACT ITEMS		UNIT	QUANTITY	UNIT PRICE	FULL AMOUNT	ATP QUANTITY	ATP GRANT AMOUNT
1	Prepare SWPPP	LS	1	\$10,314.39	\$10,314	(pro-rated)	\$6,281
2	Water Pollution Control	LS	1	\$21,488.32	\$21,488	(pro-rated)	\$13,085
3	Fence (Temporary, Type ESA)	LF	300	\$2.36	\$708		
4	Surveying (construction)	LS	1	\$137,525.22	\$137,525	(pro-rated)	\$83,747
5	Progress Schedule (Critical Path Method)	LS	1	\$8,595.33	\$8,595	(pro-rated)	\$5,234
6	Mobilization	LS	1	\$350,000	\$350,000	(pro-rated)	\$213,135
7	Clear and Grub	LS	1	\$34,381.31	\$34,381	(pro-rated)	\$20,937
8	Traffic Control	LS	1	\$154,715.87	\$154,716	(pro-rated)	\$94,216
9	Trench Sheeting and Shoring	LS	1	\$15,000.00	\$15,000		
10	Project Funding Sign	EA	1	\$859.53	\$860	(pro-rated)	\$523
11	Construction Area Signs	EA	52	\$214.88	\$11,174	(pro-rated)	\$6,804
<b>Subtotal:</b>					\$744,762		\$443,963
<b>ROADWAY ITEMS</b>							
12	Excavation (Unclassified)	CY	2,584	\$17.19	\$44,419	2,584	\$44,419
13	Asphalt Concrete	Ton	7,485	\$60.17	\$450,372	2,485	\$149,522
14	Slurry Seal	SY	0	\$3.87	\$0		
15	Cold Mill Asphalt Concrete	SF	103,768	\$0.52	\$53,959	103,768	\$53,959
16	Aggregate Base (Class 2)	CY	1,083	\$51.57	\$55,850	1,083	\$55,850
17	Shoulder Backing	LF	2,940	\$2.41	\$7,085		
18	Pavement Fabric	SY	60,253	\$1.50	\$90,380	12,253	\$18,380
<b>Subtotal:</b>					\$702,066		\$322,131
<b>CONCRETE ITEMS</b>							
19	Curb and Gutter (6" Vertical)	LF	4,531	\$15.47	\$70,095	4,531	\$70,095
20	Sidewalk (4" PCC)	SF	40,577	\$6.19	\$251,253	40,577	\$251,253
21	Sidewalk (6" PCC)	SF	2,565	\$8.26	\$21,177	2,565	\$21,177
22	Concrete (4" Deco)	SF	10,824	\$6.45	\$69,815	10,824	\$69,815
23	Concrete (6" Deco)	SF	245	\$12.89	\$3,158	245	\$3,158
24	Concrete (4")	SF	343	\$5.16	\$1,770	343	\$1,770
25	8'-10' Sidewalk with integral retaining curb	SF	14,000	\$14.42	\$201,880	14,000	\$201,880
25	Driveway (Residential)	SF	1,963	\$6.88	\$13,505	1,963	\$13,505
26	Driveway (Residential Depressed)	SF	192	\$6.88	\$1,321	192	\$1,321
27	Concrete Curb Ramp	SF	2,928	\$8.60	\$25,181	2,928	\$25,181
28	Cross Gutter	SF	794	\$8.60	\$6,828		
29	Bus Turnout	SF	2,450	\$8.60	\$21,070	2,450	\$21,070
30	Concrete Curb (A1-6, Modified)	LF	198	\$25.79	\$5,106	198	\$5,106
31	Concrete Curb (B1-6, Modified)	LF	80	\$25.79	\$2,063		
32	Concrete Curb (18")	LF	131	\$25.79	\$3,378	131	\$3,378
33	Concrete Curb (6")	LF	16	\$25.79	\$413	16	\$413
34	Detectable Warning Surface	EA	2	\$429.77	\$860	2	\$860
35	Remove Concrete	SF	14,562	\$2.36	\$34,366	14,562	\$34,366
<b>Subtotal:</b>					\$733,239		\$724,347
<b>RETAINING WALLS</b>							
36	Concrete Retaining Wall (Highland Dr) (Not a Part of ATP Project)	EA	0	\$123,102.26	\$0		\$0
37	Concrete Retaining Wall (O'Conner Ave)	EA	1	\$105,860.04	\$105,860		\$105,860
<b>Subtotal:</b>					\$105,860		\$105,860
<b>DRAINAGE ITEMS</b>							
38	Drain (Under Sidewalk)	EA	2	\$1,719.07	\$3,438	2	\$3,438
39	Remove Area Drain	EA	1	\$859.53	\$860	1	\$860
40	Remove Manhole	EA	1	\$2,062.88	\$2,063	1	\$2,063
41	Remove Storm Drain Pipe	LF	44	\$21.49	\$946	44	\$946
42	Remove Catch Basin	EA	1	\$945.49	\$945	1	\$945
42b	Abandon Storm Drain	EA	1	\$3,008.36	\$3,008	1	\$3,008
43	Headwall (30" Inlet)	EA	1	\$4,727.43	\$4,727	1	\$4,727
44	Headwall (24" Outlet)	EA	0	\$3,438.13	\$0		\$0
45	Flared End Section (18" RCP)	EA	1	\$1,289.30	\$1,289	1	\$1,289
46	Catch Basin No. 3	EA	5	\$2,406.69	\$12,033	5	\$12,033
47	Catch Basin No. 3 (Modified)	EA	1	\$2,406.69	\$2,407	1	\$2,407
47b	Catch Basin No. 4	EA	1	\$2,406.69	\$2,407	1	\$2,407

48	Manhole (Storm Drain, Type 1-4')	EA	1	\$3,610.04	\$3,610	1	\$3,610
49	Manhole (Storm Drain, Type 1-6')	EA	1	\$4,125.76	\$4,126	1	\$4,126
50	Storm Drain Pipe (24" RCP)	LF	10	\$137.53	\$1,375	10	\$1,375
51	Storm Drain Pipe (30" RCP)	LF	6	\$236.37	\$1,418	6	\$1,418
52	Storm Drain Pipe (18" RCP)	LF	10	\$107.44	\$1,074	10	\$1,074
53	Storm Drain Pipe (18" HDPE)	LF	124	\$128.93	\$15,987	124	\$15,987
54	Storm Drain Pipe (24" HDPE)	LF	170	\$81.66	\$13,882	170	\$13,882
55	Storm Drain Pipe (30" HDPE)	LF	230	\$111.74	\$25,700	230	\$25,700
55b	Storm Drain Pipe (42" HDPE)	LF	74	\$150.00	\$11,100	74	\$11,100
56	Storm Drain Pipe (15" HDPE)	LF	401	\$55.87	\$22,404	401	\$22,404
57	Storm Drain Fitting (15" HDPE 22.5' Bend)	EA	1	\$257.86	\$258	1	\$258
58	Storm Drain Fitting (15" HDPE 11.25' Bend)	EA	4	\$214.88	\$860	4	\$860
59	Rock Slope Protection (Facing)	Ton	16	\$128.93	\$2,063		
60	Rock Slope Protection Fabric (Class 8)	SY	20	\$14.61	\$292		
61	Replace Manhole Cover (SD)	EA	25	\$644.65	\$16,116		
				<b>Subtotal:</b>	<b>\$154,390</b>		<b>\$135,918</b>
<b>WATER ITEMS</b>							
62	Water Main (6" PVC Class 150)	LF	54	\$94.55	\$5,106		
63	Water Main (6" DIP)	LF	22	\$236.37	\$5,200		
64	Water Main (8" PVC Class 150)	LF	505	\$60.17	\$30,386		
65	Water Main (8" DIP)	LF	82	\$85.95	\$7,048		
66	Water Main (12" DIP)	LF	2,428	\$94.55	\$229,567		
67	Water Main (16" DIP)	LF	710	\$125.00	\$88,750		
68	Water Main (18" DIP)	LF	0	\$171.91	\$0		
69	Valve (12" Butterfly)	EA	12	\$2,234.78	\$26,817		
70	Valve (16" Butterfly)	EA	4	\$3,094.32	\$12,377		
71	Valve (18" Butterfly)	EA	0	\$3,438.13	\$0		
72	Valve (6" Resilient Wedge Gate)	EA	2	\$1,289.30	\$2,579		
73	Valve (8" Resilient Wedge Gate)	EA	13	\$1,547.16	\$20,113		
74	Valve (Blow Off)	EA	2	\$2,148.83	\$4,298		
75	Valve (Air Relief)	EA	2	\$2,062.88	\$4,126		
76	Abandon Valve	EA	25	\$343.81	\$8,595		
76b	Adjust Valve	EA	69	\$322.32	\$22,240		
77	Reconnect Water Service (1")	EA	8	\$1,289.30	\$10,314	8	\$10,314
77b	Reconnect Water Service (2")	EA	2	\$1,500.00	\$3,000	2	\$3,000
78	Water Meter	EA	2	\$1,547.16	\$3,094		
79	Water Service (1")	EA	3	\$2,148.83	\$6,446		
80	Relocate Water Meter (1")	EA	7	\$1,805.02	\$12,635	7	\$12,635
80b	Reset Water Meter Box	EA	2	\$343.81	\$688	2	\$688
81	Fire Hydrant Assembly	EA	6	\$4,469.57	\$26,817	6	\$26,817
82	Replace Fire Hydrant	EA	1	\$2,148.83	\$2,149		
83	Salvage Fire Hydrant	EA	9	\$773.58	\$6,962		
				<b>Subtotal:</b>	<b>\$539,309</b>		<b>\$53,455</b>
<b>SEWER ITEMS</b>							
84	Sanitary Sewer (8") (Not a Part of ATP Project)	LF	0	\$85.95	\$0		
85	Manhole (Sewer, Type 1-4') (Not a Part of ATP Project)	EA	0	\$3,438.13	\$0		
86	Adjust Manhole	EA	7	\$687.63	\$4,813		
87	Rodhole (Sanitary Sewer) (Not a Part of ATP Project)	EA	0	\$859.53	\$0		
88	Reconnect Sanitary Sewer Lateral (Not a Part of ATP Project)	EA	0	\$1,461.21	\$0		
89	Abandon Sanitary Sewer (Not a Part of ATP Project)	EA	0	\$2,148.83	\$0		
90	Replace Manhole Cover (SS) (Not a Part of ATP Project)	EA	0	\$1,289.30	\$0		
91	Bypass Pumping (Not a Part of ATP Project)	LS	0	\$21,488.32	\$0		
91b	Replace Manhole (Not a Part of ATP Project)	EA	0	\$3,867.90	\$0		
91c	Remove Manhole (Not a Part of ATP Project)	EA	0	\$2,148.83	\$0		
91d	Abandon Manhole (Not a Part of ATP Project)	EA	0	\$1,031.44	\$0		
				<b>Subtotal:</b>	<b>\$4,813</b>		<b>\$0</b>
<b>SIGN, STRIPE AND MARKING ITEMS</b>							
92	Pavement Marking (Thermoplastic)	SF	4,687	\$6.88	\$32,247	1,092	\$7,513
93	Remove Pavement Marking	SF	3,582	\$2.58	\$9,242	1,075	\$2,772
93b	Remove Traffic Stripe (White)	LF	19,980	\$2.15	\$42,957	19,980	\$42,957
93c	Remove Traffic Stripe (Yellow)	LF	32,070	\$2.58	\$82,741		
94	Traffic Stripe (4" Thermoplastic)	LF	35,900	\$0.43	\$15,437		
95	Traffic Stripe (6" Thermoplastic)	LF	12,500	\$0.64	\$8,000	12,500	\$8,000
96	Traffic Stripe (8" Thermoplastic)	LF	13,700	\$0.77	\$10,549	9,860	\$7,592
97	Pavement Markers	EA	1,544	\$6.02	\$9,295		
98	Install Sign	EA	20	\$214.88	\$4,298	4	\$860
99	Remove Sign	EA	35	\$85.95	\$3,008		
100	Relocate Sign	EA	23	\$214.88	\$4,942		
101	Curb Marking (Red)	LF	100	\$3.01	\$301		
102	Beacon (Rectangular Rapid Flashing)	EA	3	\$12,033.46	\$36,100	3	\$36,100
103	Object Marker (Type K-1)	EA	2	\$51.57	\$103		
				<b>Subtotal:</b>	<b>\$259,219</b>		<b>\$105,795</b>
<b>TRAFFIC SIGNAL</b>							
104	Signal Conduit (Wisconsin Ave)	LS	1	\$10,314.39	\$10,314		

105	Pull Box (#6) (Wisconsin Ave)	EA	8	\$859.53	\$6,876		
106	Modify Traffic Signal (Pleasant St)	LS	1	\$6,016.73	\$6,017		
107	Modify Traffic Signal (Airpark Dr) (Not a Part of ATP Project)	LS	0	\$3,438.13	\$0		
<b>Subtotal:</b>					<b>\$23,207</b>		<b>\$0</b>
<b>ELECTRIC</b>							
108	Electric Service Pedestal	EA	2	\$4,297.66	\$8,595	2	\$8,595.32
109	Conduit (2" PVC)	LF	2,843	\$10.31	\$29,314	2,843	\$29,314
110	Conduit (4" PVC)	LF	327	\$12.89	\$4,218		
111	Conduit (6" PVC)	LF	145	\$17.19	\$2,484		
112	Conductor (#6)	LF	3,455	\$1.72	\$5,943	3,455	\$5,943
113	Conductor (1/0 Triplex Secondary)	LF	863	\$4.30	\$3,710	863	\$3,710
114	Electric Splice Box (2E)	EA	3	\$386.79	\$1,160	3	\$1,160
115	Electric Splice Box (3E)	EA	5	\$558.70	\$2,794	5	2,794
116	Remove Street Light	EA	1	\$859.53	\$860		
117	Pedestrian Safety Lighting (25' with Luminaire)	EA	7	\$3,008.36	\$21,059	7	\$21,059
118	Pedestrian Safety Lighting (35' with Luminaire)	EA	10	\$3,008.36	\$30,084	10	\$30,084
<b>Subtotal:</b>					<b>\$110,220</b>		<b>\$102,658</b>
<b>LANDSCAPE</b>							
119	Tree (15 Gallon)	EA	13	\$107.44	\$1,397	13	\$1,397
120	Tree (24" Box)	EA	104	\$279.35	\$29,052	104	\$29,052
120b	Shrub (5 Gallon)	EA	6	\$50.00	\$300	6	\$300
121	Mulch	CY	264	\$64.46	\$17,017	264	\$17,017
122	Barrier (Root)	EA	413	\$12.89	\$5,317	413	\$5,317
<b>Subtotal:</b>					<b>\$53,084</b>		<b>\$53,084</b>
<b>IRRIGATION</b>							
123	Check Valve (In-Line)	EA	15	\$17.19	\$258	15	\$258
124	Master Control Valve	EA	3	\$150.42	\$451	3	\$451
125	Ball Valve	EA	3	\$12.89	\$39	3	\$39
126	Valve (Quick Coupling)	EA	3	\$51.57	\$155	3	\$155
127	Reduce Pressure Principle Device (1")	EA	2	\$1,289.30	\$2,579	2	\$2,579
128	Irrigation Controller Assembly	EA	2	\$3,867.90	\$7,736	2	\$7,736
129	Irrigation Control Valve	EA	6	\$85.95	\$516	6	\$516
130	Irrigation Bubbler	EA	246	\$25.79	\$6,344	246	\$6,344
131	PVC Pipe (0.75")	LF	1,250	\$6.02	\$7,525	1,250	\$7,525
132	PVC Pipe (1")	LF	1,981	\$7.74	\$15,335	1,981	\$15,335
133	PVC Pipe (1.5")	LF	2,875	\$8.60	\$24,725	2,875	\$24,725
134	PVC Pipe (2")	LF	825	\$9.45	\$7,796	825	\$7,796
135	PVC Sleeve (6" Sch. 40)	LF	625	\$25.79	\$16,119	625	\$16,119
<b>Subtotal:</b>					<b>\$89,577</b>		<b>\$89,577</b>
<b>MISCELLANEOUS</b>							
136	Monument (Centerline)	EA	2	\$429.77	\$860		
137	Fence (6' Vinyl Coated Chain Link)	LF	370	\$38.68	\$14,312	370	\$14,312
138	Railing (Cable)	LF	0	\$25.79	\$0		\$0
139	Adjust Monument	EA	20	\$300.84	\$6,017		
140	Reset Mailbox	EA	5	\$236.37	\$1,182		
141	Adjust Pull Box	EA	9	\$515.72	\$4,641		
142	Relocate Pull Box	EA	2	\$687.63	\$1,375		
<b>Subtotal:</b>					<b>\$28,387</b>		<b>\$14,312</b>
<b>SUBTOTAL (CONTRACT ITEMS)</b>					<b>\$3,548,132</b>		<b>\$2,151,099</b>
<b>CONSTRUCTION CONTINGENCIES 10%</b>					<b>\$354,813</b>		<b>\$215,110</b>
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$3,902,945</b>		<b>\$2,366,209</b>
<b>RIGHT OF WAY ACQUISITION</b>					<b>\$96,000</b>		<b>\$0</b>
<b>(Geotech., Engineering Design, Environmental,) PRELIMINARY ENGINEERING 18%</b>					<b>\$638,664</b>		<b>\$0</b>
<b>(Contract Admin., Inspecting, Testing, Staking) CONSTRUCTION ENGINEERING 10%</b>					<b>\$354,813</b>		<b>\$215,110</b>
Water Service Connection Fee		EA	2	\$5,600.00	\$11,200		\$11,200
<b>TOTAL</b>					<b>\$5,003,622</b>		<b>\$2,592,519</b>

<b>FUNDING SOURCE:</b>	TIF, ATP Grant, Streets, Water Utility, Sewer Utility, Storm Drain Utility, REU.	<b>ATP</b>
<b>For Budget Purposes, Say:</b>	<b>\$5,005,000</b>	

**PREPARED BY: J. Abshier**

## City of Redding approved Policies and Plans

Hyperlinks provided where accessible.

Excerpts of documents are attached and highlighted as appropriate.

- City of Redding Bikeway Action Plan, 2010  
<http://healthyshasta.org/downloads/biking/ReddingBikePlan2010.pdf>
- Regional Transportation Plan, 2010  
<http://www.srta.ca.gov/pastel/Adobe%20Files/Regional%20and%20Local%20Planning/2010%20RTP/Full%20Final%20Draft%202010%20RTP-reduced.pdf>  
Short URL:  
<http://goo.gl/P7qngp>
- Redding Parks, Trails, and Open Space Master Plan, 2004  
<http://www.ci.redding.ca.us/CommunityServices/masterplan.html>
- City of Redding General Plan- Transportation Element  
[http://www.ci.redding.ca.us/devserv/planning/documents/TRANSPTN\\_001.pdf](http://www.ci.redding.ca.us/devserv/planning/documents/TRANSPTN_001.pdf)
- Staff Report to City Council  
Subject: City of Redding Traffic Impact Fee (TIF) Program Project Priority List Update  
Meeting Date: December 16, 2008  
[http://reddingcityca.iqm2.com/Citizens/Detail\\_Communication.aspx?Frame=&MeetingID=1170&MediaPosition=&ID=2952&CssClass=](http://reddingcityca.iqm2.com/Citizens/Detail_Communication.aspx?Frame=&MeetingID=1170&MediaPosition=&ID=2952&CssClass=)  
Short URL: <http://goo.gl/XmcZSY>  
  
Meeting Minutes:  
<http://www.ci.redding.ca.us/cclerk/Minutes-2008/Council/12-16-2008.pdf>
- Placer Street Improvement Notice of Determination (2012) & Addendum (2013)  
**attached**
- Complete Streets Policy adopted 2012  
<http://www.ci.redding.ca.us/council/CouncilPolicies/1303.pdf>

## APPENDIX B- Recommended System Changes and Capital Improvement Plan

### Recommended System Changes

The Bikeway Plan Committee systematically reviewed the current bikeway network to consider various circulation and connectivity improvements, identify safety issues, and grade the overall functionality of the system. The result was a number of recommended additions, deletions or corrections.

The accompanying table in this appendix and the maps included in Appendix F detail the proposed changes to the bikeway system. 2.9 miles of bikeways have been deleted from the system, primarily in the downtown core where bike traffic has been re-routed to less congested streets. Conversely 41.60 miles in bikeways have been added to the system, in the downtown core as mentioned and at other strategic locations throughout the City to improve connectivity. The result is a net gain of 38.70 on-street miles for a system total of 140.30 on-street miles.

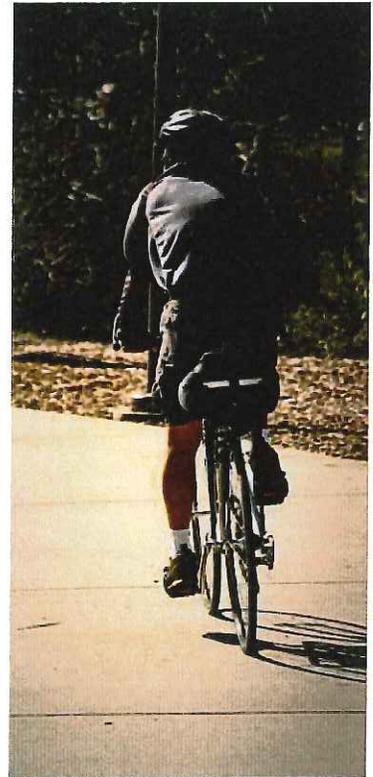
Based on the recommendations of the Bikeway Plan Committee, the *Action Plan* anticipates by 2015 the complete bikeway system network totaling 162.81 miles of dedicated paved multi-use paths and on-street signed routes to serve current and future needs, with a significant portion of the on-street system upgraded to a Class 2 Bike Lane level of service.

The Bikeway Plan Committee also identified emerging issues that while not contained in the current *Action Plan* recommendations should be considered in future bikeway system discussions:

- Establishing a connection between Browning Street and the Dana-to-Downtown Trail either via the Caltrans right-of-way next to Interstate 5, or alternatively using the service lane located behind the retail centers on Hilltop Drive.
- Ensuring that bike-friendly elements are incorporated into the traffic circulation designed for the forthcoming Shasta County Courthouse construction.

### Capital Improvement Plan

The accompanying table in Appendix B also serves as the Capital Improvement Plan for the *Action Plan* with priorities based on street projects identified in the *City of Redding's 2009-10 to 2014-15 Capital Improvement Plan*.



Adding signage to designate all 140.30 miles of the on-street bikeway system network is a major priority, and the timeline detailed in Appendix A proposes an orderly completion of this task within the *Action Plan* timeframe.

It is anticipated that the improvement of individual Class 3 Bike Routes to a Class 2 Bike Lane level of service will be completed on an as-opportunity-permits basis by incorporating these projects into overall roadway design and construction projects. Some segments were graded as "Almost Class 2" by the Bikeway Plan Committee, and can qualify as full Class 2 Bike Lanes after the completion of minor improvements such as lane striping and leveling out manhole covers. Others will require significantly more work to be improved.

In planning these improvements, priority should be given to segments that provide connectivity to existing Class 1 and 2 bikeways, and improve vital north-south / east-west connections. Because the needs of each individual segment are different, specific project costs will be determined on a case-by-case basis as these projects are designed and developed.

System improvements currently under active consideration, pending Bicycle Transportation Account grant funding, include the installation of Class 2 Bike Lanes on Quartz Hill Road between Snow Lane and Terra Nova Drive (estimated cost \$223,000) and the installation of Class 2 Bike Lanes on Old Alturas Road between Edgewood Drive and Shasta View Drive (estimated cost \$554,000). These two potential upgrades will significantly improve the bikeway system, particularly the Old Alturas Road segment which was designated the "worst section of road in the City" in the recent assessment undertaken by the Bikeway Plan Committee.

**CLASS I - BIKEWAYS**

STATUS	ROAD SEGMENT	FROM	TO	MILES
Existing	CalTrans Bikeway	Boulder Creek	Interstate 5	0.24
Existing	CalTrans Bikeway	Interstate 5	College View Dr	0.61
In Process	CalTrans Bikeway	Dana Drive	Sundial Bridge Drive	1.10
EXISTING CLASS I BIKEWAYS:				1.95

**CLASS II - BIKE LANES**

STATUS	ROAD SEGMENT	FROM	TO	MILES
Existing	Buenaventura Blvd	Keswick Dam Rd	Stanford Hills Trailhead	1.00
Existing	Cedars Rd	Westside Rd	State Route 273	0.03
Existing	Eastside Rd	Polk St	Radio Ln	1.13
Existing	Knighton Rd	Churn Creek Rd	Airport Rd	1.75
Existing	Park Marina Dr	Butte	Parkview Av	1.36
Existing	Polk St	Ellis	Eastside	0.37

Existing	South Bonnyview Rd	State Route 273	Churn Creek Rd	3.06
Existing / Proposed	N. Market St	Lake Blvd	Quartz Hill Rd	1.26
Existing / Proposed	Tarmac Rd	Shasta View Dr	Abernathy Ln	0.97
Existing / Upgrade	Buenaventura Blvd	Buenaventura Trailhead	Railroad Av	3.00
Existing / Upgrade	Hilltop Dr	State Route 299	E. Cypress Av	3.34
Existing / Upgrade	Lake Blvd	Pinegrove	N. Market St	5.02
Existing / Upgrade	Old Alturas Rd	Churn Creek Rd	Old Oregon Trail	2.46
Existing / Upgrade	Shasta View Dr	College View Dr	Rancho Rd	5.97
Existing / Upgrade	Victor Av	Old Alturas Rd	Rancho Rd	3.68
Existing / Upgrade / Proposed	Bechelli Ln	Bechelli River Access	South Bonnyview Rd	3.22
Existing / Upgrade / Proposed	Browning St	Hilltop Dr	Old Alturas Rd	1.11
Existing / Upgrade / Proposed	Churn Creek Rd	State Route 299	Knighton Rd	8.53
Existing / Upgrade / Proposed	Hartnell Av	Cypress Av	Airport Rd	4.14
Upgrade	Benton Dr	Quartz Hill Rd	Sacramento River	0.47
Upgrade	Butte St	Continental St	Park Marina Dr	0.39
Upgrade	Center St	Riverside Dr	Trinity St	0.16
Upgrade	College View Dr	Bodenhamer Blvd (Future)	Old Alturas Rd	2.01
Upgrade	Continental St	Trinity St	Butte	0.31
Upgrade	Court St	Sacramento River	Schley Av / Railroad Av	1.19
Upgrade	Cypress Av	Civic Center Dr	Ishi Dr	2.90
Upgrade	East St	Trinity St	South St	1.14
Upgrade	Keswick Dam Rd	Buenaventura Blvd	Lake Blvd	1.70
Upgrade	Oasis Rd	Lake Blvd	Old Oregon Trail	4.15
Upgrade	Old Oregon Trail	Oasis Rd	State Route 44	7.09
Upgrade	Parkview Av	Market Street	Park Marina Dr	0.96
Upgrade	Quartz Hill Rd	Keswick Dam Rd	N. Market St	3.01
Upgrade	Railroad Av	Schley Av	Buenaventura Blvd	1.35
Upgrade	Riverside Dr	Court St	Center St	0.20
Upgrade	Schley Av	Court St	Railroad Av	0.07
Upgrade	State Route 273	South Bonnyview Rd	City Limits	3.88
Upgrade	Trinity St	Center St	Continental St	0.43
Upgrade	Westside Rd	Buenaventura Blvd	Cedars Rd	1.87
Upgrade / Proposed	Boulder Dr	State Route 299 Bikeway	State Route 299 Bikeway	0.18

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Bikeway Action Plan | 2010-2015

Upgrade / Proposed	Hawley St	State Route 299	Proposed Future Trailhead	0.58
Upgrade / Proposed	Placer St	City Limits	Airpark Dr	3.26
Upgrade / Proposed	Rancho Rd	Churn Creek Rd	Venture	2.36
Proposed	Airport Rd	Hartnell Av	Sacramento River	6.15
Proposed	Bechelli River Access	Dana-to-Downtown Bikeway	Bechelli Ln	0.24
Proposed	Future Rd	Future Trailhead	Tanglewood	0.66
Proposed	Loma Vista	Bechelli Ln	Churn Creek Rd	0.50
Proposed	Palisades Av	Hilltop Dr	Dana-to-Downtown Bikeway	0.42
Proposed	Preserve Blvd	Thomason	Airport Rd	0.38
Proposed	Radio Ln / East Bonnyview Rd	Eastside Rd	South Bonnyview Rd	0.46
Proposed	South St	Court St	Park Marina Dr	1.35
Proposed	Venture St	Rancho Rd	Unforgettable Ln	2.34
Proposed	View St	Browning St	Dana-to-Downtown Bikeway	0.25
<b>TOTAL CLASS II BIKEWAYS:</b>				<b>103.80</b>

## CLASS III - BIKE ROUTES

STATUS	ROAD SEGMENT	FROM	TO	MILES
Existing	Anita St	Ellis	Rio St	0.16
Existing	Benton Dr	Quartz Hill Rd	N. Market St	1.00
Existing	Branstetter Ln	West City Limits	Westside Rd	2.06
Existing	Cedars Rd	El Reno Ln	Westside Rd	1.50
Existing	Clear Creek Rd	West City Limits	State Route 273	4.01
Existing	Collyer Dr	Mountain View Dr	Old Oregon Trail	2.42
Existing	East St	South St	Locust St	0.21
Existing	Eastside Rd	Radio Ln	Girvan Rd	2.35
Existing	El Reno Ln	Cedars Rd	Westside Rd	0.15
Existing	Ellis St	Polk St	Anita St	0.12
Existing	Freebridge Av	Parkview Av	Rio St	0.39
Existing	Girvan Rd	Eastside Rd	State Route 273	0.04
Existing	Honeybee Rd	Texas Springs Rd	Clear Creek Rd	0.67
Existing	Mountain View Dr	Twin View Blvd	Collyer	0.57
Existing	Rio St	Freebridge Av	Anita St	0.04
Existing	Texas Springs Rd	Honeybee Rd	Branstetter Ln	2.42
Existing	Twin View Blvd	Oasis Rd	Mountain View Dr	1.29
Proposed	8 th St	Mary St	West St	0.08

Proposed	11 th St	West St	Court St	0.08
Proposed	Airpark Dr	Placer St	Gold St	0.16
Proposed	California St	Trinity St	Tehama St	0.24
Proposed	Center St	Trinity St	Division	0.10
Proposed	Churn Creek Rd	Knighton Rd	Airport Rd	3.43
Proposed	Civic Center Dr	Locust St	Cypress Av	0.14
Proposed	Continental St	Butte St	South St	0.32
Proposed	Dersch Rd	Airport Rd	Stillwater Creek Trail	0.81
Proposed	Division	Center St	California St	0.08
Proposed	Foothill Blvd	Lakeside Dr	Knolls Trailhead / Las Animas	0.59
Proposed	Gold St	Airpark Dr	West St	0.52
Proposed	Hemstead	Cypress Av	Bechelli Ln	0.47
Proposed	Hilltop Dr	E. Cypress Av	Maraglia St	0.27
Proposed	Keswick Dam Rd	Sacramento River Trailhead	Buenaventura Blvd	1.48
Proposed	Lakeside Dr	Buenaventura Blvd	Foothill Blvd	0.14
Proposed	Las Animas	Foothill Blvd	Monte Bello	0.05
Proposed	Locust St	East St	Civic Center Dr	0.32
Proposed	Manzanita Hills Av	Knolls Trailhead / Monte Bello	Shasta St	0.11
Proposed	Market St	Placer St	South St	0.11
Proposed	Mary St	Overhill Trailhead	8 th St	0.20
Proposed	Meadow View Dr	Churn Creek Rd	Airport Rd	0.93
Proposed	Monte Bello	Las Animas	Manzanita Hills Av	0.05
Proposed	Overhill	Eureka Way	Overhill Trailhead	0.53
Proposed	Pleasant St	Placer St	Stratford	0.20
Proposed	Quartz Hill Rd	Keswick Dam Rd	Lake Blvd	2.91
Proposed	Railroad Av	South St	Schley Ave / Court St	0.44
Proposed	Shasta St	Stratford	Court St	0.98
Proposed	South St	West St	Court St	0.08
Proposed	Tehama St	West St	Callifornia St	0.28
Proposed	Traveled Way	N. Market St	Sacramento River Trailhead	0.24
Proposed	West St	8 th St	11 th St	0.30
Proposed	West St	Shasta St	Gold St	0.46
Proposed	Willis	Shasta St	Shasta St	0.01
TOTAL CLASS III BIKEWAYS:				36.50
TOTAL ALL TYPES OF BIKEWAYS:				142.25

## MULTI-USE TRAILS

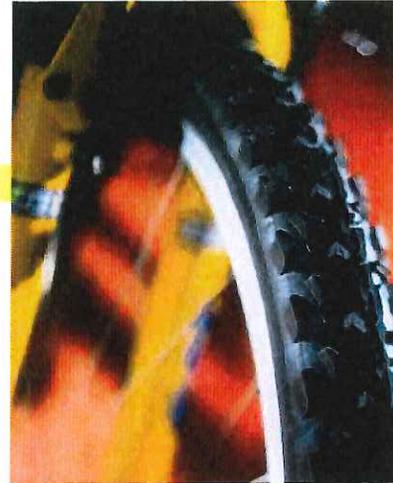
STATUS	TRAIL NAME	FROM	TO	MILES
Existing - Paved	Blue Gravel Mine Trail	Placer St	Canyon Creek Rd	2.04
Existing - Paved	Buckeye Park Trail	Internal Loop	Internal Loop	0.29
Existing - Paved	Buenaventura Trail	Lakeside Dr	Sunflower Dr	0.45
Existing - Paved	Canyon Creek Trail	Blazingwood Dr	Buenaventura Blvd	0.51
Existing - Paved	Cascade Park Trail	Internal Loop	Internal Loop	0.50
Existing - Paved	Civic Center Perimeter Trail	Internal Loop	Internal Loop	0.89
Existing - Paved	Clover Creek Preserve	Internal Loop	Internal Loop	2.00
Existing - Paved	Enterprise Park Trail	Internal Loop	Internal Loop	1.53
Existing - Paved	Knolls Trail	Foothill Blvd	Eureka Way	0.19
Existing - Paved	Lema Ranch Trails (Private, Open to public)	Internal Loop	Internal Loop	3.58
Existing - Paved	Mary Lake - Westside Trail Connector	Mary Lake Park	Westside Trail	0.30
Existing - Paved	Mary Lake Trail Loop	Internal Loop	Internal Loop	0.75
Existing - Paved	Mary Street / Overhill Extension	Sacramento River Trail	Overhill St	0.31
Existing - Paved	Park Marina River Front	Cypress Av	Park Marina Blvd	0.11
Existing - Paved	Parkview Riverfront Park Trail	Civic Center	Cypress Av	0.55
Existing - Paved	Peppertree Park Trail	Internal Loop	Internal Loop	0.37
Existing - Paved	Sacramento River to Rail Trail	Motion Creek	Keswick Dam Rd	12.00
Existing - Paved	Sacramento River Trail - North	Keswick Dam Rd	Hilltop Drive	6.72
Existing - Paved	Sacramento River Trail - South	Court St	Keswick Dam Rd	3.40
Existing - Paved	Sacramento River Trail - Turtle Bay West	Convention Center	State Route 44	1.00
Existing - Paved	Stanford Hills Trail	Sutro Mine Rd	Sacramento River Trail - North	0.86
Existing - Paved	Sundial Bridge	Riverfront Park	State Route 44 / Auditorium Dr	1.32
Existing - Dirt	Buenaventura Trail	Sunflower Dr	Sacramento River Trail - South	0.70
Existing - Dirt	Candlewood Trail	State Route 44	Candlewood Dr	0.55
Existing - Dirt	Churn Creek Open Space Trails (Private, Open to public)	Tidmore Ln	Minder Park	4.00
Existing - Dirt	Clover Creek Preserve	Internal Loop	Internal Loop	2.50
Existing - Dirt	Fishermens Trail	Keswick Dam Rd	Sacramento River to Rail Trail	0.40
Existing - Dirt	Hornbeck Trail	Quartz Hill Rd	Walker Mine Rd	4.00
Existing - Dirt	Lower Sacramento Ditch Trail	Internal Loop	Internal Loop	3.30
Existing - Dirt	Old 99 Spur Trail	Lake Blvd	North Market St	0.96
Existing - Dirt	Palatine Trail	Scenic Dr	Sacramento River Trail - South	0.50

Existing - Dirt	Swasey Trails	Swasey Rd	Mule Town Rd	10.80
Existing - Dirt	Upper Sacramento Ditch Trail	Walker Mine Rd	Shasta Dam	10.00
Existing - Dirt	Westside Trails	Placer Rd	Mary Lake Park	6.08
Proposed - Paved	ACID Trail	Butte St	Cypress Av	0.89
Proposed - Paved	Boulder Creek Trail	State Route 299 Bikeway	Churn Creek	1.69
Proposed - Paved	Canyon Creek Trail Extension	Placer St	Blazingwood Dr	2.13
Proposed - Paved	Churn Creek Trail	Minder Park	Churn Creek Rd	4.03
Proposed - Paved	Clear Creek Trail	State Route 273	Cascade Park	1.66
Proposed - Paved	Clover Creek Trail	Sports Park	Sacramento River	8.30
Proposed - Paved	Jenny Creek Trail	Eureka Way	Mary Lake	0.62
Proposed - Paved	Lema - Nash Trail	Shasta View Dr	Old Oregon Trail	0.98
Proposed - Paved	Linden Creek Trail	Placer St	Sheridan St	1.64
Proposed - Paved	Little Churn Creek Trail	Hartnell Av	Churn Creek	1.07
Proposed - Paved	Manzanita Trail	Manzanita Hills Av	Almond Av	0.27
Proposed - Paved	Middle Creek Trail	Old Shasta / State Route 299	Sacramento River Trail	1.86
Proposed - Paved	Palisades Trail	Hilltop Dr	North Bechelli Ln	1.43
Proposed - Paved	Riverside Trail	Sacramento River Trail	Center St	0.38
Proposed - Paved	Sacramento River Trail - Expansion	Cypress Av	Anderson River Park	11.50
Proposed - Paved	Sacramento River Trail - Hatchcover Spur	Hemstead Dr	Cypress Av	0.29
Proposed - Paved	Sacramento River Trail - Park Marina	State Route 299	Cypress Av	2.12
Proposed - Paved	Stillwater Creek Trail	Old Oregon Trail	Sacramento River	15.45
Proposed - Paved	Stillwater Plant Trail	State Route 44	Dersch Rd	1.85
Proposed - Paved	Sulpher Creek Trail - South	North Market St	Aboretum Perimeter	0.38
Proposed - Paved	Upper Churn Creek Trail	Pine Grove Av	Oasis Rd	1.75
Proposed - Paved	Wentz Creek Trail	Mistletoe School	Cypress Av	0.55
Proposed - Dirt	Avalon Trail	Shasta View Dr	Old Oregon Trail	1.00
Proposed - Dirt	China Dam Trail	Placer Rd	Texas Springs Rd	2.43
Proposed - Dirt	Greenwood Trail	Walnut Av	Sonoma St	0.83
Proposed - Dirt	Mercedes Trail	Arboretum Perimeter Trail	Mercedes Ln	0.21
Proposed - Dirt	Olney Creek Trail	Texas Springs Rd	Cascade Park	3.67
Proposed - Dirt	Ridgeview Trail	Ridgeview Park	Blue Gravel Mine Trail	0.65
Proposed - Dirt	Salt Creek Trail	Lower Springs Rd	Sacramento River Trail	2.00
Proposed - Dirt	Sulpher Creek Trail - North	Quartz Hill Rd	North Market St	3.30
TOTAL MULTI-USE TRAILS - EXISTING AND PROPOSED:				158.39

## Background

### Overview

The primary goal of the non-motorized transportation program is to create a transportation environment that encourages non-motorized alternatives. Actions and policies listed below promote bicycling and walking as a means to decrease automobile-dependency; reduce traffic congestion, air pollution, and noise pollution; and support sidewalks, and bike and pedestrian trails. Planning for facilities to promote walking and biking as transportation modes provides for safe non-motorized travel.



### Pedestrian

Most residents of Shasta County choose the automobile for transportation to work: 92% of workers, or 59,096 people, according to the 2000 Census.<sup>1</sup> Walking is the next most popular mode, with 2.2% of workers, or 1,443 people, walking. Although often overlooked as a significant mode of transportation, walking is more common than both transit and bicycling. Attempts to promote walking are primarily addressed through land use measures. The policy section of the land use chapter (see Chapter 10) encourages local agencies to provide for mixed-use development that lends itself to walking or bicycling.

Recreational hiking and bike riding are widespread in the many parks and forests in Shasta County. Lassen Volcanic National Park, in the southeast corner of the county, has perhaps the best-developed series of hiking trails. Additionally, hundreds of miles of abandoned logging roads provide recreational opportunities for mountain biking.

The Pacific Crest National Scenic Trail extends 2,600 miles from Canada to Mexico. Seventy-eight miles of this hiking and equestrian trail lie in Shasta County, extending up the east side and across the north side of the county. The U.S. Forest Service has another 275 miles of trails in Shasta County.

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<sup>1</sup>The 2000 Census only addresses transportation modes to work; therefore, modes of travel to schools and stores are not addressed in this document.

The City of Redding has built a series of interconnected river and park trails along the Sacramento River. Approximately eight miles of paved pedestrian/bicycle trails have been completed along the Sacramento River between Hilltop Drive and Keswick Dam Road. A footbridge was completed in 1990 at the northerly end of the trail to provide a looped system. New feeder trails have been funded and are under design. These trails will provide bicycle and pedestrian access from adjacent residential areas to the main river trail. Various extensions of the main trail are planned as funding becomes available. The Sundial Bridge, which connects the Museums of Turtle Bay with the Redding Arboretum across the Sacramento River, opened in July 2004.

A former railroad grade has been improved and provides a 12 mile paved and unpaved trail from near Keswick Dam Road to Shasta Dam. This trail connects with the City of Redding's network of trails. These trails are coordinated with designated bikeways on roads to provide loop possibilities to the trail users. It is also anticipated that, as this network of trails matures and becomes more widespread, bicycling will become a more viable commuting option.

**TABLE 9-1**  
**Summary of Trails and Bikeways in the Redding Area**

	<i>TRAILS Paved and Dirt</i>	<i>BIKEWAYS Class I, II, III</i>	<i>TOTAL System Miles</i>
Existing Miles	80.25	75.46	155.71
Proposed Miles	78.45	54.56	133.01
Total Existing and Proposed Miles	158.7	130.02	288.72

In the Burney area, there is a proposed project to create a multipurpose trail on the alignment of the former McCloud Railway Company railroad tracks. The rail line has been abandoned east of McCloud, which included a line to Burney in Shasta County. The tracks have been removed. The right-of-way is still owned by the Forbis family.

The Shasta County Department of Public Health encourages pedestrian facilities and walking as part of a healthy lifestyle. Walking can help reduce obesity, diabetes, hearth disease, and respiratory diseases. Public Health also encourages safe design of pedestrian facilities to prevent injuries.

**TABLE 9-2**  
Existing Trails in the City of Redding (2008)

**MULTIPLE-USE TRAILS**

	Trail Name	From	To	Length	Acres *
1	Blue Gravel Mine Trail *	Placer St	Canyon Creek Rd	2.04	12.34
2	Buckeye Park Trail*	Internal Loop	Internal Loop	0.29	1.76
3	Buenaventura Trail	Lakeside Drive	Sunflower Drive	0.45	
4	Canyon Creek Trail*	Blazingwood Dr	Buenaventura Blvd	0.51	3.09
5	Cascade Park Trail	Internal Loop	Internal Loop	0.50	
6	Civic Center Perimeter Trail	Internal Loop	Internal Loop	0.89	
7	Clover Creek Preserve	Internal Loop	Internal Loop	2.00	
8	Enterprise Park Trail	Internal Loop	Internal Loop	1.53	
9	Knolls Trail *	Foothill Blvd	Eureka Way	0.19	0.14
10	Lema Ranch Trails (private, open to the public)	Internal Loop	Internal Loop	3.58	
11	Mary Lake Trail Loop	Internal Loop	Internal Loop	0.75	
12	Mary Lake - Westside Trail Connector *	Mary Lake Park	Westside Trail	0.30	1.82
13	Mary Street / Overhill Extension *	Sacramento River Trail	Overhill St	0.31	1.90
14	Park Marina River Front	Cypress Bridge	2703 Park Marina	0.11	
15	Parkview Riverfront Park Trail	Civic Center	Cypress Bridge	0.55	
16	Peppertree Park Trail	Internal	Internal Loop	0.37	
17	Sacramento River Trail - North *	Keswick Dam Road	Hilltop Drive	6.72	40.73
18	Sacramento River Trail - South *	Court St	Keswick Dam Road	3.40	20.61
19	Sacramento River Rail Trail (BLM)	Motion Creek	Keswick Dam Rd	12.00	
20	Stanford Hills Trail *	Sutro Mine Rd	Sac. River Trail - North	0.86	5.19
21	Sundial Bridge *	Riverfront Park	Highway 44/Auditorium Dr	1.32	8.00
<b>MULTIPLE-USE TRAILS</b>				<b>38.67</b>	<b>87.58</b>

**DIRT TRAILS**

*1 mile from Placer/Buena Ventura intersection*

	Trail Name	From	To	Length	Acres *
1	Buenaventura Trail	Sunflower Drive	Sacramento River Trail	0.70	
2	Churn Creek Open Space Trails (private, open to public)	Tidmore Lane	Minder Park	4.00	
3	Clover Creek Preserve	Internal Loop	Internal Loop	2.50	
4	Fishermens Trail (BLM)	Keswick Dam	Sacramento River Rail Trail	0.40	
5	Hornbeck Trail (BLM)	Quartz Hill Road	Walker Mine Road	4.00	
6	Lower Sacramento Ditch Trail (BLM)			3.30	
7	Sunset Trail (Palatine) *	Scenic Dr	Sacramento River Trail	0.50	3.03
8	Swasey Trails (BLM)	Swasey Road	Mule Town Road	10.80	
9	Upper Sacramento Ditch Trail (BLM)	Walker Mine Road	Shasta Dam	10.00	
10	Westside Trails	Lower Springs/Placer Rd	Mary Lake Park	6.08	
<b>DIRT TRAILS</b>				<b>41.58</b>	<b>3.03</b>
<b>MULTIPLE-USE and DIRT TRAILS</b>				<b>80.25</b>	
<b>TRAIL ACREAGE *</b>					<b>90.61</b>

\* TRAIL ACREAGE. Trails included in the Level-of-Service acreage, using a 50'-wide corridor, are marked with asterisks. Included in this acreage calculation are all public trails found within the city limits and outside a developed park.

**TABLE 9-3  
Future Trails in the Redding Area**

<b>MULTIPLE-USE TRAILS</b>						
	<b>Trail Name</b>	<b>From</b>	<b>To</b>	<b>Miles</b>	<b>Acres</b>	<b>Year</b>
1	ACID Trail	Butte St	Cypress Av	0.89	5.38	2012
2	Boulder Creek Trail	SR 299E Bikeway	Churn Creek	1.69	10.24	2015
3	Candlewood Trail	Highway 44	Candlewood Dr	0.55	3.32	2009
4	Canyon Creek Trail Extension	Placer St	Blazingwood Dr	2.13	12.93	2010
5	Churn Creek Trail	Minder Park	Churn Creek Rd	4.03	24.42	2007-2020
6	Clear Creek Trail	SR 273S Bridge	Cascade Park	1.66	10.06	2012
7	Clover Creek Trail	Sports Park	Sacramento River	8.30	50.32	2007-2020
8	Dana To Downtown Bikeway	Sundial Bridge Drive Overpass	Mt. Shasta Mall	1.00	6.06	2011
9	Jenny Creek Trail	Eureka Way	Mary Lake	0.62	3.78	2011
10	Lema - Nash Trail	Shasta View Dr	Old Oregon Trail	0.98	5.94	2015
11	Linden Creek Trail	Placer St	MLK, Jr. Park	1.64	9.94	2012
12	Little Churn Creek Trail	Hartnell Av	Churn Creek	1.07	6.48	2012
13	Manzanita Trail	Manzanita Hills Av	Almond Av	0.27	1.63	2012
14	Middle Creek Trail	Old Shasta / SR 299W	Sacramento River Trail	1.86	11.28	2009-2012
15	Old 99 Spur Trail*	Lake Blvd	North Market St	0.96	4.61	2010
16	Palisades Trail	Hilltop Dr	North Bechelli Ln	1.43	8.67	2012
17	Riverside Trail	Sacramento River Trail	Center St	0.38	2.31	2015
18	Sac. River Trail - Future Expansion	Cypress Av	Anderson River Park	11.50	69.72	2018-2020
19	Sac. River Trail - Hatchcover Spur	Hemstead Dr	Cypress Av	0.29	1.74	2010
20	Sac. River Trail - Park Marina Trail	State Route 299W	Cypress Av	2.12	12.87	2015
21	Sac. River Trail - Turtle Bay West Extension	Convention Center	State Route 44	1.00	6.06	2007
22	Stillwater Creek Trail	Old Oregon Trail	Sacramento River	15.45	93.63	2020
23	Stillwater Plant Trail	State Route 44	Dersch Rd	1.85	11.21	2020
24	Sulphur Creek Trail -South	North Market St	Arboretum Perimeter Trail	0.38	2.30	2010
25	Upper Churn Creek Trail	Pine Grove Av	Oasis Rd	1.75	10.62	2020
26	Wentz Creek Trail	Mistletoe School	Cypress Av	0.55	3.34	2020
			<b>FUTURE MULTIPLE-USE TRAILS</b>	<b>64.36</b>	<b>390.08</b>	

**TABLE 9-3 (Cont'd)**

<b>DIRT TRAILS</b>						
	<b>Trail Name</b>	<b>From</b>	<b>To</b>	<b>Miles</b>	<b>Acres</b>	<b>Year</b>
1	China Dam Trail	Placer Rd	Texas Springs Rd	2.43	14.75	2012
2	Mercedes Trail	Arboretum Perimeter Trail	Mercedes Ln	0.21	1.26	2015
3	Olney Creek Trail	Texas Springs Rd	Cascade Park	3.67	22.22	2016
4	Ridgeview Trail	Ridgeview Park	Blue Gravel Mine Trail	0.65	3.91	2012
5	Salt Creek Trail	Lower Springs Rd	Sacramento River Trail	2.00	12.12	2010
6	Sulphur Creek Trail - North	Quartz Hill Rd	North Market St	3.30	20.02	2012
7	Greenwood Trail	Walnut Ave	Sonoma St	0.83	5.03	2010
8	Avalon Trail	Shasta View Dr	Old Oregon Trail	1.00	6.06	2015
<b>FUTURE DIRT TRAILS</b>				<b>14.09</b>	<b>85.37</b>	
<b>TOTAL FUTURE TRAILS</b>				<b>78.45</b>		
<b>TOTAL FUTURE ACRES</b>					<b>475.44</b>	

### Bicycling

In California, 0.83% of employees bicycled to work in 2000, according to the 2000 Census. This is an unusually high average because of good weather and the presence of bicycle-friendly cities, such as Davis, where 25% of commuters bicycle.

In Shasta County, only 0.38% of employees bicycle to work. This is the same percentage as the national average.

There are some significant impediments for bicycle commuters in Shasta County. The major barriers in the urbanized area are Interstate 5, the Union Pacific Railroad, and the Sacramento River. Of the seven existing Sacramento River crossings for autos in the urbanized areas of Redding and Anderson, three have design provisions to accommodate bicycle traffic: the Diestelhorst, South Bonnyview, and Airport Road/North Street bridges. Two others, Cypress Avenue and Highway 44, are currently being widened and will contain pedestrian and bicycle facilities. There are also two bicycle/pedestrian bridges connecting sections of the Sacramento River Trail that cross the river: the Ribbon and Sundial bridges.

Bikeways are only part of the story. The Redding Area Bus Authority has front-mounted bike racks on its fixed-route buses. Each bus can carry three bicycles. This will increase opportunities for both commuting and recreational bicyclists.

Biking to the store, school, or work provides the added benefit of improving the health of Shasta County citizens. By providing a system that supports bicycling as an alternative transportation option, citizens have a time-efficient, low cost way of attaining the U.S. Surgeon General's recommended daily allowance for

physical activity. Bicycle exercise can help reduce heart disease, diabetes, obesity, and other chronic illnesses.

**State Facilities Not Restricting Bicycle Traffic**

Existing bike routes in the county include portions of the state and federal highways listed in Table 9-4. In the vicinity of Redding, there are sections of SR 299, Interstate 5, and SR 44 that prohibit bicycle and/or pedestrian traffic. Per District 2’s Cycling Guide for State Highways of Northern California, “While enjoying the 1,200+ miles open to cyclists in District 2, you should be aware of certain hazards. On all highways other than I-5, a cyclist should expect to find paved shoulder widths anywhere from 0-8 feet, with 2 feet or less being the most common. On I-5 a cyclist will encounter a 10-foot treated shoulder with rumblestrips.” Pit River Bridge has less than 10-foot shoulders. State highways provide vital links from the rural areas of Shasta County to the cities of Redding, Anderson, and Shasta Lake.

**TABLE 9-4  
STATE AND FEDERAL HIGHWAYS OPEN TO BICYCLISTS**

HIGHWAYS	LOCATION	MILES OPEN TO BICYCLES
I-5	North of Cottonwood to Anderson	5 miles
I-5	SR 273 to Oasis Road	1 mile
I-5	City of Shasta Lake to Dunsmuir	40 miles
SR 36	Platina to Trinity County line	12 miles
SR 44	Redding to Lassen County line	75 miles
SR 89	Siskiyou to Viola	50 miles
SR 151	City of Shasta Lake	3 miles
SR 273	Redding to Anderson	15 miles
SR 299	Trinity County to Lassen County	100 miles

*For more information, see the Caltrans District 2 Cycling Guide at [www.dot.ca.gov/dist2](http://www.dot.ca.gov/dist2).*

### Bikeways Defined

Bikeways are divided into three basic categories, based on the degree to which they separate bicycles from other travel modes:

- **Class I bikeways** (bike "paths") - Characterized by completely separate rights-of-way separating cyclists from motorists.
- **Class II bikeways** (bike "lanes") - Delineated by signs and striping along street shoulders.
- **Class III bikeways** (bike "routes") - Indicated only by posted signs on existing streets.

### Bikeways Existing and Proposed

The following is an inventory of bikeways, both existing and proposed:

**TABLE 9-5  
Shasta County Bikeways**

Class II Bike Lanes					
	STATUS	ROAD SEGMENT	FROM	TO	MILES
1	Existing	Lake Boulevard	Redding city limit	Ashby Road	2.05
2	Existing	Deschutes Road	Hillside Drive	Berkeley Drive	0.60
3	Existing	Ashby Road	Lake Boulevard	Shasta Lake city limit	0.15
4	Proposed	Gas Point Road	I-5/Cottonwood	Happy Valley Road	6.44
5	Proposed	Happy Valley Road	Gas Point Road	Hawthorne Avenue	6.58
6	Proposed	Canyon Road	Hawthorne Avenue	Highway 273	2.18
7	Proposed	Balls Ferry Road	Anderson city limit	Deschutes Road	1.03
8	Proposed	Deschutes Road	Balls Ferry Road	Highway 299 East	13.80
9	Proposed	Placer Road	Redding city limit	Cloverdale Road	7.64
10	Proposed	Texas Springs Road	Placer Road	Branstetter Road	4.60
11	Proposed	Oasis Road	I-5/Redding	Old Oregon Trail	1.72
12	Proposed	Union School Road	I-5/Shasta Lake	Old Oregon Trail	1.73
13	Proposed	Old Oregon Trail	I-5/Mountain Gate	Highway 299 East	7.34
14	Proposed	Old Oregon Trail	Highway 299 East	Highway 44	4.37
15	Proposed	Airport Road	Highway 44	Anderson city limit	6.40
16	Proposed	Cloverdale Road	Placer Road	Oak Street	5.78
17	Proposed	Oak Street	Cloverdale Road	Palm Avenue	1.57
18	Proposed	Palm Avenue	Oak Street	Happy Valley Road	2.54
19	Proposed	Olinda Road	Happy Valley Road	Anderson city limit	5.20
20	Proposed	Old Alturas Road	Redding city limit	Old Oregon Trail	0.45
21	Proposed	Dersch Road	Airport Road	Deschutes Road	2.79
22	Proposed	Swasey Drive	Highway 299 West	Placer Road	4.06
23	Proposed	Abandoned McCloud Railway Company railbed*	Burney	To be determined	N/A

*feeding from county to city via Placer* \*

\* Sponsored by Save Burney Falls, a non-profit organization.

**TABLE 9-6**  
**City of Anderson Bikeways**

<b>Class 1 - Bikeways</b>				
	<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>
1	Existing	Barney Road	South Street	SR 273
2	Existing & proposed	SR 273	South Street	South city limit
<b>Class 2 – Bike Lanes</b>				
3	Existing & proposed	South Street	SW city limit	SR 273
4	Existing & proposed	North Street		
5	Existing & proposed	Balls Ferry Road	South Street	SE city limit
6	Existing & proposed	East Street	Alexander Ave.	Balls Ferry Road
7	Existing	Rupert Road	Stingy Lane	Dodson Lane
8	Proposed	Dodson Lane	Balls Ferry Road	Rupert Road
9	Proposed	Stingy Lane	North Street	Balls Ferry Road
10	Proposed	Riverside Avenue	North Street	Ox Yoke Road
11	Proposed	McMurray Drive	North Street	Balls Ferry Road
12	Proposed	Ventura Street	North Street	Balls Ferry Road
13	Proposed	Freeman Street	North Street	South Street
14	Proposed	Fairgrounds Drive	1 <sup>st</sup> Street	3 <sup>rd</sup> Street
15	Proposed	3 <sup>rd</sup> Street	Fairgrounds Drive	SR 273
16	Proposed	Marx Way	SR 273	Barney Road
17	Proposed	Pinon Avenue	SR 273	To the west
<b>Class 3 – Bike Routes</b>				
18	Existing	Church Street	North Street	South Street
19	Existing	Silver Street	Briggs Street	South Street
20	Existing & proposed	Ferry Street	ACID canal	Ventura Atreet
21	Proposed	Barney Road	South Street	SR 273
22	Proposed	Alexander Avenue & Little Street	SR 273	Riverside Avenue
23	Proposed	1 <sup>st</sup> Street & Briggs Street	Fairgrounds Drive	SR 273

**TABLE 9-7**  
**City of Redding Bikeways**

<b>CLASS I - BIKEWAYS</b>				
<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>	<b>MILES</b>
Existing	SR 299E	Boulder Creek	Interstate 5	0.24
Existing	SR 299E	Interstate 5	College View Dr	0.61
	SR 44	Dana Drive	Sundial Bridge Drive	1.10
<b>EXISTING CLASS I BIKEWAYS:</b>				<b>1.95</b>

<b>CLASS II - BIKE LANES</b>				
<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>	<b>MILES</b>
Existing	Buenaventura Blvd	Keswick Dam Rd	Stanford Hills Trailhead	1.00
Existing	Cedars Rd	Westside Rd	State Route 273	0.03
Existing	Eastside Rd	Polk St	Radio Ln	1.13
Existing	Knighton Rd	Churn Creek Rd	Airport Rd	1.75
Existing	Park Marina Dr	Butte	Parkview Av	1.36
Existing	Polk St	Ellis	Eastside	0.37
Existing	South Bonnyview Rd	State Route 273	Churn Creek Rd	3.06
Existing/ Proposed	N Market St	Lake Blvd	Quartz Hill Rd	1.26
Existing/ Proposed	Tarmac Rd	Shasta View Dr	Abernathy Ln	0.97
Existing/ Upgrade	Buenaventura Blvd	Buenaventura Trailhead	Railroad Av	3.00
Existing/ Upgrade	Hilltop Dr	State Route 299	E Cypress Av	3.34
Existing/ Upgrade	Lake Blvd	Pine Grove Av	N Market St	5.02
Existing/ Upgrade	Old Alturas Rd	Churn Creek Rd	Old Oregon Trail	2.46
Existing/ Upgrade	Shasta View Dr	College View Dr	Rancho Rd	5.97
Existing/ Upgrade	Victor Av	Old Alturas Rd	Rancho Rd	3.68
Existing/ Upgrade/ Proposed	Bechelli Ln	Bechelli River Access	South Bonnyview Rd	3.22
Existing/ Upgrade/ Proposed	Browning St	Hilltop Dr	Old Alturas Rd	1.11
Existing/ Upgrade/ Proposed	Churn Creek Rd	State Route 299	Knighton Rd	8.53
Existing/ Upgrade/ Proposed	Hartnell Av	Cypress Av	Airport Rd	4.14

Upgrade	Benton Dr	Quartz Hill Rd	Sacramento River	0.47
Upgrade	Butte St	Continental St	Park Marina Dr	0.39
Upgrade	Center St	Riverside Dr	Trinity St	0.16
Upgrade	College View Dr	Bodenhamer Blvd (Future)	Old Alturas Rd	2.01
Upgrade	Continental St	Trinity St	Butte	0.31
Upgrade	Court St	Sacramento River	Schley Av / Railroad Av	1.19
Upgrade	Cypress Av	Civic Center Dr	Ishi Dr	2.90
Upgrade	East St	Trinity St	South St	1.14
Upgrade	Keswick Dam Rd	Buenaventura Blvd	Lake Blvd	1.70
Upgrade	Oasis Rd	Lake Blvd	Old Oregon Trail	4.15
Upgrade	Old Oregon Trail	Oasis Rd	State Route 44	7.09
Upgrade	Parkview Av	Market Street	Park Marina Dr	0.96
Upgrade	Quartz Hill Rd	Keswick Dam Rd	N Market St	3.01
Upgrade	Railroad Av	Schley Av	Buenaventura Blvd	1.35
Upgrade	Riverside Dr	Court St	Center St	0.20
Upgrade	Schley Av	Court St	Railroad Av	0.07
Upgrade	State Route 273	South Bonnyview Rd	City Limits	3.88
Upgrade	Trinity St	Center St	Continental St	0.43
Upgrade	Westside Rd	Buenaventura Blvd	Cedars Rd	1.87
Upgrade/ Proposed	Boulder Dr	State Route 299 Bikeway	State Route 299 Bikeway	0.18
Upgrade/ Proposed	Hawley St	State Route 299	Proposed Future Trailhead	0.58
Upgrade/ Proposed	Placer St	City Limits	Airpark Dr	3.26
Upgrade/ Proposed	Rancho Rd	Churn Creek Rd	Venture	2.36
Proposed	Airport Rd	Hartnell Av	Sacramento River	6.15
Proposed	Bechelli River Access	Dana-to-Downtown Bikeway	Bechelli Ln	0.24
Proposed	Future Rd	Future Trailhead	Tanglewood	0.66
Proposed	Loma Vista	Bechelli Ln	Churn Creek Rd	0.50
Proposed	Palisades Av	Hilltop Dr	Dana-to-Downtown Bikeway	0.42
Proposed	Preserve Blvd	Thomason	Airport Rd	0.38
Proposed	Radio Ln / East Bonnyview Rd	Eastside Rd	South Bonnyview Rd	0.46
Proposed	South St	Court St	Park Marina Dr	1.35
Proposed	Venture St	Rancho Rd	Unforgettable Ln	2.34
Proposed	View St	Browning St	Dana-to-Downtown Bikeway	0.25
<b>TOTAL CLASS II BIKEWAYS:</b>				<b>103.80</b>



<b>CLASS III - BIKE ROUTES</b>				
<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>	<b>MILES</b>
Existing	Anita St	Ellis	Rio Street	0.16
Existing	Benton Dr	Quartz Hill Rd	N Market St	1.00
Existing	Branstetter Ln	West City Limits	Westside Rd	2.06

Existing	Cedars Rd	El Reno Ln	Westside Rd	1.50
Existing	Clear Creek Rd	West City Limits	State Route 273	4.01
Existing	Collyer Dr	Mountain View Dr	Old Oregon Trail	2.42
Existing	East St	South St	Locust St	0.21
Existing	Eastside Rd	Radio Ln	Girvan Rd	2.35
Existing	El Reno Ln	Cedars Rd	Westside Rd	0.15
Existing	Ellis St	Polk St	Anita St	0.12
Existing	Freebridge Av	Parkview Av	Rio St	0.39
Existing	Girvan Rd	Eastside Rd	State Route 273	0.04
Existing	Honeybee Rd	Texas Springs Rd	Clear Creek Rd	0.67
Existing	Mountain View Dr	Twin View Blvd	Collyer	0.57
Existing	Rio St	Freebridge Av	Anita St	0.04
Existing	Texas Springs Rd	Honeybee Rd	Branstetter Ln	2.42
Existing	Twin View Blvd	Oasis Rd	Mountain View Dr	1.29
Proposed	8 th St	Mary St	West St	0.08
Proposed	11 th St	West St	Court St	0.08
Proposed	Airpark Dr	Placer St	Gold St	0.16
Proposed	California St	Trinity St	Tehama St	0.24
Proposed	Center St	Trinity St	Division	0.10
Proposed	Churn Creek Rd	Knighton Rd	Airport Rd	3.43
Proposed	Civic Center Dr	Locust St	Cypress Av	0.14
Proposed	Continental St	Butte St	South St	0.32
Proposed	Dersch Rd	Airport Rd	Stillwater Creek Trail	0.81
Proposed	Division	Center St	California St	0.08
Proposed	Foothill Blvd	Lakeside Dr	Knolls Trailhead / Las Animas	0.59
Proposed	Gold St	Airpark Dr	West St	0.52
Proposed	Hemstead	Cypress Av	Bechelli Ln	0.47
Proposed	Hilltop Dr	E Cypress Av	Maraglia St	0.27
Proposed	Keswick Dam Rd	Sacramento River Trailhead	Buenaventura Blvd	1.48
Proposed	Lakeside Dr	Buenaventura Blvd	Foothill Blvd	0.14
Proposed	Las Animas	Foothill Blvd	Monte Bello	0.05
Proposed	Locust St	East St	Civic Center Dr	0.32
Proposed	Manzanita Hills Av	Knolls Trailhead / Monte Bello	Shasta St	0.11
Proposed	Market St	Placer St	South St	0.11
Proposed	Mary St	Overhill Trailhead	8 th St	0.20
Proposed	Meadow View Dr	Churn Creek Rd	Airport Rd	0.93
Proposed	Monte Bello	Las Animas	Manzanita Hills Av	0.05
Proposed	Overhill	Eureka Way	Overhill Trailhead	0.53
Proposed	Pleasant St	Placer St	Stratford	0.20
Proposed	Quartz Hill Rd	Keswick Dam Rd	Lake Blvd	2.91
Proposed	Railroad Av	South St	Schley Ave / Court St	0.44
Proposed	Shasta St	Stratford	Court St	0.98
Proposed	South St	West St	Court St	0.08
Proposed	Tehama St	West St	California St	0.28

Proposed	Traveled Way	N Market St	Sacramento River Trailhead	0.24
Proposed	West St	8 th St	11 th St	0.30
Proposed	West St	Shasta St	Gold St	0.46
Proposed	Willis	Shasta St	Shasta St	0.01
<b>TOTAL CLASS III BIKEWAYS:</b>				36.50
<b>TOTAL ALL TYPES OF BIKEWAYS:</b>				142.25

**TABLE 9-8  
City of Shasta Lake Bikeways**

<b>Class I - Bikeways (Path)</b>				
	<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>
1	Existing	Sacramento St	Shasta Dam Blvd	Rose Ave
2	Proposed	Ashby Road	Pine Grove Ave	El Cajon Ave
3	Proposed	Pine Grove Ave	Ashby Rd	Cascade Blvd
4	Proposed	Along Churn Creek	Pine Grove Ave	South city limits
5	Proposed	Shasta Way (future road)	Grand Avenue	Mountain Gate Blvd
6	Proposed	Future Rd	Shasta Way (future road)	Black Canyon Blvd

<b>Class II - Bike Lanes</b>				
	<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>
7	Existing	Shasta Dam Blvd (SR 151)	Lake Blvd	I-5
8	Existing	Lake Blvd	Shasta Dam Blvd	Pine Grove Ave
9	Existing	Pine Grove Ave/Ashby Rd	Lake Blvd	El Cajon Ave
10	Proposed	Ashby Rd/Shasta Gateway Dr and future road	Pine Grove Ave	Cascade Blvd
11	Proposed	Future road/Cabello/Black Ranch Rd	Pine Grove Ave	Shasta Way (future road)
12	Proposed	Cascade Blvd	South city limit	Shasta Dam Blvd
13	Proposed	Grand Coulee Blvd	Shasta Dam Blvd	Cascade Blvd
14	Proposed	Twin View Blvd	South city limit	Pine Grove Ave east
15	Proposed	Shasta Way (future road)	Grand Ave	Mountain Gate Blvd

<b>Class III - Bike Routes</b>				
	<b>STATUS</b>	<b>ROAD SEGMENT</b>	<b>FROM</b>	<b>TO</b>
16	Proposed	Lake Blvd	Shasta Dam Blvd	North city limit
17	Proposed	SR 151	Lake Blvd	West city limit
18	Proposed	Flanagan Road	Lake Blvd	West city limit
19	Proposed	Hill Street	Lake Blvd (south)	Lake Blvd (north)
20	Proposed	Toyon Ave	Lake Blvd	Sacramento Ave
21	Proposed	Future road	Pine Grove Ave	South city limit
22	Proposed	Montana St	Vallecito Ave	Red Bluff Ave
23	Proposed	Vallecito Ave	Montana St	Washington Ave
24	Proposed	Washington Ave	Vallecito Ave	Shasta Way
25	Proposed	Shasta Way	Washington Ave	Shasta Dam Blvd
26	Proposed	Fort Peck St	Montana Ave	Shasta Way
27	Proposed	Red Bluff Ave	Montana Ave	Mussel Shoals Ave
28	Proposed	Mussel Shoals Ave	Shasta Dam Blvd	Black Canyon Rd
29	Proposed	Grand Ave	Mussel Shoals Ave	Shasta Way

## **Non-Motorized Goal, Issues, Objectives, Policies, and Actions**

**Goal:** *Create a transportation environment that encourages non-motorized alternatives.*

### **Issues**

- A. Inadequate bicycle and pedestrian facilities discourage non-motorized trips. Bike plans need to account for commuter trail interconnectivity in order to increase bike- and walk-to-work trips.
- B. Many existing or potential on-street bicycle/pedestrian routes are not used due to a lack of shoulders or other barriers.
- C. Class I bikeways are costly, difficult to maintain, and used less by bicycle commuters.
- D. Class II and III bikeways utilizing street and road shoulders are often littered with glass, gravel, and other debris.
- E. The lack of a continuous regional bikeway system often impedes bicycle commuters.
- F. In addition to bicycles, Class II facilities are important routes for wheelchair users and pedestrians.
- G. Traffic lights often won't change for bicycles.
- H. Maintenance of bike lanes and bike paths is a continuing problem.
- I. Utility poles often obstruct pedestrian facilities.

## Objectives

### Short-Range (2010-2020)

- O-1 Strive to eliminate barriers to bicycle and pedestrian traffic.
- O-2 Integrate non-motorized transportation into development plans throughout the region.
- O-3 Keep bicycle and pedestrian lanes in a usable condition through an on-going maintenance program.
- O-4 Mark the road as to where a bicycle should be placed to trip all new traffic signals.
- O-5 At fixed-time traffic signals, where feasible, make all new walk/don't walk signals automatic so they go to walk without having to push the button. This is considered an ITS application for pedestrian crossing detection information.

### Long-Range (2020-2030)

- O-6 Strive to provide an interconnected bicycle/pedestrian network throughout the county.
- O-7 Mark all signaled intersections as to where to place a bicycle to trip the signal.
- O-8 Encourage the public to use non-motorized transportation facilities.

## Policies

- P-1 Encourage each city and the county to maintain an updated bikeway plan.
- P-2 Implement the Shasta County Regional Bikeway Plan including, where appropriate, street and highway improvements that accommodate non-motorized traffic by utilizing widened shoulders, bike paths, or lanes that serve non-motorized transportation.
- P-3 Provide bicycle lanes and pedestrian walkways on the Sacramento River bridges in Redding and Anderson to allow for better non-motorized traffic flow.
- P-4 Support continued development of the Sacramento River Trail and feeder trails.
- P-5 Encourage pedestrian and bicycle transportation as mitigation for regional transportation impacts.
- P-6 Encourage the inclusion of bike lanes and pedestrian facilities in road construction and improvement projects, where appropriate.
- P-7 Eliminate non-motorized barriers to comply with the Americans with Disabilities Act.
- P-8 Encourage sweeping of shoulders on all feeder and arterial routes on a frequent schedule to improve conditions for bicyclists.

- P-9 Identify traffic signal detectors for bicycle placement with use of standard road markings.
- P-10 Provide automatic walk signals at fixed-time signalized intersections equipped with walk/don't walk signals, where feasible.
- P-11 Use the Transportation Enhancement (TE) funding available within Shasta County for development of non-motorized projects.
- P-12 Where feasible and appropriate, enhance pedestrian safety by installing traffic calming measures, such as raised sidewalks, medians, and pedestrian countdown signals that are appropriately timed to meet the needs of seniors.

## **Actions**

### Short-Range (2010-2020)

#### *Caltrans and Regional Transportation Planning Agency*

- TE funds will remain available for use in constructing/improving non-motorized facilities. (P-1, P-2, P-11)

#### *Shasta County*

- The Shasta County Bikeway Plan emphasizes safety, and focuses on Class II and III bike lanes adjacent to selected roadways. (P-2) This Bikeway Plan is currently being updated.
- Due to low construction and maintenance costs and higher commuter usage of Class II and III facilities, Shasta County is focusing on these types of facilities for improvement of its bicycle corridors. (P-2)

#### *City of Anderson*

- The City of Anderson Bicycle Transportation Plan was adopted October of 2007. It emphasizes coordination of bicycle facilities with local agencies to link major activity centers. The City currently has about 7.5 miles of Class I, II, and III bicycle facilities, including about 2.5 miles in the Anderson River Park. The Plan proposes to add 9.9 miles of bikeways. (P-1)

#### *City of Redding*

- The City of Redding has identified various potential bikeways and paths that are expected to be built by land developers as part of their requirements. Several feeder routes to the Sacramento River Trail are planned, allowing access from adjacent residential areas. (P-2, P-4)

#### *City of Shasta Lake*

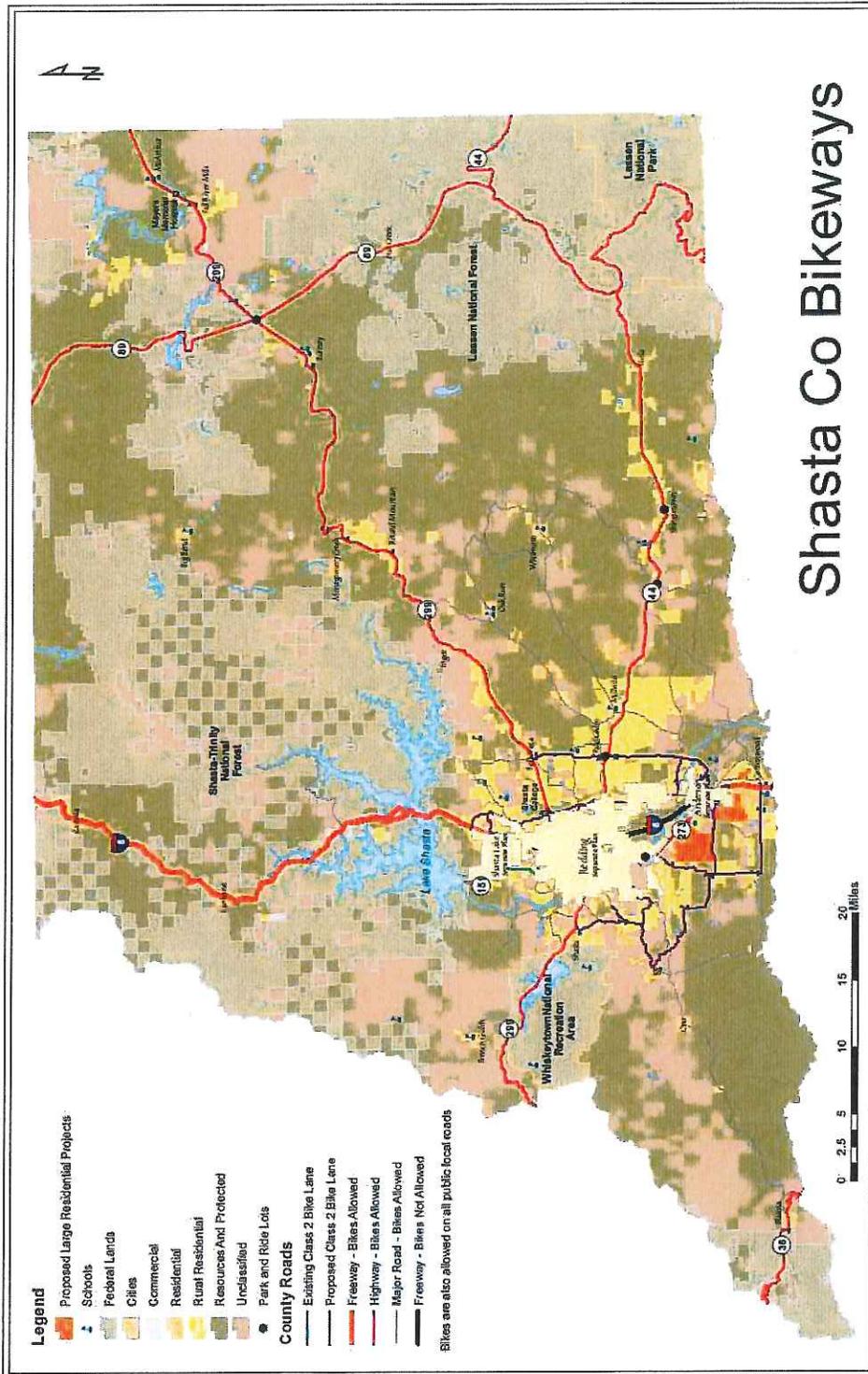
- The City of Shasta Lake adopted a new Bicycle Transportation Plan (BTP) in July of 2009. Adoption of the plan qualifies the city to apply for Bicycle Transportation Account funding. The City has about seven miles of existing bikeways. The BTP proposes to construct an additional 16.5 miles of bikeways. (P-1).

Long-Range (2020-2030)

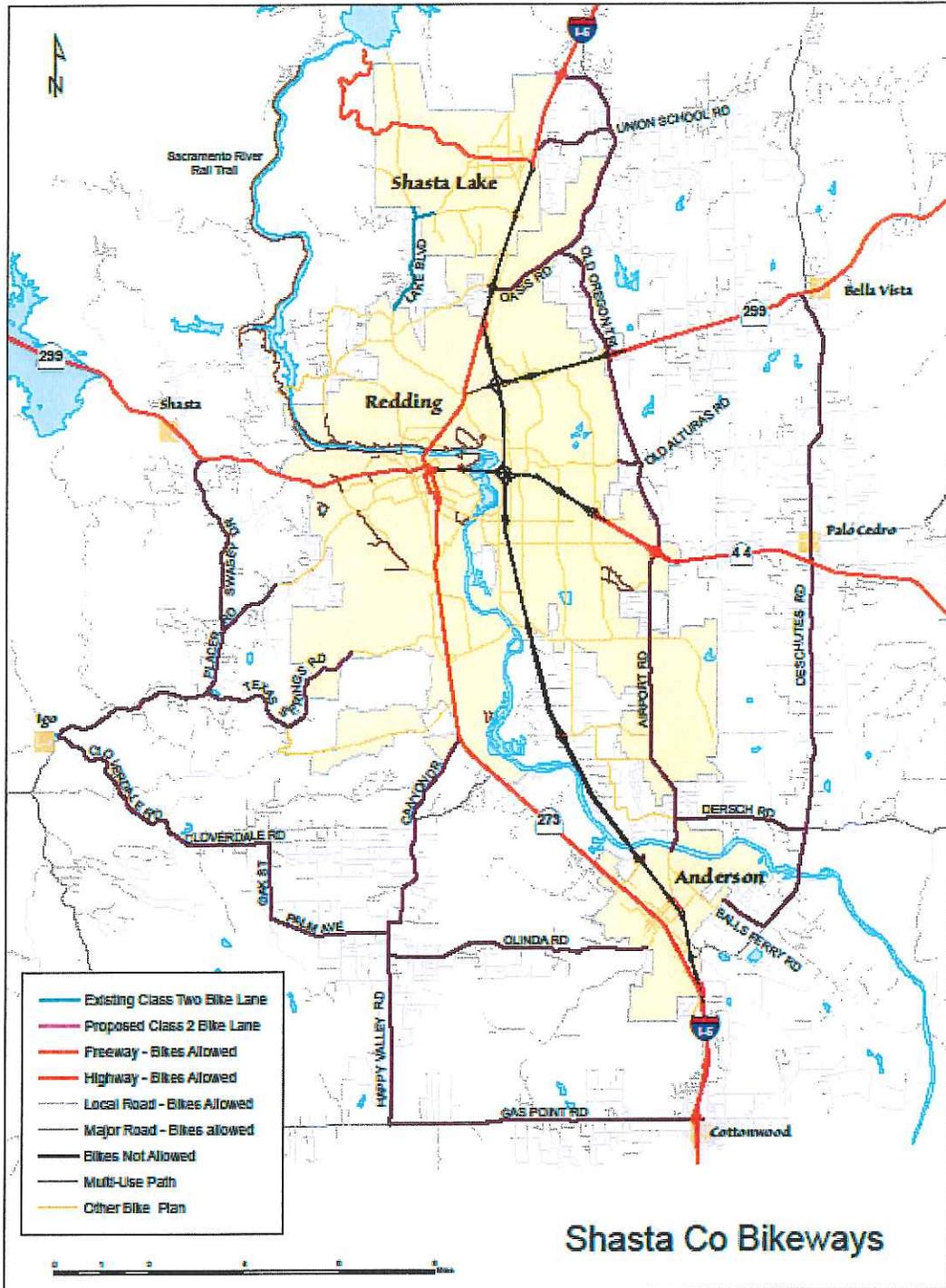
*Regional Transportation Planning Agency*

- The RTPA will pursue funding for non-motorized facilities and coordinate bikeway planning efforts. (P-11)

**MAP 9-1  
Shasta County Bikeways**



**MAP 9-2  
Shasta County South Central Region (SCR) Bikeways**



## Existing and Proposed Trail Inventory

### Inventory Overview

Redding's present trail system encompasses a wide range of trail types suitable for many kinds of users. Some trails are steep and challenging, while others are flat and easily accommodate wheelchairs or youngsters. From them, you can fish, walk the dog, race in marathons, ride your horse, watch wildlife, or skate with friends. Trails can be found in greenways downtown, within suburban neighborhoods, or in secluded open space areas that carry you far from roads and houses.

Our substantial inventory of trails, listed in the table on the next two pages, shows that we have 18 trails either existing or under development in the 83-square mile City-County planning area. More than 25 miles are paved pathways, and an additional 6 miles are engineered with dirt surfaces.

Trails are very popular recreation facilities for Redding residents. **The 2001 Household Survey shows that two-thirds (67%) of respondents have used the City's trails for walking a few times per year.** The Sacramento River Trail is also the venue for numerous celebrations, organized walks and runs, and special occasions that benefit charitable causes.

The Trail and Bikeway Strategy proposes almost 102 additional miles of trails within the planning area over the next twenty years. This will create a total network of 133 miles of multipurpose trails, dirt equestrian and bike paths, connector trails, and loops in every part of the City.



*Sacramento River Trail in Caldwell-Lake Redding Park*

**The Redding Parks, Trails and Bikeways Map** illustrates the general layout of this comprehensive trail network and how it will connect with street bikeways. *Please note that while existing trails are shown as accurately as a map at this scale can depict, the proposed trail alignments should be interpreted as schematic and conceptual.* Before any trail is built and opened to the public, detailed engineering studies will be made with the cooperation of land owners and resource agencies.

## Trails Existing or Under Development in the Redding Area, 2003

### MULTIPLE-USE TRAILS

Map No.	Trail Name	From	To	Length	Acres	Quad
1*	Blue Gravel Mine Trail *	Placer St	Canyon Creek Rd	2.04	12.34	SW
2	Buckeye Park Trail*	Internal Loop	Internal Loop	0.29	1.76	NW
3	Canyon Creek Trail*	Blazingwood Dr	Buenaventura Blvd	0.51	3.09	SW
4	Cascade Park Trail	Internal Loop	Internal Loop	0.50		SW
5	Civic Center Perimeter Trail	Internal Loop	Internal Loop	0.89		SW
6	Enterprise Park Trail	Internal Loop	Internal Loop	1.53		SE
7	Knolls Trail *	Foothill Blvd	Eureka Way	0.19	0.14	SW
8	Lema Ranch Trails (private, open to the public)	Internal Loop	Internal Loop	3.58		NE
9*	Mary Lake Trail	Internal Loop	Internal Loop	1.00		SW
10*	Mary Street / Overhill Extension *	Sacramento River Trail	Overhill St	0.31	1.90	SW
34	Old 99 Spur Trail*	Lake Blvd	North Market St	0.96	4.81	NW
36	Parkview Riverfront Park Trail	Civic Center	Cypress Bridge	0.55		SW
11	Peppertree Park Trail	Internal	Internal Loop	0.37		NW
12	Sacramento River Trail - North *	Stress Ribbon Bridge	Hilltop Drive	6.12	37.07	NW
13	Sacramento River Trail - South *	Court St	Stress Ribbon Bridge	2.80	16.97	SW
44	Sacramento River Rail Trail - Connector	Spring Creek	Keswick Dam Rd	3.00		NW
14	Stanford Hills Trail *	Sutro Mine Rd	Sac. River Trail - North	0.86	5.19	NW
MULTIPLE-USE TRAILS				25.49	83.07	

### DIRT TRAILS

15*	Westside Trails	Lower Springs / Placer Rd	Mary Lake Park	6.08		SW
DIRT TRAILS				6.08		
MULTIPLE-USE and DIRT TRAILS				31.57		
TRAIL ACREAGE *					83.07	

\* TRAIL ACREAGE Trails included in the Level-of-Service acreage, using a 50'-wide corridor, are marked with asterisks. Included in this acreage calculation are all public trails found within the city limits, and outside a developed park (because its acreage would already be counted in the park's acreage). Excluded from the trail acreage count are private trails (Lema Ranch Trails, a portion of the River Trail within the McConnell Arboretum), trails outside the city (Westside Trails) and those located within developed parks.

## Future Trails for the Redding Area, 2004-2020

### MULTIPLE-USE TRAILS

Map No.	Trail Name	From	To	Length	Acres	Quad	Year
16	ACID Trail	Butte St	Cypress Av	0.89	5.38	SW	2008
17	Blue Gravel Mine Spur	Placer St	Blue Gravel Mine Trail	0.18	1.08	SW	2004
18	Boulder Creek Trail	SR 299E Bikeway	Chum Creek	1.69	10.24	NE	2015
19	Buenaventura Trail	Eureka Way	Placer St	0.82	4.96	SW	2004
20	Candlewood Trail	Chum Creek Trail	Candlewood Dr	0.55	3.32	NE	2010
21	Canyon Creek Trail Extension	Placer St	Blazingwood Dr	2.13	12.93	SW	2004-2005
22	Chum Creek Trail	Twin View Blvd	Chum Creek Rd	8.03	48.68	NE	2007-2020
23	Clear Creek Trail	SR 273S Bridge	Cascade Park	1.66	10.06	SW	2012
24	Clover Creek Trail	Sports Park	Sacramento River	8.30	50.32	NE	2007-2020
25	Dana Drive Trail and Bikeway	Tuttle Bay	Mt. Shasta Mall	0.59	3.57	SW	2006-2007
26	Gold Run Creek Trail	Sacramento River Trail	Eureka Way	0.90	5.44	SW	2004
27	Jenny Creek Trail	Eureka Way	Mary Lake	0.62	3.78	SW	2004
28	Lema - Nash Trail	Shasta View Dr	Old Oregon Trail	0.98	5.94	NE	2015
29	Linden Creek Trail	Fire Hall #2	MLK, Jr. Park	1.64	9.94	SW	2020
30	Little Chum Creek Trail	Hartnell Av	Chum Creek	1.07	6.48	SE	2010
31	Manzanita Trail	Manzanita Hills Av	Almond Av	0.27	1.63	SW	2010
32	Middle Creek Trail	Old Shasta / SR 299W	Sacramento River Trail	1.86	11.28	SW	2005-2007
33	Minder Park Trail	Lema Ranch	Chum Creek	0.37	2.22	NE	2006
35	Palisades Trail	Hilltop Dr	North Bechelli Ln	1.43	8.67	NW	2006-2007
37	Riverside Trail	Sacramento River Trail	Center St	0.38	2.31	SW	2005
38	Sac. River Trail - Future Expansion	Cypress Av	Anderson River Park	10.20	61.82	SW	2018
39	Sac. River Trail - Hatchcover Spur	Hemstead Dr	Cypress Av	0.29	1.74	SW	2004
41	Sac. River Trail - Keswick Dam Extension	Keswick Dam	Stress Ribbon Bridge	0.69	4.15	NW	2004
42	Sac. River Trail - Park Marina Trail	State Route 299W	Cypress Av	2.12	12.87	SW	2015
43	Sac. River Trail - Tuttle Bay/West Extension	Convention Center	State Route 299W	1.57	9.51	SW	2007
44	Sacramento River Rail Trail	Shasta Dam	Keswick Dam Rd	11.80	71.62	NW	2004
45	Stillwater Creek Trail	Old Oregon Trail	Sacramento River	15.46	93.63	NE	2020
46	Stillwater Plant Trail	State Route 44	Dersch Rd	1.65	11.21	SE	2020
47	Sulphur Creek Trail - South	North Market St	Arboretum Perimeter Tra	0.38	2.30	NW	2010
48	Sundial Bridge	McConnell Arboretum	Convention Center	0.32	1.94	SW	2004
49	Sunset Trail	Scenic Dr	Sacramento River Trail	0.15	0.91	SW	2004
50	Upper Chum Creek Trail	Pine Grove Av	Oasis Rd	1.75	10.62	NE	2020
51	Wertz Creek Trail	Mistletoe School	Cypress Av	0.55	3.34	SE	2020
FUTURE MULTIPLE-USE TRAILS				81.47	493.79		

### DIRT TRAILS

Map No.	Trail Name	From	To	Miles	Acres	Quad	Year
52	China Dam Trail	Placer Rd	Texas Springs Rd	2.43	14.75	SW	2012
53	Mercedes Trail	Arboretum Perimeter Trail	Mercedes Ln	0.21	1.26	NW	2006
54	Olney Creek Trail	Texas Springs Rd	Cascade Park	3.67	22.22	SW	2016
55	Ridgeview Trail	Ridgeview Park	Blue Gravel Mine Trail	0.65	3.91	SW	2008
56	Salt Creek Trail	Lower Springs Rd	Sacramento River Trail	2.00	12.12	SW	2010
57	Sulphur Creek Trail - North	Quartz Hill Rd	North Market St	3.30	20.02	NW	2010
58	Westside Trails Extension	Mule Town Rd	Westside Ridge	5.00	30.30	SW	2003-2005
59	Greenwood Trail	Walnut Ave	Sonoma St	0.83	5.03	SW	2010
60	Avalon Trail	Shasta View Dr	Old Oregon Trail	1.00	6.06	NE	2015
FUTURE DIRT TRAILS				19.09	115.67		
FUTURE DIRT and MULTIPLE-USE TRAILS				100.56	609.46		
TOTAL EXISTING and FUTURE TRAILS				132.13	692.53		

## Bikeway Inventory and Classification

CalTrans, the state transportation agency, has divided bicycle facilities into three types — bike paths, bike lanes and bike routes — described in detail on the next page. Together, they serve various bicycle user groups that include casual recreational bike-riders, competitive athletes, fitness enthusiasts, and commuters.

The 2000 U.S. Census statistics show that in California, as many as 134,000 working people over the age of 16 can be considered bicycle commuters. In Shasta County, the data shows that 244 people (4 percent) in this same group use their bikes as their main transportation to work.

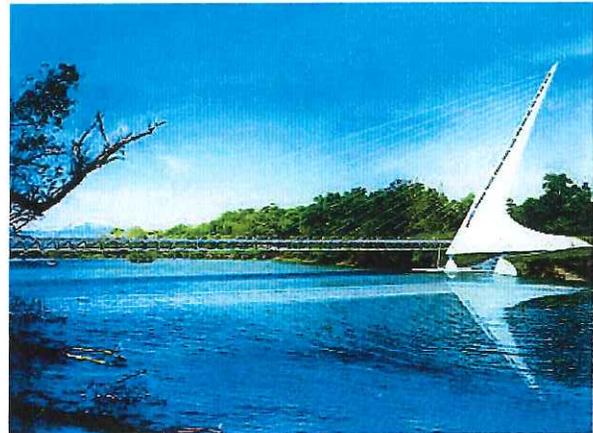
### Bridging Transportation Barriers

Like other cities, Redding’s two-wheeled commuters must contend with local impediments to bike travel. Here, those difficulties include steep topography, rainy but mild winters, and very hot summers. Significant transportation barriers limiting cross-town travel include Interstate 5, the Union Pacific Railroad, and the Sacramento River.

Of the six vehicular bridges that currently cross the River, only two safely accommodate bicycle traffic: the Lake Redding Bridge on Court/Benton Street and the South Bonnyview Road Bridge. However, new designs for the Cypress Avenue and State Route 44 bridges will increase the number of safe crossings for non-motorized vehicles in the future.

Fortunately for Redding bicyclists and pedestrians, the Sacramento River Trail has several bridge crossings available exclusively for non-motorized travel:

- *The Stress Ribbon (or Suspension) Bridge* connects the north and south sections of the River Trail just below Keswick Dam.
- *The Diestelhorst Bridge*, near Lake Redding Park at Court Street and Benton Drive, is an historic vehicular structure now used only for pedestrians and bikes.



*Sundial Bridge on the Sacramento River Trail*

- *The Sundial Bridge* spans the River with a spectacular steel cable and glass-decked design. The bridge connects the McConnell Arboretum on the north with the rest of Turtle Bay Exploration Park, the Redding Convention Center, and the Park Marina area to the south.

### Summary of Existing and Proposed Bikeways for the Redding Area

	<i>Class I Bike Path</i>	<i>Class II Bike Lane</i>	<i>Class III Bike Route</i>	<i>TOTAL MILES</i>
<i>Existing Miles</i>	0.86	7.18	65.08	73.12
<i>Proposed Miles</i>	0 *	27.43	25.51	52.94
<b>TOTAL MILES</b>	0.86	34.61	90.59	126.06
<small>* All proposed Class I Bikeways are counted as Multipurpose Trails</small>				

<b>Bike Path - Class I Bikeway</b>	
<i>Use and Definition</i>	<i>Specifications</i>
<ul style="list-style-type: none"> <li>▶ Developed within an entirely separate right of way for the exclusive use of bikes, skaters, and pedestrians, with minimal cross flows by motorists</li> <li>▶ By law, all motorized vehicles, including motorized bicycles ("mopeds"), are prohibited on bike paths unless allowed by city ordinance</li> <li>▶ Offers opportunities for cyclists not provided by the road system</li> <li>▶ Well-connected to trail system</li> <li>▶ If significant pedestrian traffic is anticipated, separate facilities should be provided to avoid conflicts between cyclists and pedestrians, and/or increase width and sight distances on curves and at intersections</li> <li>▶ Class I Bikeways are included in the Level-of-Service acreage calculation as trails, calculated with an average corridor width of 50'</li> </ul>	<ul style="list-style-type: none"> <li>▶ <i>Width:</i> Two-Way Path - 8' minimum, with 2' graded shoulders on either side. Increase width at steep grades and curves. One-Way Path - 5' minimum</li> <li>▶ <i>Vertical:</i> 7' minimum clearance, 10' optimal</li> <li>▶ <i>Horizontal:</i> 2' clearance minimum, 3' optimal</li> <li>▶ <i>Cross Slope:</i> 2% minimum, 5% maximum</li> <li>▶ <i>Grade:</i> 5% maximum</li> <li>▶ <i>Surface:</i> Asphalt or concrete</li> <li>▶ <i>Lighting:</i> Along path if compatible with adjacent land uses; at entrances &amp; intersections for safety</li> <li>▶ <i>Striping:</i> Stripe lanes in high use areas; around barrier posts</li> <li>▶ <i>Signage:</i> "Bike Path", with supplemental destination plates ("To Downtown"; to "To College")</li> </ul>

<b>Bike Lane - Class II Bikeway</b>	
<i>Use and Definition</i>	<i>Specifications</i>
<ul style="list-style-type: none"> <li>▶ A corridor within the road right-of-way designated specifically for one-way bike use, and delineated by bike lane signs and pavement striping along street shoulders</li> <li>▶ Connected to trail system</li> <li>▶ Not included in the Level-of-Service acreage calculation</li> </ul>	<ul style="list-style-type: none"> <li>▶ <i>Width:</i> 5' minimum, 13' where parking is permitted</li> <li>▶ <i>Signage:</i> "Bike Lane", with supplemental destination plates ("To Downtown"; to "To College"); placed at beginning, and on far side of every arterial street intersection, at all major changes in direction, and at 0.62 miles (1k) intervals</li> </ul>

<b>Bike Route - Class III Bikeway</b>	
<i>Use and Definition</i>	<i>Standards</i>
<ul style="list-style-type: none"> <li>▶ Shared facilities where bicycle use is secondary</li> <li>▶ Offers a higher degree of services to bicyclists than alternative streets: traffic control devices adapted for bikes, more frequent pavement maintenance, restricted parking along the street</li> <li>▶ Established by placing bike route signs along existing roadways</li> <li>▶ Should be connected to trail system</li> <li>▶ Not included in the Level-of-Service acreage calculation</li> </ul>	<ul style="list-style-type: none"> <li>▶ <i>Roadway</i> Prior to signing a new route, roadway characteristics should include 2'-wide shoulders (preferably 4'-wide); or roadways should have low traffic volumes and have speeds of 40 mph or less.</li> <li>▶ <i>Signage:</i> "Bike Route," with supplemental destination plates ("To Downtown"; to "To College") and directional arrows to increase functionality</li> </ul>

**Table: Existing and Proposed Bikeways in the Redding Area, 2002-2020**

**CLASS I - BIKEWAYS**

STATUS	ROAD SEGMENT	FROM	TO	MILES	QUAD
Existing	CalTrans Bikeway	Boulder Creek	Interstate 5	0.24	NW
Existing	CalTrans Bikeway	Interstate 5	College View Dr	0.61	NE
EXISTING CLASS I BIKEWAYS:				0.85	

**CLASS II - BIKE LANES**

STATUS	ROAD SEGMENT	FROM	TO	MILES	QUAD
Existing	Eastside Rd	Polk St	Breslauer Ln	1.01	SW
Existing	Hartnell Av	Cypress Av	Victor Av	1.98	SE
Existing	Park Marina Dr	State Route 44	Parkview Av	1.48	SW
Existing	Placer St	Wisconsin Av	Pleasant St	1.01	SW
Existing	So Bonnyview Rd	East Bonnyview Rd	Bechelli Ln	1.70	SW
Proposed	Airport Rd	State Route 44	North Street Bridge	5.86	SE
Proposed	Bechelli Ln*	Cypress Av	Hartnell Av	0.50	SW
Proposed	Browning St	Hilltop Dr	Churn Creek Rd	0.37	NE
Proposed	Buenaventura Blvd	Keswick Dam Rd	Sutro Mine Rd	0.79	NW
Proposed	College View Dr	Bodenhamer Blvd (future)	Old Oregon Trail	2.15	NE
Proposed	Cypress Av (future alignment)	Ishi Dr	Goodwater Av	0.42	SE
Proposed	Freebridge Av	Parkview Av	Smile Pl	0.05	SW
Proposed	Hartnell Av	Victor Av	Shasta View Dr	0.73	SE
Proposed	Hawley Rd	State Route 299E	North City Limits	2.68	NE
Proposed	Hilltop Dr	Cypress Av	Maraglia St	0.27	SE
Proposed	Keswick Dam Rd	Sacramento River Trail	North City Limits	2.13	NW
Proposed	Knighten Rd	Churn Creek Rd	Airport Rd	1.53	SE
Proposed	Loma Vista Dr (future alignment)	Churn Creek Rd	Victor Av	0.87	SE
Proposed	Old Oregon Trail	Dasis Rd	State Route 44	6.83	NE
Proposed	Parkview Av	Park Marina Dr	Cypress Av	0.07	SW
Proposed	Parkview Av (future alignment)	Freebridge Av	Hartnell Av	0.59	SW
Proposed	Pleasant St	Shasta St	Placer St	0.20	SW
Proposed	Quartz Hill Rd	Lake Blvd	West City Limits	0.55	NW
Proposed	Quartz Hill Rd	Keswick Dam Rd	North City Limits	0.52	NW
Proposed	South Bonnyview Rd	Bechelli Ln	Churn Creek Rd	0.31	SW
EXISTING CLASS II BIKEWAYS:				7.18	
PROPOSED CLASS II BIKEWAYS:				27.43	
TOTAL CLASS II BIKEWAYS:				34.61	

Future connection to school

**CLASS III - BIKE ROUTES**

STATUS	ROAD SEGMENT	FROM	TO	MILES	QUAD
Existing	Bechelli Ln*	Hartnell Av	South Bonnyview Rd	1.89	SW
Existing	Benton Dr*	Quartz Hill Rd	North Market St	1.00	NW
Existing	Branstetter Ln	West City Limits	Westside Rd	3.64	SW
Existing	Buenaventura Blvd	Placer St	Westside Rd	2.21	SW
Existing	Buenaventura Blvd (1)	Eureka Way	Placer St	0.83	SW
Existing	Butte St	Continental St	Auditorium Dr	0.39	SW
Existing	Cedars Rd*	El Reno Ln	South Bonnyview Rd	1.54	SW
Existing	Center St	Trinity St	Riverside Dr	0.16	SW
Existing	Churn Creek Rd*	State Route 44	Rancho Rd	4.13	SE
Existing	Churn Creek Rd*	State Route 299E	State Route 44	2.38	NE
Existing	Clear Creek Rd	West City Limits	State Route 273S	4.03	SW
Existing	Collyer Dr	Hawley Rd	Old Oregon Trail	1.74	NE
Existing	Continental St	Trinity St	Butte St	0.31	SW
Existing	Cypress Av*	Churn Creek Rd	Ishi Dr	1.03	SE
Existing	Cypress Av*	Pine St	Hartnell Av	0.89	SW
Existing	Cypress Av	Interstate 5	Churn Creek Rd	0.38	SE
Existing	Cypress Av	Hartnell Av	Interstate 5	0.49	SW
Existing	East St	Trinity St	Pine St	0.57	SW
Existing	Eastside Rd	Breslauer Ln	South City Limits	2.85	SW
Existing	Freebridge Av	Parkview Av	Ellis St	0.53	SW

**CLASS III - BIKE ROUTES (continued)**

STATUS	ROAD SEGMENT	FROM	TO	MILES	QUAD
Existing	Hilltop Dr	State Route 44	Cypress Av	0.98	SE
Existing	Hilltop Dr	Browning St	State Route 44	0.53	NE
Existing	Hilltop Dr *	Interstate 5	Browning St	0.24	NE
Existing	Hilltop Dr *	Lake Blvd	Interstate 5 Fwy	1.57	NW
Existing	Keswick Dam Rd *	North City Limits	Lake Blvd	0.83	NW
Existing	Lake Blvd	North City Limits	North Market St	2.62	NW
Existing	North Market St *	Lake Blvd	Benton Dr	0.80	NW
Existing	Oasis Rd *	Interstate 5	East City Limits	1.80	NE
Existing	Oasis Rd *	Lake Blvd	Interstate 5	2.33	NW
Existing	Old Alturas Rd *	Churn Creek Rd	Old Oregon Trail	2.45	NE
Existing	Parkview Av *	State Route 273	Hartnell Av	0.59	SW
Existing	Placer Rd *	West City Limits	Wisconsin Av	0.80	SW
Existing	Quartz Hill Rd *	West City Limits	Benton Dr	1.82	NW
Existing	Railroad Av	Court St	Buenaventura Blvd	1.36	SW
Existing	Rancho Rd *	Churn Creek Rd	Airport Rd	1.73	SE
Existing	Riverside Dr	Court St	Center St	0.20	SW
Existing	Shasta View Dr *	State Route 44	Rancho Rd	2.69	SE
Existing	Shasta View Dr *	College View Dr	State Route 44	3.28	NE
Existing	Trinity St	Center St	Continental St	0.43	SW
Existing	Twin View Blvd/Mtn. View Dr *	Hawley Rd	Oasis Rd	1.86	NE
Existing	Victor Av *	State Route 44	Rancho Rd	3.12	SE
Existing	Victor Av *	Old Alturas Rd	State Route 44	0.57	NE
Existing	Westside Rd	Buenaventura Blvd	South Bonnyview Rd	1.47	SW
Proposed	Butte St	Almond Av	Oregon St	0.74	SW
Proposed	California St	Trinity St	Tehama St	0.24	SW
Proposed	Churn Creek Rd	Rancho Rd	Airport Rd	5.77	SE
Proposed	Civic Center Dr	Locust St	Cypress Av	0.14	SW
Proposed	Clear Creek Rd	Honeybee Rd	West City Limits	0.32	SW
Proposed	Collyer Dr	Mountain View Dr	Hawley Rd	0.67	NE
Proposed	Dersoh Rd	Airport Rd	Stillwater Creek Trail	1.77	SE
Proposed	East St	South St	Locust St	0.21	SW
Proposed	El Reno Ln	Cedars Rd	Westside Rd	0.14	SW
Proposed	Ellis St	Polk St	Anita St	0.12	SW
Proposed	Highway 273	Girvan Rd	Ox Yoke -Riverside Av	2.76	SW
Proposed	Honey Bee Rd	Texas Springs Rd	Clear Creek Rd	0.73	SW
Proposed	Lake Blvd	The Shasta Dam	North City Limits	2.87	NW
Proposed	Locust St	East St	Civic Center Dr.	0.32	SW
Proposed	Manzanita Hills Av	Knolls Trail	Shasta St	0.20	SW
Proposed	Meadow View Dr	Churn Creek Rd	Airport Rd	1.29	SE
Proposed	Oregon St	Tehama St	Yuba St	0.14	SW
Proposed	Placer Rd	Tower View Rd	West City Limits	0.98	SW
Proposed	Quartz Hill Rd	Keswick Dam Rd	Lake Blvd	2.33	NW
Proposed	Radio Ln	Eastside Rd	South Bonnyview Rd	1.58	SW
Proposed	Shasta St	Pleasant St	Manzanita Hills	0.13	SW
Proposed	South Market St	Placer St	South St	0.11	SW
Proposed	South St	South Market St	East St	0.15	SW
Proposed	Tehama St	California St	Oregon St	0.13	SW
Proposed	Texas Springs Rd	West City Limits	Honey Bee Rd	0.77	SW
Proposed	Tower View Rd	Rattlesnake Ln	Placer Rd	0.42	SW
Proposed	Westside Rd	Buenaventura Blvd	El Reno Ln	0.35	SW
Proposed	Yuba St	Oregon St	California St	0.13	SW
EXISTING CLASS III BIKEWAYS:				65.08	
PROPOSED CLASS III BIKEWAYS:				25.51	
TOTAL CLASS III BIKEWAYS:				90.60	
TOTAL ALL TYPES OF BIKEWAYS:				126.05	

\* ASTERISKED Class III Bike Routes will be up-graded to Class II Bike Lanes in the future.

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# TRANSPORTATION ELEMENT

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## INTRODUCTION

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### PURPOSE AND CONTENT

A city is both defined and constrained by the network of highways, roads, trails, railroads, and transit services that move its residents and goods in, through, and out of the community. A comprehensive, well-planned, and efficiently functioning transportation system is essential to Redding's long-term growth and vitality. The Transportation Element (referred to by the Government Code as the *Circulation Element*) provides the necessary framework to guide the growth and development of the Planning Area's transportation-related infrastructure and integrates land use and transportation planning by ensuring that all existing and future developments have adequate circulation. The element is not limited to automobile-related transportation, but addresses the development of a balanced, multimodal transportation system for the City, although the street and highway (circulation/access) system supports the movement of all transportation modes, except rail, in Redding. Recognition of the regional nature of transportation facilities that various transport modes use and the need for interagency coordination is also emphasized.

Background data and information for this element are contained within Chapter 6 of the City of Redding *General Plan Background Report*.

Specific topics addressed within the policy document include:

- ▶ Streets and Highways.
- ▶ Regional Transportation Planning.
- ▶ Neighborhood Streets.
- ▶ Pedestrianism.
- ▶ Parking.
- ▶ Bicycle System.
- ▶ Public Transportation and Facilities.
- ▶ Air Transportation and Facilities.
- ▶ Railroad Services and Facilities.

### AUTHORITY

Pursuant to Government Code Section 65302(b), a general plan is required to include:

*A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the plan.*

The provisions of a Transportation Element affect a community's physical, social, and economic environment and are inexorably linked with a land use element. Its provisions must also be integrated with applicable state and regional transportation plans.

The City of Redding has chosen to address utility-oriented facilities, such as energy, water, sewage, storm drainage, and communications, within a comprehensive Public Facilities and Services Element.

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## GOALS AND POLICIES

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### COMPLETE STREETS

The City of Redding desires to develop and maintain an efficient transportation system that provides safe multimodal transportation choices for independent mobility, encourages healthy, active living, and supports greater social interaction. This system will provide safe and convenient travel along and across streets through the development and maintenance of a comprehensive, integrated transportation network designed to provide safe and convenient transportation alternatives for all users, including pedestrians, bicyclists, public transportation riders, and motorists. Such a transportation network is accomplished through the development of a system of "Complete Streets."

The goals and policies below reinforce various policies of the General Plan's Community Development and Design Element, Transportation Element, and Recreation Element intended to encourage development of infill parcels and mixed-use developments that help to lessen reliance on automobiles and to provide pedestrian and bicycle connections between neighborhoods, transit, recreational amenities, schools, employment centers, and services. Together these actions will help to establish a land use and transportation network that is efficient, accessible, and builds on the existing strengths of the Redding community.

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### GOAL T1

**PROVIDE SAFE, EFFICIENT, AND COMFORTABLE ROUTES FOR WALKING, BICYCLING, AND PUBLIC TRANSPORTATION TO INCREASE USE OF THESE MODES OF TRANSPORTATION, ENABLE CONVENIENT AND ACTIVE TRAVEL AS PART OF DAILY ACTIVITIES, AND MEET THE NEEDS OF ALL USERS OF THE STREETS.**

**Policies to achieve this goal are to:**

**T1A.** Ensure that multimodal infrastructure improves transportation choices for pedestrians, bicyclists, motorists, and public transportation riders of all ages and abilities and that all users

are considered and included in the planning, design, approval, construction, and operation of new streets, and the alteration and maintenance phases of existing streets by:

- ▶ Including infrastructure that promotes a safe means of travel for all users along the right of way, such as sidewalks, shared-use paths, bicycle lanes, and paved shoulders.
- ▶ Provide pedestrian and bike connections from developments to adjacent main streets, open space areas, parks, transit stops, schools, commercial and employment centers, and other activity centers as opportunities arise.
- ▶ Designing new development to incorporate street connectivity for all users.
- ▶ Including new or alteration of existing infrastructure that facilitates safe crossing of the right-of-way for all users, such as: accessible curb ramps, high-visibility crosswalks, pedestrian refuge islands, smaller curb radii, corner bulbouts, pedestrian signals, and bicycle detection at traffic signals where warranted.
- ▶ Incorporating street design features and techniques that promote safe and comfortable travel along streets by pedestrians, bicyclists, and public transportation riders. Examples include: constructing traffic-calming mechanisms in neighborhoods; providing pedestrian refuge medians on busy streets; reducing the number of motor vehicle lanes and/or widths where appropriate; providing transit turnouts; and constructing physical buffers and separations between vehicular traffic and other users.
- ▶ Providing features that improve the comfort, convenience, and safety of users such as pedestrian-oriented/wayfinding signs, pedestrian-scale lighting, benches and other street furniture, bicycle parking facilities, comfortable and attractive public transportation stops and facilities, street trees, landscape, and planting strips.

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## GOAL T2

**ESTABLISH A SYSTEMATIC COMPLETE STREETS RETROFIT PROGRAM THAT WILL EFFECTIVELY ALTER EXISTING APPROPRIATELY IDENTIFIED STREETS INTO COMPLETE STREETS AS RESOURCES BECOME AVAILABLE.**

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**Policies to achieve this Goal are to:**

- T2A.** Identify and prioritize physical improvements that would make bicycle and pedestrian travel safer along current key bicycling and walking routes. Establish an implementation strategy to construct needed improvements. Undertake improvements as part of street projects where feasible.
- T2B.** Identify intersections and other locations where collisions have occurred or that present safety challenges for pedestrians, bicyclists, or other users, including, but not limited to, intersections within one mile of schools; consider gathering additional data through methods such as walkability/bikeability audits.
- T2C.** Ensure that the transportation capital improvement program and other budgetary tools include funding for Complete Streets infrastructure to the fullest feasible extent. Utilize grant funds and other funding sources to augment City resources. Undertake street modifications with existing capital projects such as overlays, sidewalk repair, ADA curb ramps, and similar projects to reduce costs while providing multimodal accessibility.

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## GOAL T3

**ENSURE THAT EXISTING STANDARDS, PROGRAMS, AND PROCEDURES INCLUDE COMPLETE STREETS IMPLEMENTATION AS A MAIN FOCUS.**

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**Policies to achieve this Goal are to:**

- T3A.** Review the City's construction standards for streets, intersections, pedestrian facilities, bicycle facilities, and transit facilities and

revise as necessary to incorporate Complete Streets standards that support all users.

- T3B.** Consider establishing Multimodal Level of Service Criteria, including pedestrians and cyclists to guide development of the street network.
- T3C.** Collaborate with the Redding Area Bus Authority (RABA) to incorporate infrastructure to assist users in employing multiple means of transportation in a single trip in order to increase transportation access and flexibility. Examples include, but are not limited to, provisions for bicycle access on public transportation, secure bicycle racks at transit stops, and public transportation access to trails and recreational locations.
- T3D.** Consider development of a Complete Streets Design Manual that can serve as a guide for public and private development projects that propose new streets or modifications of existing streets.
- T3E.** Encourage new development in close proximity to existing employment, housing, schools, commercial centers, and other services and amenities.

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## GOAL T4

**WORK WITH THE PUBLIC, STAKEHOLDERS, AND OTHER JURISDICTIONS AND AGENCIES TO PROMOTE, DESIGN, AND CONSTRUCT AN EFFECTIVE TRANSPORTATION SYSTEM THAT SERVES ALL USERS.**

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**Policies to achieve this Goal are to:**

- T4A.** Undertake targeted outreach and public participation in community decisions concerning street design and use.
- T4B.** In collaboration with Shasta County, City of Anderson, City of Shasta Lake, and the Regional Transportation Planning Agency, integrate bicycle, pedestrian, and public transportation facility planning into regional and local transportation planning programs to

to encourage the highest level of use, pedestrian facilities need to be linked or connected to areas or destination points that people want to get to. These include, but are not limited to: a neighborhood store, place of employment, neighboring development, educational/recreational facilities, the river, or other creekside trail. Policies addressing this issue are included in the Community Development and Design Element.

When walking is not perceived as safe, convenient, or comfortable, it is not selected as the mode of travel by those who have a choice. Development of the type of pedestrian system described in this section is essential to increasing the number of individuals choosing to walk through the Redding community. The Recreation Element also addresses the establishment of a comprehensive trail system that will complement the City's sidewalk system.

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### GOAL T10

#### PROVIDE AN ATTRACTIVE, SAFE, AND CONTINUOUS SYSTEM OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES.

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##### Policies to achieve this goal are to:

- T10A. Provide pedestrian-oriented features, such as benches, enhanced landscape, and trash receptacles, in commercial areas, particularly in the Downtown and Park Marina areas.
- T10B. Require new development to provide sidewalks or other pedestrian-dedicated facilities on both sides of new public streets. Exceptions may be appropriate where topography is difficult, proposed lots are of a rural or semi-rural nature, or where the development plan illustrates that pedestrians will be accommodated by alternative means.
- T10C. Work with neighborhoods to decide where curbs, gutters, and sidewalks are needed on unimproved local streets and how to pay for the improvements; establish sidewalk continuity wherever feasible.
- T10D. Pursue funding for the continued replacement and repair of sidewalks that have deteriorated due to age and tree-root invasion.

T10E. Develop and implement a program to identify, prioritize, and fund the retrofitting of existing intersections that do not currently have handicapped access ramps at the street corners.

T10F. Require all new or renovated pedestrian facilities to be of a sufficient width to ensure pedestrian comfort and safety and to accommodate the special needs of the physically disabled.

T10G. Restrict speed limits in residential neighborhoods, Downtown, and other areas of the City where pedestrian activities are strongly encouraged to reduce the potential for pedestrian injuries and fatalities.

### PARKING

Parking facilities are an important part of the transportation system. Allowing on-street parking along busy arterial streets, for instance, increases the possibility of pedestrian and vehicle conflicts and can disrupt the flow of traffic. Off-street parking often has its own drawbacks, particularly related to conflicts resulting from the number and location of driveways and the appearance they have from the street. The latter issue is addressed in the Community Development and Design Element. In certain areas, such as Downtown, on-street parking is desirable, the conflicts noted above notwithstanding. Traffic generally moves at a slower speed in the Downtown area and maintains a small-town feel to the streets.

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### GOAL T11

#### ENSURE THAT SUFFICIENT, WELL-DESIGNED, AND CONVENIENT ON-STREET AND OFF-STREET PARKING FACILITIES ARE PROVIDED TO SERVE LAND USES THROUGHOUT THE CITY.

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##### Policies to achieve this goal are to:

- T11A. Maintain adequate on-street and public off-street parking areas within the Downtown area to meet ongoing parking demands.
- T11B. Generally prohibit on-street parking on arterial streets outside the Downtown area to reduce congestion and conflicts.
- T11C. Pursue funding options and strategies for the construction and maintenance of shared-parking facilities/structures Downtown.

T11D. Establish maximum and minimum standards for parking spaces in transit corridors and Downtown to promote use of alternate modes.

**BICYCLE SYSTEM**

Bicycles can be an integral part of a city's transportation system. As lifestyles and land use patterns continue to change, there is every reason to expect that this transportation mode will increase considerably. To make the most of commuter bicycle use, a comprehensive system of bikeways needs to be established. There are many opportunities within Redding's existing arterial and collector street system to establish a viable commuter system. In many instances, this system can be linked to the system of multiuse trails that have been and will be constructed along the river, its tributary streams, and other areas. It will take commitment on the part of the City to ensure that proper facilities are provided as new streets are constructed and to establish an active program to retrofit existing streets to accommodate bike facilities. This work may consist of restriping streets to provide adequate width for bike facilities and/or providing additional paved width along shoulders. The preparation of a properly documented Bikeway Plan is necessary to identify existing deficiencies, recommend upgrades, and establish timing and funding priorities.

Until a Comprehensive Bikeway Plan is adopted, Figure 2-3 should be used to plan for a well-integrated bikeway system. The system should include all classes of facilities as addressed in Table 2-1.

**Table 2-1  
Bikeway Classifications**

Bikeway Classification	Description of Facility
Class I	Paths developed within an entirely separate right-of-way for the exclusive use of bicycles and pedestrians. Except for occasional cross-flow points, these facilities completely separate cyclists from motorists.
Class II	Lanes within the road right-of-way designated specifically for one-way bicycle use. Class II facilities are delineated by signs and striping along street shoulders.
Class III	Bicycle routes indicated only by posted signs on existing streets. No specific bicycle lane is delineated.

**GOAL T12**

**MAKE IT EASIER AND SAFER FOR PEOPLE TO TRAVEL BY BICYCLE.**

**Policies to achieve this goal are to:**

- T12A. Develop and maintain a Comprehensive Bikeway Plan geared to establishing an integrated bicycle system.
- T12B. Incorporate facilities suitable for bicycle use in the design of interchanges, intersections, and other street-improvement/maintenance projects.
- T12C. Make improvements to streets, signs, and traffic signals as needed to improve bicycle travel.
- T12D. Keep bikeways free of overhanging shrubbery, debris, and other obstacles.
- T12E. Install bicycle parking in the Downtown area and at City parks, civic buildings, and other community centers.
- T12F. Support the efforts of the Redding Area Bus Authority (RABA) to provide bicycle racks on all buses within the system.
- T12G. Require new development to provide bicycle facilities or pay in-lieu fees based on the fair share of that development's impacts on the bikeway system and needs identified on the Comprehensive Bikeway Plan.

**PUBLIC TRANSPORTATION AND FACILITIES**

Public transportation, particularly bus service, is essential to the circulation system. It is often the only means of transport for people who cannot or choose not to drive, including school children, the elderly, and disabled persons. In conjunction with fundamental land use changes that provide adequate densities to ensure the feasibility of transit, the availability of a quality public transportation system can help reduce residents' dependence on the automobile. Coordination between transit and air transportation services can also enhance the transportation options available to residents and visitors.

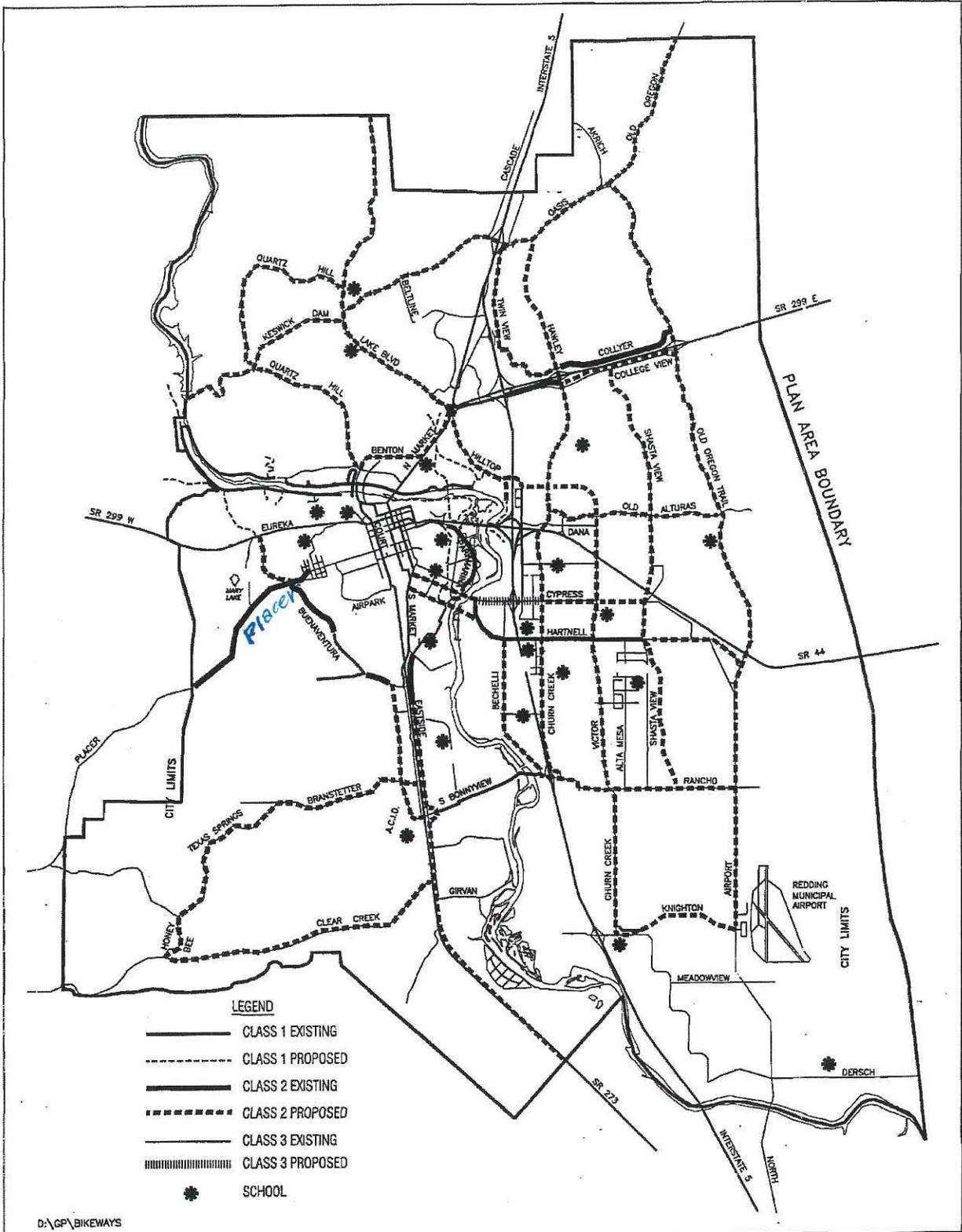


Figure 2-3 Bikeway System



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### GOAL T13

**PROMOTE AND MAINTAIN A PUBLIC TRANSIT SYSTEM THAT IS SAFE, EFFICIENT, COST-EFFECTIVE, AND RESPONSIVE TO THE NEEDS OF RESIDENTS.**

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**Policies to achieve this goal are to:**

- T13A. Support the continuation and expansion of private commercial bus operations to provide additional regional transit opportunities for residents.
- T13B. Work with the Redding Area Bus Authority (RABA) on an ongoing basis to plan and implement additional transit services that are timely, cost-effective, responsive to growth patterns, and meet the needs of existing and future transit demand.
- T13C. Provide bus pull-outs along arterial streets at approximately ¼-mile intervals or as indicated in the Shasta County Transit Development Plan. Determine the precise locations during development plan review or at the time of major street improvement or reconstruction.
- T13D. Require development to install passenger amenities at designated bus stops when identified as a mitigating measure.
- T13E. Provide attractive, well-lighted, comfortable, and protected waiting areas for bus passengers.
- T13F. Promote coordination of transit and air transportation services to enhance the transportation options available for residents and visitors to the Redding community.

#### AIR TRANSPORTATION AND FACILITIES

Redding's two airports—Redding Municipal and Benton Airpark—provide the community with transportation options which not all cities have. Not only do these facilities provide a base for corporate, recreational, and emergency-response aircraft, they also play a key role in serving the commercial aviation needs of businesses and the traveling public. It is important that the community support activities to maintain and expand these facilities as needed in conjunction with the City's growth.

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### GOAL T14

**PRESERVE AND ENHANCE THE AIR TRANSPORTATION OPPORTUNITIES PROVIDED BY THE REDDING MUNICIPAL AIRPORT AND BENTON AIRPARK, WHILE PROTECTING THE PUBLIC FROM AIRPORT-RELATED NOISE AND SAFETY HAZARDS.**

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**Policies to achieve this goal are to:**

- T14A. Continue to plan and develop the Redding Municipal Airport to maximize its contributions to business efficiency, economic development, and recreational opportunities within the region.
- T14B. Encourage the establishment of additional commercial airline providers at the Redding Municipal Airport to provide the widest range of aviation travel choices to residents and businesses within the region.
- T14C. Support Benton Airpark as a public-use, general aviation airport and commercial-reliever facility for the Redding Municipal Airport.
- T14D. Protect existing and planned local air transportation facilities from encroachment by potentially incompatible land uses and require developers to file an aviation easement with the City if a proposed development or expansion of an existing use is located in the area subject to the overlay district.

#### RAIL SERVICES AND FACILITIES

Redding is bisected by the Union Pacific railroad in a north-south direction. The railroad provides valuable opportunities for rail transit from several industrial areas and also serves passengers to a somewhat limited extent.

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### GOAL T15

**ENCOURAGE MAXIMUM AVAILABILITY AND USE OF BOTH FREIGHT AND PASSENGER RAIL SERVICE.**

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**Policies to achieve this goal are to:**

ITEM NO.	9-11(h)
MEETING DATE	December 16, 2008
APPROVED BY	
DEPARTMENT DIRECTOR	
CITY MANAGER	

CITY OF REDDING

## REPORT TO CITY COUNCIL

DATE: December 5, 2008  
T-080-400

FROM: Brian Crane, Transportation/Engineering Director

SUBJECT: City of Redding Traffic Impact Fee Program  
Project Priority List Update

### *Recommendation*

It is the recommendation of staff that the City Council approve the proposed update of the Citywide Development Traffic Impact Fee (TIF) Project Priority List. This update will allow staff to direct resources in planning and delivering these priority projects for construction.

### *Background*

The City's TIF program was first developed in 2004, with a list of Council-approved priority projects to be constructed over a 10-year period. Since that time, several projects have reached construction, including the widening of South Bonnyview Road, the replacement of the Cypress Bridge, the widening of the Hilltop Drive overcrossing of State Route 44, and the signalization of several intersections. However, conditions have changed some since 2004, and an update to the project priority list is needed.

In order to accomplish this effort, the City Council, at its regular meeting on November 6, 2007, directed staff to:

- ▶ Review project scope, cost, and schedule for the current Citywide TIF Program priorities.
- ▶ Evaluate transportation-system needs and consider new projects that should be added to the program priorities.
- ▶ Form an advisory committee to support development of revised priorities.
- ▶ Return to Council with the revised Citywide TIF Program priorities for Council consideration.

With this direction, staff utilized the Shasta County Regional Travel Demand Model (Model) to develop a list of candidate projects based on projected 2015 transportation operational and capacity needs. Overall, this exercise identified 22 project needs that were carried forward in the prioritization effort. Fact sheets with project descriptions and a summary of community impacts, system benefits, and costs were developed and used by staff to develop program priorities.

Staff presented these fact sheets and other information to a citizens' advisory committee. A matrix was used by staff and the committee that allowed a project ranking to be developed based on factors including the project benefit to the overall transportation system, impacts of the project on the community as a whole, the relative cost of each project, and the individual committee member's subjective project priority. An overall ranking was then developed and ultimately agreed upon by staff and the advisory committee (see attached scoring table).

In addition to the large projects, staff and the advisory committee discussed and recommend that two additional priorities be included in the recommended list. The first item includes an annual

reservation for traffic signals, consistent with the previous list and past practices. The second item includes an annual reservation for small projects, including various low-cost operational and capacity improvements and using this reservation to leverage other funding on larger projects. Attached is the proposed project priority list, including the 22 candidate TIF projects and the annual signal and small project reservations.

The delivery of the projects is dependent on funds available in the Citywide TIF Program. Attached is a projected cash flow table that provides anticipated fund balances available for the program through Fiscal Year 2013–14. Staff is currently working on the *Placer Street Widening-Airpark Drive to Buenaventura Boulevard Project* and *Quartz Hill Road-Snow Lane to Top of the Hill Project*, as previously directed by Council.

**Issues**

Does the City Council wish to update the current list of priority projects for the Citywide Traffic Development Impact Fee Program?

**Fiscal Impact**

There is no direct fiscal impact to the City at this time. As each individual project is pursued, staff will return to Council for approval of expenditures.

**Alternatives and Implications to the Alternatives**

Alternatives for the City Council to consider are:

1. Approve the proposed TIF Project Priority List. This alternative will allow staff to direct the necessary resources to planning and delivering these priority projects for construction, thereby working to reduce congestion on City roadways. **(Staff Recommendation)**
2. Keep the current TIF Priority Project List and consider program adjustments at a later date. With this alternative, staff will continue to pursue projects on the current list in accordance with Council direction.
3. Provide alternative direction to staff.

**Conclusion**

The TIF Program is a key element in preserving levels of service on the City's roadways and bikeways. It is important to periodically reassess the system priority projects and make adjustments to ensure that facility infrastructure closely parallels area development and the corresponding demand for roadway capacity.

**Attachments**

- A. Current TIF Priority List
- B. Project Scoring Matrix
- C. TIF Project Cash Flow Table
- D. Recommended TIF Priority List

CA:el

STAF\ENGR\TIFPrgrmPriorityListUpdate-CA-CC.wpd

**City of Redding Approved Traffic Impact Fee Projects 2004 - 2014**

TIF Funded Projects	Location	Estimated TIF	
Airport Rd Widening	SR 44 to Rancho Rd.	\$12,000,000	
Caterpillar Rd	George Dr to SR 273	\$648,000	
Hartnell Ave Widening	Victor Ave to Shasta View Dr	\$4,893,000	
Hilltop Dr Overcrossing	Widen over I-5	\$1,769,000	
Hilltop Dr Overcrossing	Widen over SR 44	\$1,775,000	<i>Constructed</i>
Hilltop Dr Widening	I-5 to Lake Blvd	\$3,673,000	
Old Alturas Rd Widening	Victor Ave to Oak Mesa Ln	\$2,590,000	
Placer St Widening	Airpark to Buenaventura Blvd	\$2,400,000	<i>In Design</i>
Placer St Widening	Buenaventura Blvd to Boston St.	\$4,850,000	
Quartz Hill Widening	Snow Ln to Keswick Dam Blvd	\$1,280,000	<i>In Design</i>
Shasta View Dr Extension	Collyer Dr to Old Indian Trail	\$600,000	
S Bonnyview Widening	Sacramento River to SR 273	\$4,672,000	<i>In Construction</i>
Signalize 20 intersections @ \$250,000 each		\$5,000,000	
	Total	\$46,150,000	

ITEM 4-11 (h)  
ATTACHMENT A

# PROJECT SCORING TABLE

Map ID	Project Description	Total Score	Estimated Cost
O	Placer St Widening - Buenaventura Blvd to Boston St.	339	\$1,350,000
Q	Victor Ave Widening - Hartnell Ave to E Cypress Ave.	290	\$4,100,000
E	Hilltop Dr Widening - I-5 to Lake Blvd	289	\$1,400,000
T	Victor Ave Widening - Vega Street to Hartnell	271	\$4,750,000
F	Churn Creek Road Widening - Churn Creek to SR 299E	234	\$3,120,000
I	Churn Creek Road Widening - Browning St. to Churn Creek	234	\$3,468,000
J	Hilltop Dr Overcrossing - Widen over I-5	220	\$8,100,000
V	Churn Creek Road Widening - City Limits to Victor Ave	213	\$2,816,000
P	Railroad Ave Widening - Sheridan St. to Grandview	212	\$2,320,000
M	Victor Ave Widening - E. Cypress Ave to Mistletoe Lane	209	\$4,675,000
L	Victor Ave Widening - SR 44 to Old Alturas Road	208	\$2,800,000
C	Shasta View Dr Widening - SR 299E to Palacio Drive	204	\$3,785,000
H	Shasta View Dr Widening - Hemmingway Drive to Atrium Way	201	\$4,992,000
R	Hartnell Ave Widening - Victor Ave. to Shasta View Dr	201	\$6,000,000
D	Quartz Hill Widening - Top of the Hill to City Limits	193	\$4,200,000
A	Caterpillar Rd - George Dr to SR 273 - Widen Roadway & Signal	179	\$1,700,000
S	Shasta View Dr Widening - Hartnell Avenue to Goodwater Ave.	177	\$5,819,000
U	Airport Rd Widening - SR 44 to Rancho Rd.	174	\$6,121,000
K	Old Alturas Rd Widening - Victor Ave to Shasta View Drive	174	\$8,550,000
N	Cypress Connection - Victor to Shasta View	129	\$17,000,000
G	Palacio Connection - Churn Creek to Cornell Place (Shasta Vw.)	97	\$8,500,000
B	Shasta View Dr Extension - Collyer Dr to Manzanoaks Drive	93	\$13,000,000

ITEM 4-11(h)  
 ATTACHMENT 5

**CITYWIDE TIF CASH FLOW PROJECTIONS**

	2005/06 Expenditures	2006/07 Expenditures	2007/08 Expenditures	2008/09 Budgeted	2009/10 CIP Exp.	2010/11 CIP Exp.	2011/12 CIP Exp.	2012/13 CIP Exp.	2013/14 CIP Exp.
<b>REVENUES</b>									
Beginning TIF Balance									
Bond Proceeds		\$10,000,177.88							
TIF Actual/Budgeted Revenue	\$4,589,888.13	\$4,134,318.60	\$2,132,843.78	\$2,300,000.00	\$1,700,000.00	\$1,700,000.00	\$1,700,000.00	\$1,700,000.00	\$1,700,000.00
Interest Revenue	\$435,985.60	\$886,461.48	\$1,028,113.00	\$314,000.00	\$232,191.82	\$143,443.06	\$109,917.62	\$115,634.36	\$121,486.13
Subtotal	\$4,985,064.73	\$14,820,958.94	\$3,161,056.78	\$2,614,000.00	\$1,932,191.82	\$1,843,443.06	\$1,809,917.62	\$1,815,634.36	\$1,821,486.13
<b>TOTAL TIF AVAILABLE</b>	\$15,489,147.26	\$28,460,198.08	\$29,873,654.30	\$25,377,455.11	\$13,541,782.63	\$9,015,986.99	\$7,305,798.61	\$7,597,352.47	\$7,895,741.99
<b>TIF ADMINISTRATIVE COSTS</b>									
Annual Administration Costs									
2008 TIF Update									
Bond Debt Service									
Subtotal									
<b>CURRENT TIF COMMITMENTS</b>									
Traffic Signal Lake @ Keswick (4797)									
Traffic Signal Airport/Rancho (4769)									
Traffic Signal Shasta View/Hardell									
Traffic Signal Shasta View Hwy 44 Ramp									
Traffic Signal Airport/Hwy 44 Ramp EB (4537)									
Traffic Signal Buenaventura @ Summit/Canyon									
Traffic Signal Quartz Hill/Benton									
Victor Ave Widening (for purchase)									
South Bennyview (4794)									
Cypress Bridge (4506)									
Quartz Hill Widening Snow Ln to Top of The Hill									
Victor Ave Plan Line (4321)									
Hilltop Widening Overpass @ 44 (4727)									
Airport Road Plan Line (4323)									
Placer (Airport to Buenaventa Ventures) Widening									
Subtotal									
<b>AVAILABLE FOR NEW PROJECTS</b>									
Small Project Reservation									
Traffic Signal Reservation									
Available for Large Projects									
	\$14,839,240.14	\$26,812,597.52	\$22,763,455.11	\$11,609,591.11	\$7,722,152.83	\$5,045,880.99	\$6,331,718.11	\$6,624,256.46	\$6,370,788.47

ITEM 24-11 (ch)  
ATTACHMENT C

## Recommended TIF Project Priority List

Project Description	Estimated Cost
Placer St Widening - Buenaventura Blvd to Boston St.	\$1,350,000
Victor Ave Widening - Hartnell Ave to E Cypress Ave.	\$4,100,000
Hilltop Dr Widening - I-5 to Lake Blvd	\$1,400,000
Victor Ave Widening - Vega Street to Hartnell	\$4,750,000
Churn Creek Road Widening - Churn Creek to SR 299E	\$3,120,000
Churn Creek Road Widening - Browning St. to Churn Creek	\$3,468,000
Hilltop Dr Overcrossing - Widen over I-5	\$8,100,000
Churn Creek Road Widening - City Limits to Victor Ave	\$2,816,000
Railroad Ave Widening - Sheridan St. to Grandview	\$2,320,000
Victor Ave Widening - E. Cypress Ave to Mistletoe Lane	\$4,675,000
Victor Ave Widening - SR 44 to Old Alturas Road	\$2,800,000
Shasta View Dr Widening - SR 299E to Palacio Drive	\$3,785,000
Shasta View Dr Widening - Hemmingway Drive to Atrium Way	\$4,992,000
Hartnell Ave Widening -Victor Ave. to Shasta View Dr	\$6,000,000
Quartz Hill Widening - Top of the Hill to City Limits	\$4,200,000
Caterpillar Rd - George Dr to SR 273 - Widen Roadway & Signal	\$1,700,000
Shasta View Dr Widening - Hartnell Avenue to Goodwater Ave.	\$5,819,000
Airport Rd Widening - SR 44 to Rancho Rd.	\$6,121,000
Old Alturas Rd Widening - Victor Ave to Shasta View Drive	\$8,550,000
Cypress Connection - Victor to Shasta View	\$17,000,000
Palacio Connection - Churn Creek to Cornell Place (Shasta Vw.)	\$8,500,000
Shasta View Dr Extension - Collyer Dr to Manzanoaks Drive	\$13,000,000
Browning Street - Churn Creek to Friendly	\$400,000
Signals - Various (Annual)	\$250,000
Small Projects - Various (Annual)	\$300,000

ITEM 4-11 (h)  
ATTACHMENT D

City Council, Regular Meeting  
City Council Chambers  
777 Cypress Avenue  
Redding, California  
December 16, 2008, 7:00 p.m.

The Pledge of Allegiance to the flag was lead by Council Member Jones.

The Invocation was provided by Redding Police Chaplain Cyndee Thomas.

The meeting was called to order by Mayor Bosetti with the following Council Members Present: Dickerson, Jones, McArthur, and Stegall.

Also present were City Manager Starman, Assistant City Manager Tippin, City Attorney Duvernay, Development Services Director Hamilton, Transportation and Engineering Director Crane, Electric Utility Director Hauser, Police Chief Hansen, Community Services Director Niemer, Senior Planner Manuel, City Clerk Strohmayer, Assistant City Clerk Mize, and Executive Assistant Stribley.

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PUBLIC COMMENT

(P-150-150)

Shelly Shively, Redding resident, urged the City Council to reconsider neighborhood policing budget cuts, particularly in the Garden Tract and Parkview Neighborhoods. She pointed out that an enormous amount of work has been done in the past to rehabilitate these areas and she expressed concern that the lack of neighborhood policing would invite criminal activity back into the area.

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PRESENTATION - Appreciation Clock to Fred Quigley for service on the Community Development Advisory Committee

[B-080-600-100]

On behalf of the City Council, Mayor Bosetti presented a Clock of Appreciation to Fred Quigley for service on the Community Development Advisory Committee.

Mr. Quigley stated that he enjoyed the years of service and thanked the community and the City Council for the opportunity to serve.

PRESENTATION - Appreciation Clock to Missy McArthur for service on the Shasta Public Library Citizens' Advisory Committee

[B-080-600-244 & L-050]

Mayor Bosetti presented a Clock of Appreciation to Council Member McArthur for her service on the Shasta Public Library Citizens' Advisory Committee.

Council Member McArthur thanked the community.

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CONSENT CALENDAR

The following matters were considered inclusively under the Consent Calendar.

Approval of Minutes - Regular and Special Meetings of December 2, 2008

Approval of Payroll and Accounts Payable Register

(A-050-100-500)

It is recommended that Accounts Payable Register No. 11, check numbers 868960 through 869458 inclusive, in the amount of \$9,449,962.95, for the period of December 1, 2008, through December 12, 2008; and Payroll Register No. 11, electronic deposit transaction numbers 244376 through 245226 and check numbers 542180 through 542276 inclusive, in the amount of \$2,622,363.12, for the period of November 16, 2008, through November 29, 2008, be approved. TOTAL: \$12,072,326.07

Treasurer's Report - October 2008

(A-050-100-600)

Total Treasurer's Accountability - \$147,849,986.39

\$49 million to clear the back log of needed street repairs. He related that the study estimates were somewhat high and other methods have been researched to lower cost. Last year, he said it cost \$3.8 million for street maintenance, and it is anticipated that \$2.5 million will be spent in 2009.

No action was required on this informational item.

CITY COUNCIL MEETING AGENDA/CONSENT CALENDER

[A-050-060]

Council Member McArthur expressed concern that when citizens attend a City Council meeting, there is no way for them to view the detailed information regarding award of bid items listed on the Consent Calendar of the City Council Agenda. Members of the audience do not know who bid, the amount of the bid, or the name of the successful bidder. She suggested that this information be included on the Agenda under Award of Bids listed on the Consent Calendar.

In response to Council Member Stegall, City Manager Starman advised that the bid list information is included in the staff report and that the information is also available on the City's website.

City Clerk Strohmayer suggested that extra copies of the staff reports for the Agenda could be brought to the meeting and made available to interested members of the public.

**MOTION:** Made by Council Member Jones, seconded by Council Member McArthur, directing the City Clerk to provide copies of the Consent Calendar staff reports to the public at City Council meetings. The Vote:

AYES: Council Members - Jones, McArthur, and Bosetti

NOES: Council Members - Dickerson and Stegall

ABSTAIN: Council Members - None

ABSENT: Council Members - None



UPDATE TO CITYWIDE DEVELOPMENT TRAFFIC IMPACT FEE PROJECT PRIORITY LIST

[T-080-400]

Transportation and Engineering Director Crane provided a PowerPoint presentation depicting the Traffic Impact Fee (TIF) Project Priority List and pointing out projects that are complete or nearing completion. He advised that, due to the weak economy, less funds are available than previously estimated. He stated that TIF funds are derived from development, specifically, single family residential permits (\$5,288), commercial permits (\$25 per square foot), and industrial permits (\$5 per square foot).

In order to propose a new TIF Priority List, Mr. Crane said staff reviewed the Shasta County Regional Demand Model, focusing on the portions with City streets, looked at "hot spots" within the City and, with the Traffic Advisory Committee, developed a list of 22 potential projects. He stated that Placer Road from Buenaventura Boulevard to Boston Street project ranked number one.

Mr. Crane recommended that the City Council approve the Large Project List of Priorities, reserve \$300,000 for small projects, and reserve \$250,000 for a traffic signal.

Gary Cadd, Redding resident, suggested that a list of the top five TIF projects be sent to the newly-elected administration in Washington to be considered for funding as part of the proposed economic stimulus package.

Council Members Stegall and McArthur inquired about the status of the over-crossing or under-crossing project at the railroad tracks at South Street. Council Member Stegall recalled that \$12.5 million was set for the crossing several years ago and she believed the state later removed the funding. City Manager Starman concurred and suggested that the crossing could be on the list for the stimulus package, but because only a portion of TIF funds (which generally mitigate new development) would be allowed for the project itself, there must be an allocation from another source.



**MOTION:** Made by Council Member Stegall, seconded by Council Member Jones, approving the Traffic Impact Fee Large Project List of Priorities, reserving \$300,000 in TIF funds for small projects, and reserving \$250,000 for traffic signalization.

The Vote: Unanimous Ayes

REC'D JF 1-18-13

# CITY OF REDDING



PUBLIC WORKS - ENGINEERING

777 Cypress Avenue, Redding, CA 96001-7718

P.O. Box 496071, Redding, CA 96049-6071

530.225.4170 FAX 530.225.7024

**FILED**

JAN 23 2012

CATHY DARLING ALLEN, COUNTY CLERK

BY: *[Signature]*  
DEPUTY CLERK

## NOTICE OF DETERMINATION

**TO:**  Office of Planning and Research  
P.O. Box 3044, 1400 Tenth Street, Room 212  
Sacramento, CA 95814

**FROM:** City of Redding  
Development Services Department  
777 Cypress Avenue  
Redding, CA 96001

County Clerk  
County of Shasta  
P.O. Box 990880, 1643 Market Street  
Redding, CA 96099-0880

**Subject:**

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code

**FILED**  
THIS NOTICE WAS POSTED ON  
01/24/2012  
IT WILL REMAIN POSTED THROUGH  
02/1/2012  
A PERIOD OF 30 DAYS  
CATHY DARLING ALLEN, COUNTY CLERK  
BY: *[Signature]*  
DEPUTY CLERK

Placer Street Improvement Project, by the City of Redding  
**Project Title**

2011112057      Jonathan Oldham      530-225-4046  
State Clearinghouse No.      Lead Agency Contact Person      Area Code/Telephone/Extension  
(If submitted to Clearinghouse)

On Placer Street, from Olive Avenue, extending west to Boston Avenue, Redding, Shasta County  
**Project Location (include county)**

**Project Description:** The project will widen approximately 1,200 lineal feet of Placer Street and restripe portions of that street to establish a uniform, five-lane arterial facility (including center turn lane) and auxiliary turn lanes where warranted. Utility lines will be upgraded, and a new traffic signal will be constructed at the intersection of Wisconsin Avenue and Placer Street. West of Boston Avenue, Placer Street will receive an asphalt overlay for a distance of approximately 1,600 feet, but no widening will occur in this area.

This is to advise that the City of Redding has approved the above-described project on January 17, 2012 and has made the following determinations regarding the above-described project:

1. The project  will  will not have a significant effect on the environment.
2.  An Environmental Impact Report was prepared for this project pursuant to provisions of CEQA.  
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures  were  were not made a condition of the approval of the project.
4. A Mitigation Report or Monitoring Plan  was  was not made a condition of the approval of the project.
5. A statement of Overriding Considerations  was  was not adopted for this project.
6. Findings  were  were not made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the general public at Redding City Hall, 777 Cypress Avenue, Redding, California.

Date Mailed: 1/20/12  
Date Received for filing: 1/23/12

*[Signature]*  
Jonathan Oldham  
Environmental Compliance Manager



**DATE:** March 6, 2013

**CODE:** S-070-100

**TO:** Project File

**FROM:** Jonathan Oldham *JO*  
Environmental Compliance Manager

**COPY:** James Triantafyllou, Project Coordinator  
John Abshier, Traffic Operations Manager

**Placer Street Improvement Project  
SCH NO. 2011112057  
Addendum No. 1 to the Mitigated Negative Declaration**

**Introduction**

The Placer Street Improvement Project Mitigated Negative Declaration (MND) was adopted by the City of Redding City Council on January 17, 2012 pursuant to the California Environmental Quality Act (CEQA). A CEQA Notice of Determination was subsequently filed on January 20, 2012 with the State Clearinghouse. Since that time, regulatory permits have been obtained and the project entered the final design phase. During the final design process, however, slight design modifications resulted in a minor change to the Environmental Study Limits (ESL) for the project as described in the MND. This document describes the change and provides an evaluation of the associated impacts.

**Project Description**

The project proposes to widen 1200 feet of Placer Street and restripe sections from Olive Avenue to Boston Avenue to establish a uniform, five lane arterial facility (including center turn lane) and auxiliary turn lanes where warranted. A new traffic signal will be constructed at the intersection of Wisconsin Avenue and Placer Street. West of Boston Avenue, Placer Street will receive an asphalt overlay for a distance of 1600 feet but no widening will occur in this area. Construction is scheduled to begin June 2012.

The original project description included improvements in and around the intersection of Placer Street and Buenaventura Blvd, extending approximately 115 feet south on Buenaventura Blvd. The project has now been modified to include curb, gutter, and sidewalk along the eastern edge of Buenaventura Blvd to connect existing sidewalks along that side of the street. This will extend the ESL an additional 200 feet southward along the east side of the roadway. Construction techniques and mitigation measures pertinent to the project as outlined in the MND, including the Initial Study, and as required by project permits will not change.

## **Evaluation of Impacts**

The sidewalk will be constructed along the existing graveled road shoulder. A portion of the adjacent landscaping will also be impacted. The landscaping is part of a shopping center development and a City of Redding fire station. All areas within the additional ESL are either paved, landscaped, or graveled. There are no native trees, shrubs, wetlands, or other natural resources present. The impacts resulting from the addition curb, gutter, and sidewalk will be insignificant. There will be no additional significant effects to aesthetics, biological resources, mineral resources, public services, utilities, agricultural resources, cultural resources, hydrology and water quality, ambient noise levels, recreation, air quality, geology/soils, land use, populations and housing, or traffic. The modified project will not result in or create significant hazards or hazardous materials, nor will it result in a cumulative impact on the environment. All provisions of the MND, including avoidance and mitigation measures, will be in effect during construction.

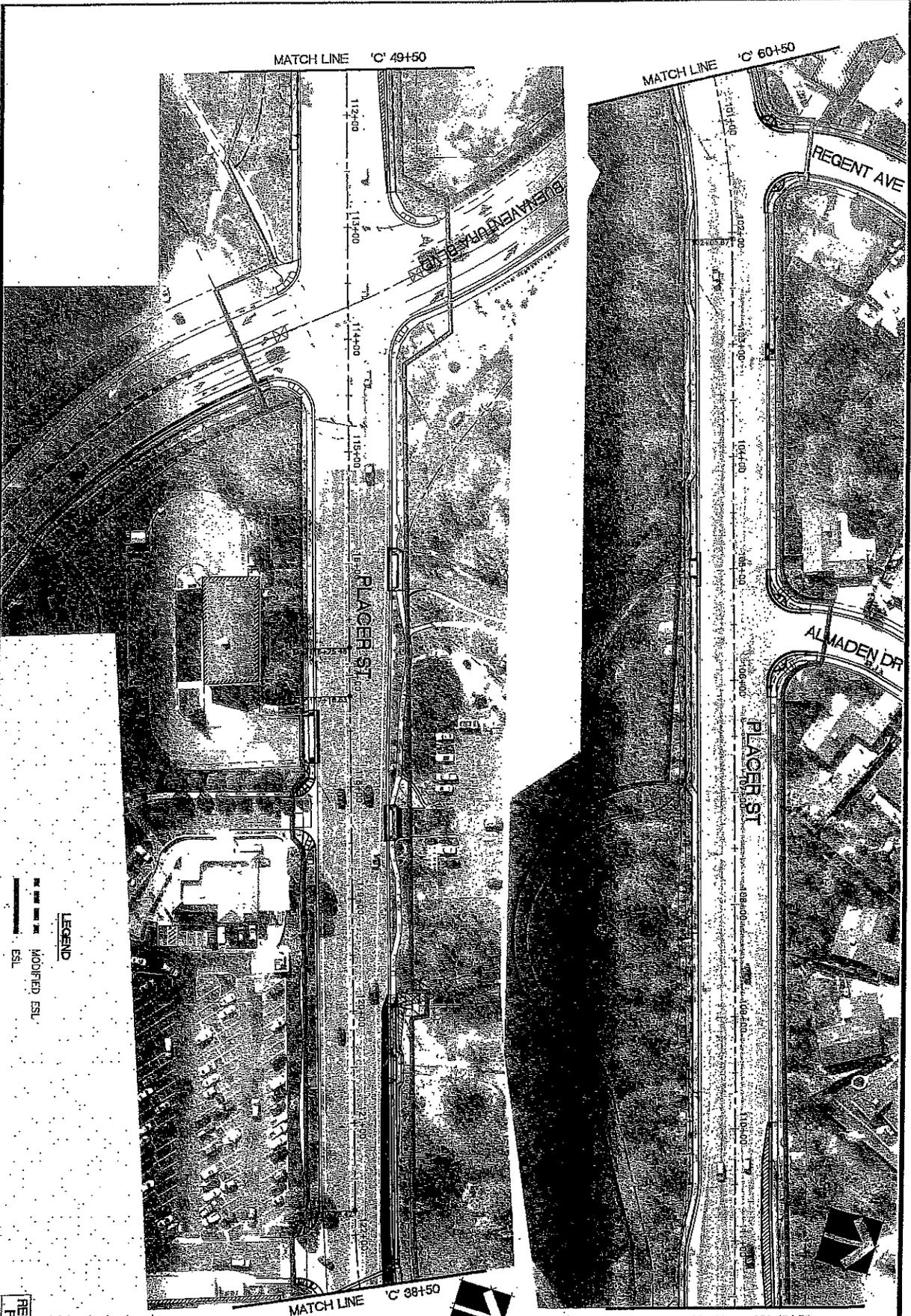
## **Conclusions**

The change described herein is desirable for the project. None of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent negative declaration have occurred. There have been no substantial changes proposed in the project which will require major revisions to the previous negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. There are no substantial changes that will occur with respect to the circumstances under which the project is undertaken which will require major revisions of the negative declaration due to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. There is no new information of substantial importance which was not known and could not have been known at the time the previous negative declaration was adopted as complete that shows any of the following: the project will have significant effects not discussed in the negative declaration; significant effects previously examined will be substantially more severe than shown in the negative declaration; mitigation measures or alternatives previously found not to be feasible would be feasible and would substantially reduce the significant effects of the project but the City of Redding declined to adopt the measures or alternatives; or mitigation measures or alternatives which are considerably different from those analyzed in the previous negative declaration would substantially reduce significant effects, but the City of Redding declined to adopt the mitigation measures or alternatives.

The additional area of curb, gutter, and sidewalk and expansion of the ESL as described herein is considered a minor technical change given the nature and extent of the work. The change will not have an additional significant effect on the environment when compared to the original project.

## **Attachments**

Attachment 1: Modified Environmental Study Limits Map



<p>REDUCED PLANS</p> <p>DATE FEB 2013</p> <p>SHEET 4 OF 7</p>	<p>A-4</p> <p>PLACER STREET IMPROVEMENTS ENVIRONMENTAL STUDY LIMITS</p>	<p>CITY OF REDDING</p> <p>TRANSPORTATION AND ENGINEERING</p> <p>DESIGNED BY: J. ABSHIER</p> <p>DRAWN BY: L. BETTES</p> <p>REVIEWED BY:</p>	<p>DESIGNED BY: J. ABSHIER</p> <p>DRAWN BY: L. BETTES</p> <p>REVIEWED BY:</p>	<p>ORIGINAL SCALE IN INCHES</p> <p>0 1 2</p>
	<p>City of Redding</p> <p>EST. 1840</p>	<p>PLACER STREET IMPROVEMENTS</p>	<p>PROJECT NUMBER: 2012-0000</p>	

**CITY OF REDDING, CALIFORNIA  
COUNCIL POLICY**

SUBJECT	RESOLUTION NUMBER	POLICY NUMBER	EFFECTIVE DATE	PAGE
COMPLETE STREETS INFRASTRUCTURE	2012-073	1303	AUGUST 21, 2012	1

***BACKGROUND***

On September 30, 2008, Governor Arnold Schwarzenegger signed Assembly Bill 1358, "The California Complete Streets Act." The legislation requires local jurisdictions to amend their General Plans as necessary to ensure that they include polices that will lead to the construction of streets that can accommodate use by pedestrians, bicyclists, disabled persons, and transit users, in addition to motor vehicles. The City of Redding adopted amendments to the Transportation Element of the General Plan on August 21, 2012, to comply with the Complete Streets Act.

***PURPOSE***

The purpose of this Council policy is to provide specific direction to affected City departments in the implementation of the City's Complete Street policies.

***POLICY***

The following shall be the policy of the City of Redding to ensure that Complete Streets are, and will continue to be, a vital element of the City's transportation infrastructure.

1. The various departments of the City of Redding shall make Complete Streets practices a routine part of everyday operations, shall approach transportation projects and programs as opportunities to improve public streets and the transportation network for all users, and shall work in coordination with other departments, agencies, and jurisdictions to achieve Complete Streets. For purposes of this resolution, projects and programs include the public and private construction, reconstruction, retrofit, maintenance, alteration, or repair of the street system and includes the planning, design, approval, and implementation processes. Projects and programs do not include minor routine upkeep such as cleaning, sweeping, mowing, spot repair, or interim measures on detour routes.
2. Street projects, including those constructed within and adjacent to, or necessary to serve, new development should incorporate Complete Streets infrastructure that balances the needs of all users, provided, however, that such infrastructure may be excluded upon written approval by the Public Works Director where documentation and data indicate that:
  - a. Use by nonmotorized users is prohibited by law.
  - b. The existing right-of-way does not allow for the accommodation of all users. In such cases, alternatives shall be explored, such as the use of revised travel-lane configurations, paved shoulders, signage, traffic-calming, or similar alternatives.
  - c. The cost would be excessively disproportionate to the need or probable future.
  - d. There is a documented absence of current or future need.
  - e. The safety of pedestrians, bicyclists, transit users, or vehicular traffic may be placed at an unacceptable risk

**CITY OF REDDING, CALIFORNIA  
COUNCIL POLICY**

SUBJECT	RESOLUTION NUMBER	POLICY NUMBER	EFFECTIVE DATE	PAGE
<b>COMPLETE STREETS INFRASTRUCTURE</b>	<b>2012-073</b>	<b>1303</b>	<b>AUGUST 21, 2012</b>	<b>2</b>

3. If the safety and convenience of users can be improved within the scope of pavement resurfacing, re-striping, signalization operations, and similar routine activities on public streets, such projects shall incorporate Complete Streets components unless to do so would be unreasonable or inappropriate in light of the scope of the project or the project is subject to the limitations noted in Item 2 above.
  
4. The City of Redding Public Works Department and the Development Services Department shall review the City's existing street-related standards and ordinances and prepare revisions as may be necessary to apply Complete Streets practices throughout the transportation network. The review shall consider right-of-way needs, cross-section templates, design-treatment details, street/intersection curb radii, and other standards to achieve a balance between the needs of various users of streets.
  
5. In its review of proposed development projects, the City will ensure that the intent of this Complete Streets policy is implemented by ensuring that the design of the development includes streets that will accommodate all multimodal users of the facility in a safe and efficient manner and that appropriate street, pedestrian, and bicycle connections from developments to adjacent main streets, open-space areas, parks, transit stops, schools, employment and commercial centers, and other activity centers are provided. It is recognized that streets must be designed in a context-sensitive manner and that not all streets, such as many local residential streets, will necessarily incorporate separate facilities for each use, as long as they provide safe accommodation for all users.
  
6. The Public Works Director shall:
  - a. Establish a program to identify critical pedestrian- and bicycle-route gaps in the transportation network for all roadway users, which categorizes and prioritizes necessary improvements to correct identified deficiencies through street-maintenance programs as funding allows.
  - b. Identify those streets and sections of streets within the City that, given existing and forecast traffic volumes, have been designed and/or constructed to accommodate traffic in excess of existing and future need. Establish a program for the redesign/retrofit of said streets to be implemented when funding is available. Such retrofits may include, but are not limited to, reducing the number of traffic lanes and adding bike lanes (i.e., "road diet"), reducing lane widths to accommodate bike and pedestrian facilities, and providing pedestrian-safety enhancements at intersections, such as "bulbouts" and refuge islands.
  - c. Establish a process to facilitate public participation in policy decisions and transparency in determinations concerning the design and use of streets.
  - d. Develop funding strategies for addressing transportation needs; actively pursue funding from state, federal, and other sources.

**CITY OF REDDING, CALIFORNIA  
COUNCIL POLICY**

SUBJECT	RESOLUTION NUMBER	POLICY NUMBER	EFFECTIVE DATE	PAGE
COMPLETE STREETS INFRASTRUCTURE	2012-073	1303	AUGUST 21, 2012	3

- e. Report to the City Council regarding the steps taken to implement this policy, additional steps planned, and any desired actions that would need to be taken by the City Council or other agencies or departments to remove impediments to implementation of this policy.
- 7. Provide opportunities for City staff and the public to participate in training programs in how to integrate, accommodate, and balance the needs of all users when such training becomes available.

Policies\CompleteStreets-KM-CC.wpd



# CITY OF REDDING

## TRANSPORTATION & ENGINEERING DEPARTMENT

777 Cypress Avenue, Redding, CA 96001-2718

P.O. Box 496071, Redding, CA 96049-6071

530.225.4170 FAX 530.245.7024

February 24, 2011

S-070-100

Dear Property Owner or Current Resident:

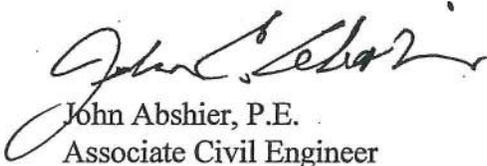
The City of Redding is proposing to construct improvements on Placer Street from the westerly City Limits to Olive Avenue. The project is a planned improvement in the City's General Plan, which will address current and future traffic needs in the area. The proposed improvements include:

- Place an AC overlay on Placer Street within the project area;
- Widen Placer Street in unimproved areas to accommodate four travel lanes and center turn lanes;
- Provide bike lanes in accordance with the City's current Bike Plan;
- Complete pedestrian sidewalks, including curbs, gutters, and curb ramps compliant with the American with Disabilities Act;
- Construct a new traffic signal at the intersection of Placer Street and Wisconsin Avenue;
- Upgrade underground utilities in Placer Street.

This letter is to invite you to attend an informational meeting on **Thursday, March 17, 2011, from 5:30pm to 7:00 pm**. The meeting will be held in the Community Room, adjacent to City Hall, located at 777 Cypress Avenue. You are invited to review the proposed project and provide comments. Staff will be available to provide information and answer questions.

We are committed to keeping you informed and being responsive to your concerns. Future public notices will be advertised in the local newspaper and/or in City Council agendas. As the project moves forward, we encourage your continued participation in the City's project development process and we look forward to seeing you at the informational meeting.

Sincerely,

  
John Abshier, P.E.  
Associate Civil Engineer

JA:sm

P:\PLACER ST IMPROVEMENTS 2336\Correspondence\Info mtg Mar 2011\020211L-HO\_CR-InfoMtg.wp

# CITY OF REDDING



## TRANSPORTATION & ENGINEERING DEPARTMENT

777 Cypress Avenue, Redding, CA 96001-2718

P.O. Box 496071, Redding, CA 96049-6071

530.225.4170 FAX 530.245.7024

March 4, 2011

S-070-100

Gold Hills Mobile Estates  
PO Box 2376  
Redding, CA 96099

SUBJECT: Placer Street Improvements

Dear Property Owner:

The City of Redding is proposing to construct improvements on Placer Street from the western City Limits to Olive Avenue. Last week, a letter was mailed to you inviting you to attend an informational meeting about the project. The proposed improvements are located within the existing City right-of-way with a few exceptions. Your property, adjacent to Placer Street, is in an area where the proposed project would potentially require some additional right-of-way width for completion of curb, gutter, and sidewalk improvements. The intent of this letter is to bring this to your attention in advance and to encourage you to attend the project informational meeting on March 17, 2011, from 5:30 pm to 7:00 pm in the Community Room, adjacent to City Hall, 777 Cypress Avenue.

If you have any questions, please give me a call at (530) 245-7159.

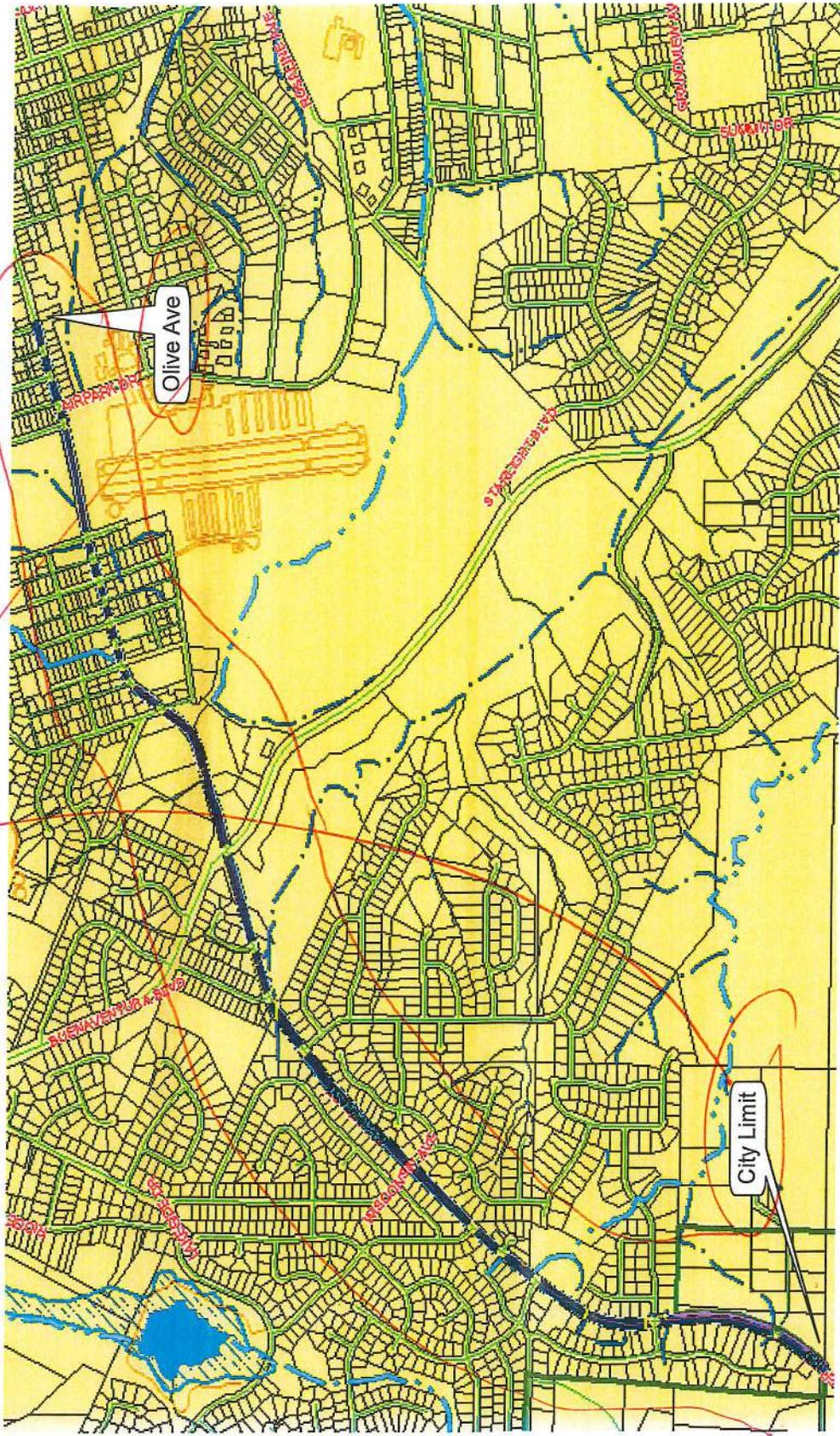
Sincerely,

A handwritten signature in black ink, appearing to read "John C. Abshier".

John C. Abshier, PE  
Associate Civil Engineer

*MAIL TO RESIDENTS + PROPERTY OWNERS  
WITHIN 300' OF PLACER*

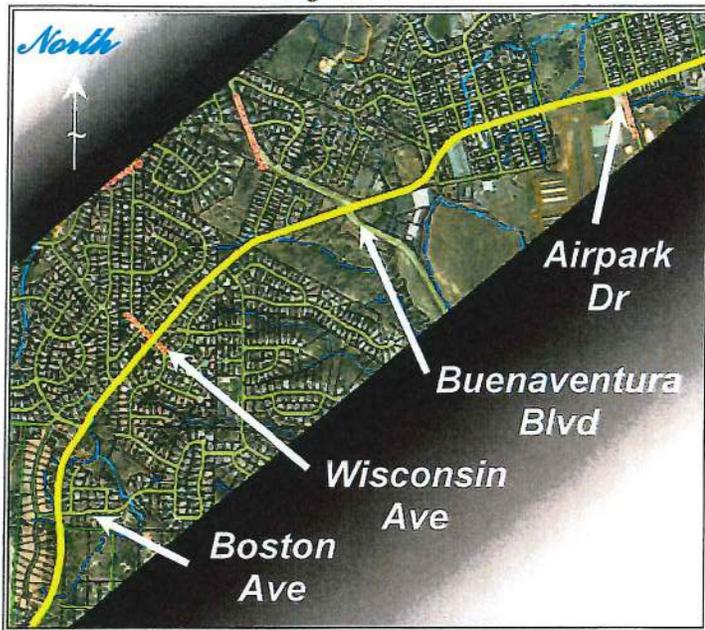
Placer Street Improvement Project  
JO 2336



Mailed to 500 residents  
for 3/17/11 meeting

# PLACER STREET IMPROVEMENT PROJECT

## Project Area



### Improvements for:

Pedestrians · Bicycles · Transit · Vehicles

- Complete 5-foot sidewalks & curb ramps
- 5-foot bike lanes
- Two new RABA pull-outs
- Limited pavement widening in some areas
- 2½ inch asphalt concrete overlay
- Restriping for 4 travel lanes & center turn lane
- New signal at Wisconsin Ave

**Budget Estimate:** \$5,800,000

**Phase** **Schedule**

Design & Environmental-	Spring/Summer 2011
Right of Way-	Fall 2011
Construction-	Spring thru Fall 2012



City of Redding  
Public Works- Engineering Division

311

Engineering Division's Construction Unit

by Don Chilton

# PROJECT ADVISORY

## CITY OF REDDING

*Working Together to Improve our Community*

**ADVISORY NO. 1**

**July 20, 2010**

The Construction Unit of the Engineering Division is going to be swamped over the next several months. The following projects will all be starting in 2 to 4 weeks:

- Clear Creek WWTP Contract #6 - Includes the Aeration Basins, Chlorine Contact Basin and Blower Building, is in full swing
- Foothill WTP 30" Raw Water Main
- Boulder Creek Wastewater Interceptor (Phase 1)
- Mary Street Wastewater Force Main and Lift Station
- Oasis Rd / I-5 SB Loop On-Ramp
- Benton Airport Runway Extension

All told, we have 24 new 2010 construction projects valued at about \$22 million dollars, with Wastewater leading the way at \$13 million.

**Energy Faire 2010**



**Thanks to everyone who helped make this year's event a huge success!**

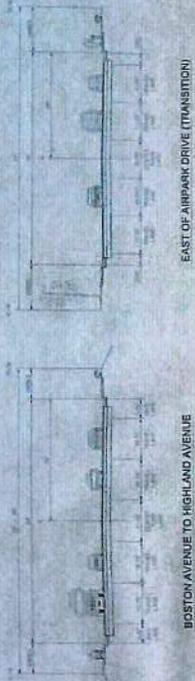
*Placer Street Improv. Project was displayed at Energy Faire 2010*  
 City of Redding Placer Street Improvements 1950

# Display used for local events

## PLACER STREET IMPROVEMENTS REDDING CITY LIMITS TO OLIVE AVENUE



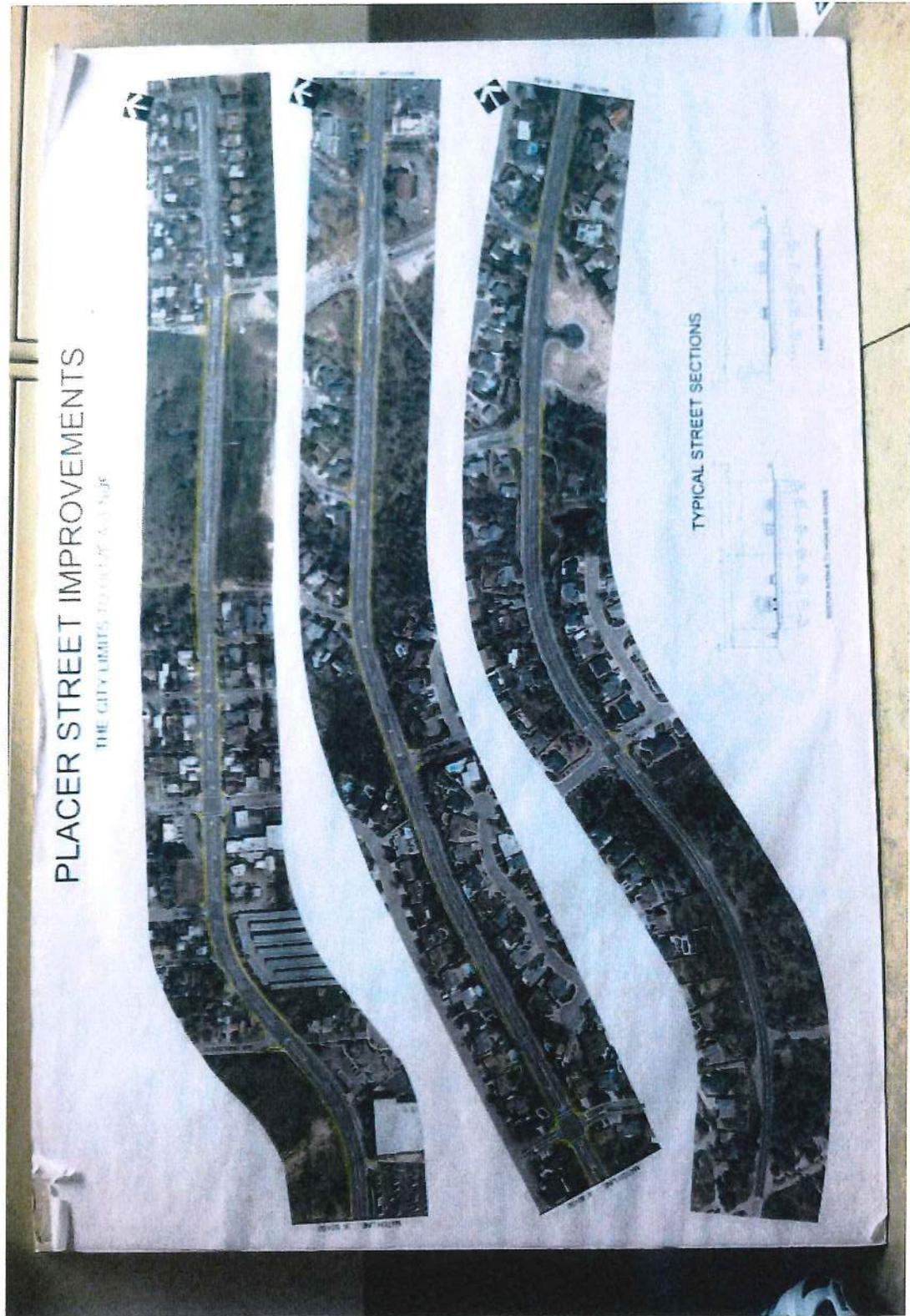
### TYPICAL STREET SECTIONS

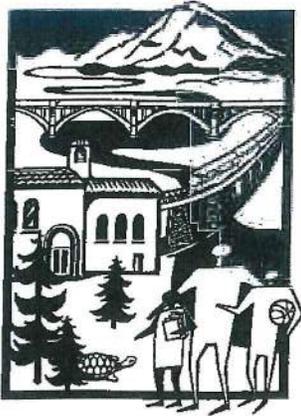


### LEGEND

- ASPHALT ROAD WIDENING
- NEW SIDEWALK
- PROPOSED MEDIAN
- PROPOSED SLOPE BARRIERS
- EXISTING SIDEWALK
- EXISTING ROAD

# Display used for local events





**REDDING  
SCHOOL  
DISTRICT**

*Academic Excellence Since 1873*



*Tradition of Excellence Since 1853*

**SHASTA UNION  
ELEMENTARY  
SCHOOL DISTRICT**



**IGO-ONO-  
PLATINA UNION  
SCHOOL DISTRICT**

**EDUCATION CENTER**  
5885 East Bonnyview Road  
P.O. Box 992418  
Redding, CA 96099-2418  
(530) 225-0011  
(530) 225-0015 Fax  
<http://redding.echalk.com>

**RICK FAUSS, Ed.D.**  
Superintendent

May 9, 2014

Chuck Aukland  
Assistant Public Works Director  
City of Redding Public Works  
777 Cypress Avenue  
Redding, CA 96001-2718

Dear Mr. Aukland,

The Redding School District fully endorses the City of Redding's grant application for Placer Street Improvements. As the Director of Facilities and Safety Committee Chair, I'm continually researching and enhancing conditions at school sites for the safety of students and staff. Manzanita Elementary is located approximately a quarter of mile north off Placer Street near Site 1 proposal. This school is an active site and houses approximately 550 students and 48 staff members. On a continual basis, the community uses the following facilities:

1. Walking and jogging track
2. Baseball and soccer field
3. Playground
4. Cafeteria
5. Classrooms

Presently, there are limited sidewalk and bicycle facilities on Placer Road. This location is a main entrance to Manzanita Elementary campus which is a safety concern. This site has student walkers, busing, and student drop off and pick up traffic concerns. In support of this project, safety benefits would apply to all of the listed concerns coupled with the use from the community. Thank you for your support in obtaining funding for this project.

Sincerely,

Maureen Lewis  
Director of Facilities/Nutrition Services

The New Millennium Partnership



# Health and Human Services Agency

Donnell Ewert, MPH, Director

## Public Health

Terri Fields Hosler, MPH, RD, Branch Director

Andrew Deckert, MD, MPH, Health Officer

2650 Breslauer Way  
Redding, CA 96001-4246

Phone: (530) 225-5591

Fax: (530) 225-3743

Toll Free: (800) 971-1999

CA Relay Service: (800) 735-2922

May 5, 2014

City of Redding  
777 Cypress Avenue  
Redding, CA 96001

RE: ATP Application for bicycle and pedestrian improvements on Placer

Dear City of Redding:

On behalf of Shasta County Health and Human Services Agency – Public Health (HHSA-Public Health), I strongly support the City of Redding's Active Transportation Program proposal to make critical bicycle and pedestrian improvements on Placer.

Having safe non-motorized transportation options is especially important to our many residents who do not drive, including children, those with disabilities, and those who cannot afford a vehicle or fuel. Our community has a very high rate of poverty, particularly among single women with children, who will benefit from safer access to groceries, school, jobs, and other destinations. Our community also has a heavy chronic disease burden, so opportunities to use active transportation to get to key destinations will help prevent disease as physical activity levels increase.

As proposed, the addition of sidewalks and bicycle lanes along Placer will greatly increase connectivity for walking and bicycling between residential areas, a major grocery store, retail outlets, churches, restaurants, and nearby schools. The proposed enhanced pedestrian crossing, where no crossing at all exists now, will greatly increase access for people walking between the public bus stop and grocery store to residential areas and a large public elementary school Public Health currently partners with through our Safe Routes to School program.

Feel free to contact me at 530-245-6869 for any further questions you may have.

Sincerely,

Terri Fields Hosler, MPH, RD  
Public Health Director

Shasta County Health and Human Services Agency- Public Health

"Healthy people in thriving and safe communities"



Anderson Partnership for  
Healthy Children/South  
County HEAC

May 5, 2014

City of Anderson

City of Redding  
777 Cypress Avenue  
Redding, CA 96001

City of Redding

City of Shasta Lake

County of Shasta

RE: ATP Application for bicycle and pedestrian improvements on Placer

First 5 Shasta

Dear City of Redding:

Mercy Medical  
Center

As you know, Healthy Shasta is a local partnership formed to address obesity and prevent chronic disease by making the 'healthy choice the easy choice' for physical activity and healthy eating. As a partner in the Healthy Shasta movement, City of Redding has a demonstrated commitment to supporting the health of the community and creating safer environments that support active transportation.

Redding Rancheria

Redding School District

Shasta College

Healthy Shasta strongly supports Redding's efforts to seek funding through the California Active Transportation Program to make bicycle and pedestrian improvements on Placer. Placer is a busy arterial that, in many places, lacks sidewalks and adequate shoulders for bicycling. Placer connects vast residential areas to a multitude of destinations, including a grocery store, retail outlets, a preschool, churches, restaurants, and a multi-use trail that ends near a major intersection on Placer. It is also the main thoroughfare to downtown for those living in residential areas on the western border of Redding as well as those in nearby unincorporated areas.

Shasta County Office of  
Education

Shasta County RTPA

Shasta Family  
YMCA

Shasta Head Start

Simpson University

We commend City of Redding for pursuing improvements for bicyclists and pedestrians on Placer, linking residential areas to important destinations. We also commend the addition of an enhanced crossing near the Placer Marketplace shopping center and bus stop. If you would like to discuss this further, please contact me at (530) 229-8428.

The McConnell  
Foundation

Turtle Bay Exploration  
Park

Sincerely,

University of California  
Cooperative Extension

Viva Downtown

Shellisa Moore  
Healthy Shasta Coordinator

Whiskeytown National  
Recreation Area



The McConnell Foundation

*Helping Build Better Communities Through Philanthropy*

5/1/2014

Chuck Aukland, P.E.  
Assistant Director  
Public Works Department  
City of Redding

Dear Chuck,

On behalf of The McConnell Foundation, please accept this letter in support of the Browning Street and Placer Street improvement projects for which you are applying for grant funding from the State of California Active Transportation program. The Foundation supports efforts to improve the health and livability of the communities we serve.

The Browning Street improvements will greatly enhance the connection from the Dana to Downtown Trail/View Trail to all points east. This is also a strong mixed-use area and has lots of local pedestrian and bicycle traffic.

The Placer Street project is also greatly needed as it has local pedestrian and bicycle traffic needs and is the major thoroughfare for that part of town. Increased traffic over the years has overrun the infrastructure making it dangerous for pedestrian and bicycle traffic.

Both of these projects are necessary and we believe they would increase pedestrian and bicycle traffic while making it safer for all users.  
Thank you for your efforts to make Redding a safer and more livable community.

Brian Sindt  
Program Officer  
The McConnell Foundation

# Shasta Living Streets

*What kind of community do we want to live in?*

May 15, 2014

To: State of California, Active Transportation Program

Re: **Enthusiastic Support for City of Redding Placer Street Improvements**

Shasta Living Streets enthusiastically supports the City of Redding's efforts to pursue infrastructure improvements on Placer Street in Redding. This project will make a significant difference for people and transportation in our community.

We look forward to having access to continuous bicycle and pedestrian facilities beginning at Airpark Drive and continuing west to the city limits. We are especially supportive of the addition of sidewalks on both sides of the roadway, tightened curb radius' at intersections to shorten crossing distances and decrease turning speeds, an enhanced pedestrian crossing with rapid flashing beacons and raised concrete island near San Francisco Street, 6 foot bike lanes on both sides, buffered bike lanes west of Cumberland, street trees with irrigation, and safety lighting.

Shasta Living Streets has a number of methods for gathering comments and input from people in our community about transportation issues – and these proposed projects directly address concerns that we have heard from hundreds of people.

A recent survey at one of our events (nearly 200 people) returned these responses:

**If there were better bicycle (like buffered or protected bike lanes) facilities and pedestrian facilities in town, I would ride my bicycle or walk more often.**

95% of respondents agreed or strongly agreed with the above statement.

**Redding should make better bicycle and pedestrian facilities a higher priority.**

93% of respondents agreed or strongly agreed with the above statement.

**A buffered or protected bike lane would make me feel more comfortable riding my bicycle on city streets.**

95% of respondents agreed or strongly agreed with the above statement.

Thank you for improving the health and wellbeing of individuals, families and businesses in our community by ensuring funding for this very important project.

Anne

Anne Wallach Thomas  
Executive Director, Shasta Living Streets

athomas@shastalivingstreets.org | 530 355-2230 | shastalivingstreets.org

RECEIVED  
MAY 15 2014  
ENGINEERING  
DIVISION

287 Ironwood Lane  
Redding, CA 96003  
May 13, 2014

Chuck Auckland, P.E.  
Public Works Dept.  
City of Redding  
Redding, CA 96001

Dear Mr. Auckland,

Excuse the handwritten note, but my printer is on hiatus at the moment.

In any event, I received your note through the Shasta Wheelman bicycle club regarding grant funding for improvements to Placer and Brauning streets.

As an avid cyclist, I welcome much needed bike lanes on both streets. The time has come for complete streets and this is a step in that direction.

Please know that I very much support grant funding for the improvements you outlined.

Yours truly  
John B. Crowe  
John B. Crowe



RECEIVED

MAY 07 2014

ENGINEERING DIVISION

May 6, 2014

Chuck Aukland, P.E.  
Assistant Director  
City of Redding Public Works Dept.  
777 Cypress Ave.  
Redding, CA 96001

Re: Placer Street/Browning Street Improvements

Dear Mr. Aukland:

It is my understanding that the City of Redding intends to submit applications to the State of California for the purpose of obtaining grant funding from the Active Transportation Program for improvements to Placer Street and Browning Street. The Shasta Wheelmen bicycle club has been an advocate of bicycle and pedestrian safety since its inception in 1970. We strongly support improvements on these two projects related to such safety, and urge the Active Transportation Program to provide necessary funding.

Thank you for your continuing efforts to provide safer streets within Shasta County.

Sincerely yours,

CHARLES M. FINKEL  
President, Shasta Wheelmen



1255 East Street, Suite 202 • Redding, CA 96001 • (530)262-6190 • FAX (530)262-6189  
E-Mail [srta@srta.ca.gov](mailto:srta@srta.ca.gov) • HOME PAGE [www.srta.ca.gov](http://www.srta.ca.gov)

Daniel S. Little, Executive Director

---

RECEIVED

/ MAY 08 2014

ENGINEERING DIVISION

May 6, 2014

Chuck Aukland, P.E.  
Assistant Director  
Public Works Department  
City of Redding  
777 Cypress Avenue  
Redding, CA 96001

Subject: Support for city of Redding's ATP Application for Improvements to Placer Street and Browning Street

Dear Mr. Aukland:

The Shasta Regional Transportation Agency (SRTA) has reviewed and strongly encourages selection of the city of Redding's Active Transportation Program (ATP) grant application for improvements to Placer Street and Browning Street.

The proposed improvements would fill a critical gap in the regional cycling network and create pedestrian safety and connectivity where there was none previously. The projects would help accomplish key Regional Transportation Plan objectives, including:

- O-1 Eliminate barriers to bicycle and pedestrian traffic;
- O-6 Increase bicycle/pedestrian network interconnectivity throughout the county; and
- O-8 Encourage public use of non-motorized transportation facilities.

SRTA will provide in-kind technical support upon request and integrate the improvements into the upcoming Shasta County Regional Active Transportation Plan and facilities inventory.

Sincerely,

A handwritten signature in blue ink, appearing to read "Daniel S. Little", is written over a horizontal line.

Daniel S. Little, AICP, Executive Director  
Shasta Regional Transportation Agency (MPO)

Chuck Aukland, P.E.  
Assistant Director  
Public Works Department  
City of Redding

5/8/14

**Browning Street Improvements:** This project will provide continuous curb, gutter and sidewalk along the south side of Browning between Canby and Churn Creek Road. It will **also include bike lanes on both sides of the roadway through the corridor**. This will close the gap between bike lane improvements constructed recently along Old Alturas Road to the East (other improvements currently in design) and the Dana to Downtown trail to the West.

O whom it may concern: I believe this project is very important to our community. These improvements will help complete bike links that will connect: Simpson University, Shasta College, Field of Dreams Sports Park, the Shasta Mall with all the adjacent shopping, the Redding downtown area, the Sacramento River trail system along with the Sundial Bridge, and much of the Redding area residential areas. I can personally testify that the Browning street section needs improvement. I was seriously injured last February when a car ran a stop sign and caused me to crash. Some of the responsibility for this accident is probably due to the poor bike lane marking or non-bike lane in some parts. Cars are faced with on again off again sections of road with bike lanes. I believe consistency through this area will help motorists be more aware of bikes and hopefully better define where to look for them. The missing section of bike lane on Old Alturas is short but crucial to complete the safe interconnection of north-south and east-west bike corridors. Please promptly approve the funding for this work to proceed.

**Placer Street Improvements:** This project will include continuous **bicycle and pedestrian** facilities beginning at Airpark Drive west to the City limits (near Boston). It features the addition of sidewalks on both sides of the roadway, tightened curb radius' at intersections to shorten crossing distances and decrease turning speeds, an enhanced pedestrian crossing with rapid flashing beacons and raised concrete island near San Francisco Street, **5-6 foot bike lanes on both sides**, buffered bike lanes west of Cumberland, street trees with irrigation, and safety lighting. The project will also include an additional travel lane in each direction funded separately through our Citywide Traffic Impact Fee.

I do not ride this section of Placer Street as often as some but I do ride it. Cars move through the area with speed but, due to road grades and turns, bikes speed up and slow down along this road making them difficult for cars to judge their presents along the road. In addition there are side streets and shopping areas that mean cars need to turn or stop along the way. These improvements will improve the visual look of the area but should help cars and bikes move safely together. Bike accidents are hurting or killing people in Redding. Projects like this will also help raise the awareness of bike traffic and how to safely co-exist with car and pedestrian traffic. Through projects like this, I hope that our kids will once again be safe riding bikes to school and parks.

Larry Toney  
2522 Clara Ct.  
Redding, CA. 96002

RECEIVED

MAY 12 2014

ENGINEERING DIVISION

May 20, 2014

Sarah Grant  
City of Redding  
777 Cypress Avenue  
Redding, CA 96001

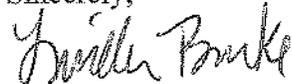
Subject: Support for Pedestrian and Bike Facilities with the Placer Street Improvement Project

Dear Ms. Grant:

As a resident of the Ridgeview Subdivision neighborhood, I support the City's effort to include pedestrian and bicycle facilities and enhancements with the Placer Street improvement project. Our family often bikes, runs, and walks the 3 mile loop through the neighborhood and the Blue Gravel Trail for exercise and enjoyment and to the shopping center at Placer Street and Buenaventura Boulevard for shopping and errands. Currently, the section between Buenaventura Boulevard and Cumberland Drive lacks adequate facilities. We have to choose between traveling on the right side of the road, and a mid-block crossing at Cumberland Drive, or the goat trails or bike lane on the wrong side of the road. Both options are difficult, especially for our 11-year-old daughter. Further, lack of facilities in the area discourages children in the neighborhoods west of Buenaventura Boulevard to walk or bike to Manzanita Elementary School, which is only a one mile distance from Cumberland Drive.

Our family also uses the pedestrian opening to Oro Street for access to the Mary Lake area and Placer Street further west for access to the Westside Trail system and beyond. Improvement connecting these recreational areas and trails, neighborhoods to shopping areas, and providing a safe route to school for many children, would be an incredible benefit to this area and the community as a whole.

Sincerely,



Linda Burke  
3741 Fujiyama Way  
Redding, CA 96001

# Parent Survey Report: One School in One Data Collection Period

**School Name:** Manzanita Elementary School

**Set ID:** 8807

**School Group:** Shasta Co Public Health

**Month and Year Collected:** September 2012

**School Enrollment:** 557

**Date Report Generated:** 05/13/2014

**% Range of Students Involved in SRTS:**

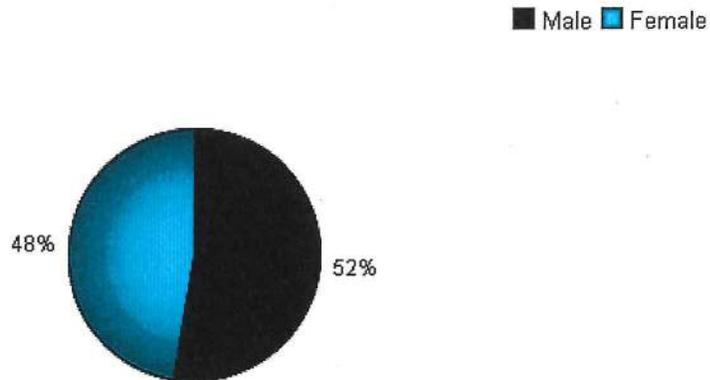
**Tags:**

**Number of Questionnaires Distributed:** 560

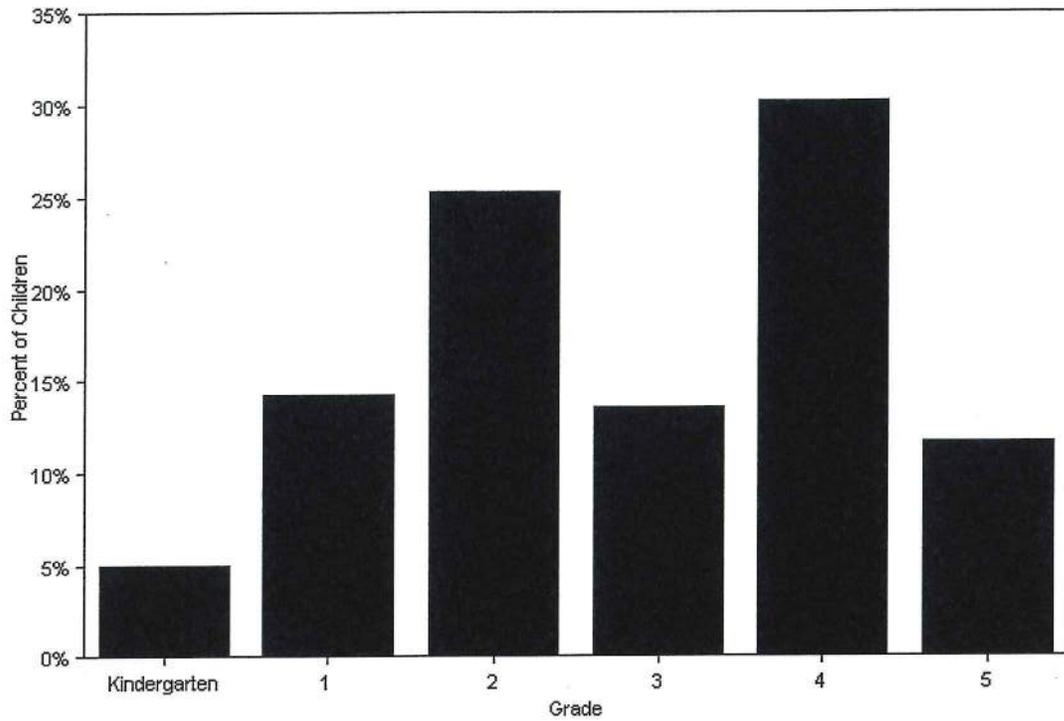
**Number of Questionnaires Analyzed for Report:** 162

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

## Sex of children for parents that provided information



Grade levels of children represented in survey



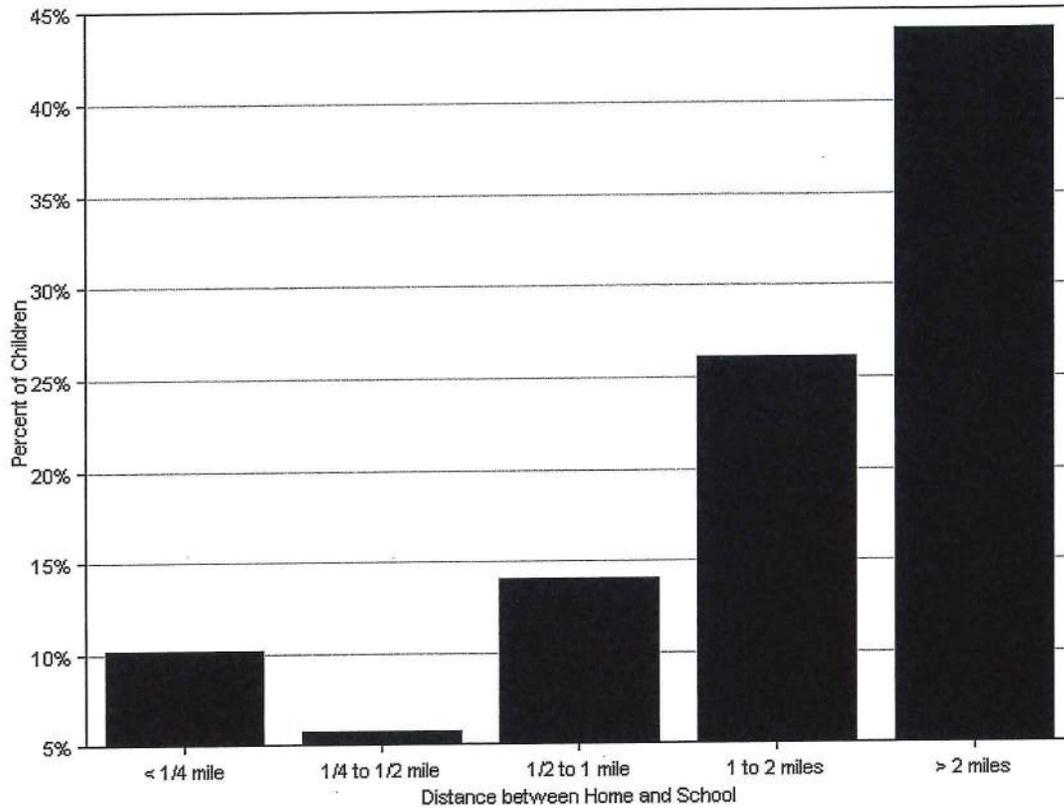
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
Kindergarten	8	5%
1	23	14%
2	41	25%
3	22	14%
4	49	30%
5	19	12%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school

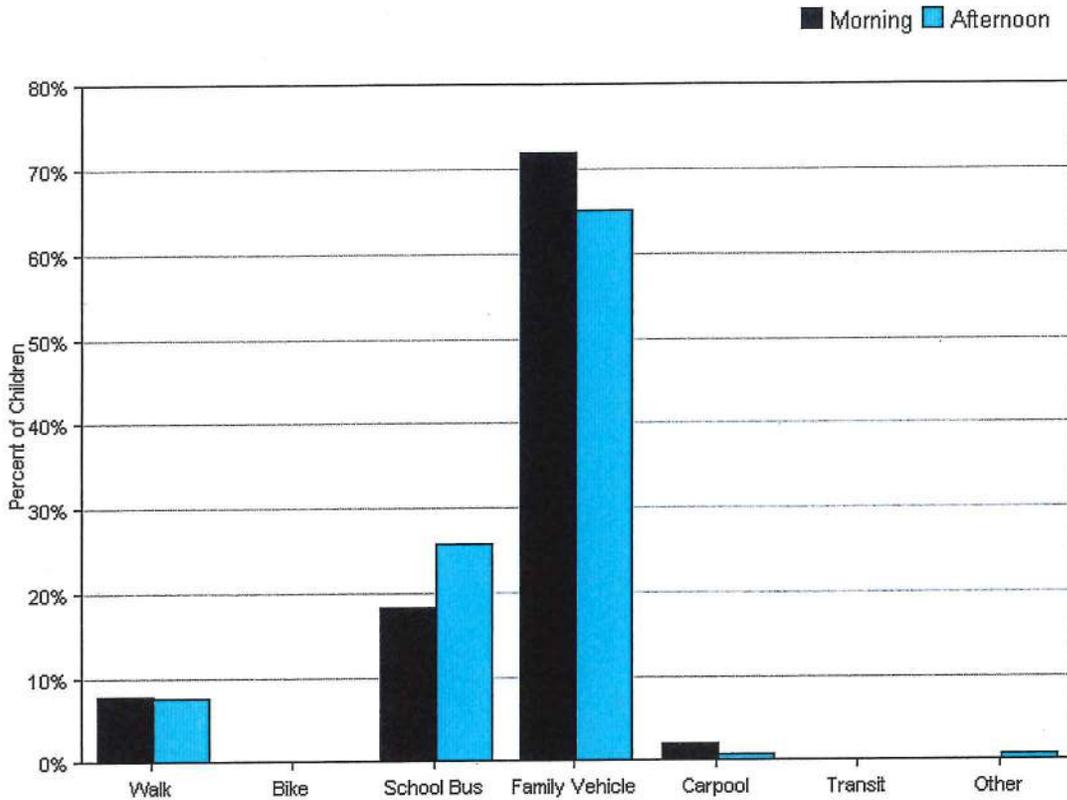


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	16	10%
1/4 mile up to 1/2 mile	9	6%
1/2 mile up to 1 mile	22	14%
1 mile up to 2 miles	41	26%
More than 2 miles	69	44%

Don't know or No response: 5  
 Percentages may not total 100% due to rounding.

### Typical mode of arrival at and departure from school

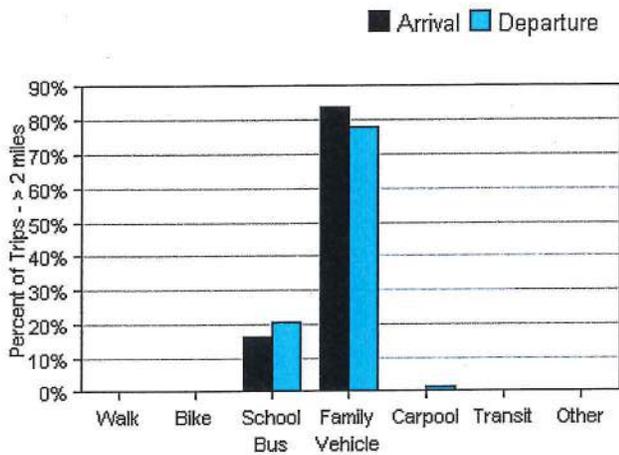
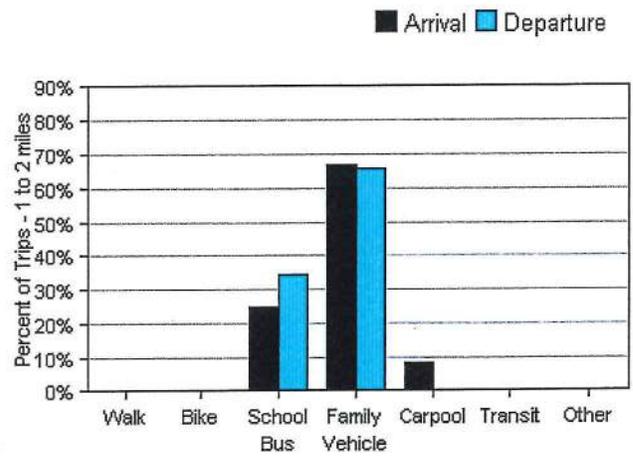
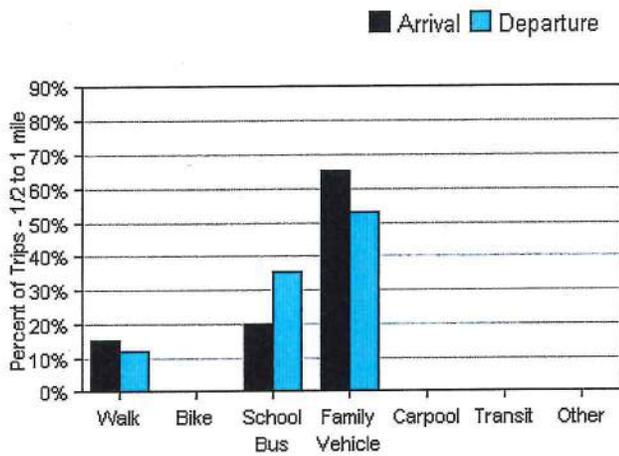
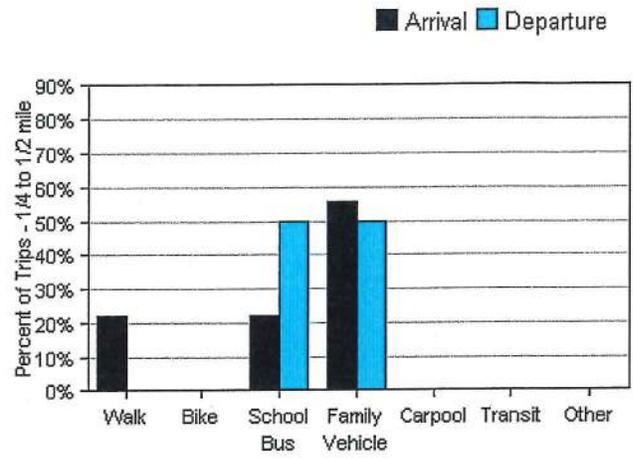
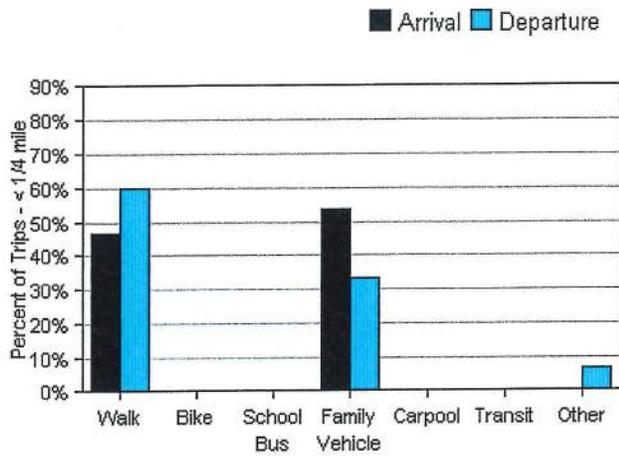


### Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	153	8%	0%	18%	72%	2%	0%	0%
Afternoon	143	8%	0%	26%	65%	0.7%	0%	0.7%

No Response Morning: 9  
 No Response Afternoon: 19  
 Percentages may not total 100% due to rounding.

## Typical mode of school arrival and departure by distance child lives from school



## Typical mode of school arrival and departure by distance child lives from school

### School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	15	47%	0%	0%	53%	0%	0%	0%
1/4 mile up to 1/2 mile	9	22%	0%	22%	56%	0%	0%	0%
1/2 mile up to 1 mile	20	15%	0%	20%	65%	0%	0%	0%
1 mile up to 2 miles	36	0%	0%	25%	67%	8%	0%	0%
More than 2 miles	68	0%	0%	16%	84%	0%	0%	0%

Don't know or No response: 14

Percentages may not total 100% due to rounding.

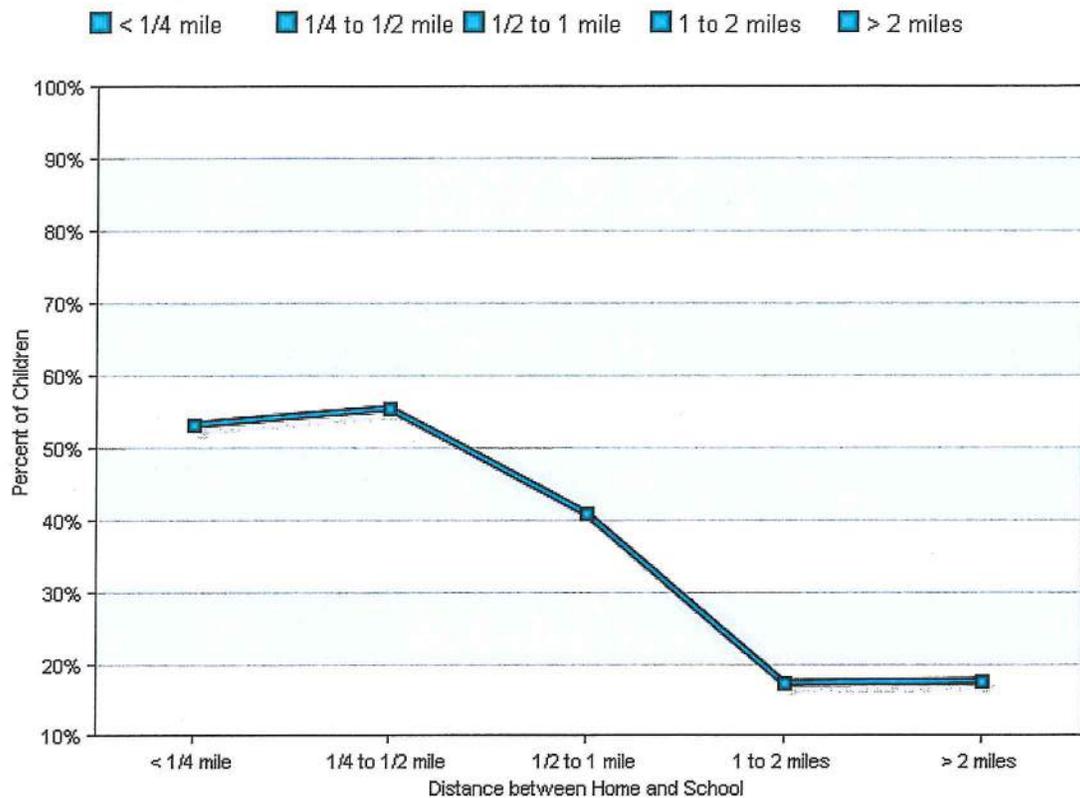
### School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	15	60%	0%	0%	33%	0%	0%	7%
1/4 mile up to 1/2 mile	8	0%	0%	50%	50%	0%	0%	0%
1/2 mile up to 1 mile	17	12%	0%	35%	53%	0%	0%	0%
1 mile up to 2 miles	35	0%	0%	34%	66%	0%	0%	0%
More than 2 miles	63	0%	0%	21%	78%	2%	0%	0%

Don't know or No response: 24

Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

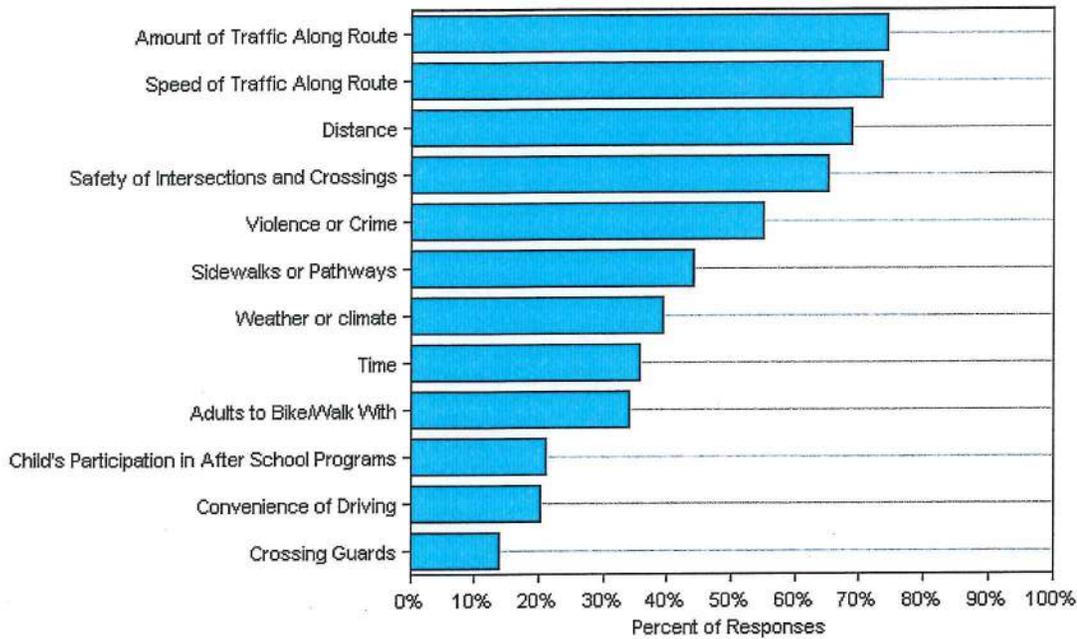


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

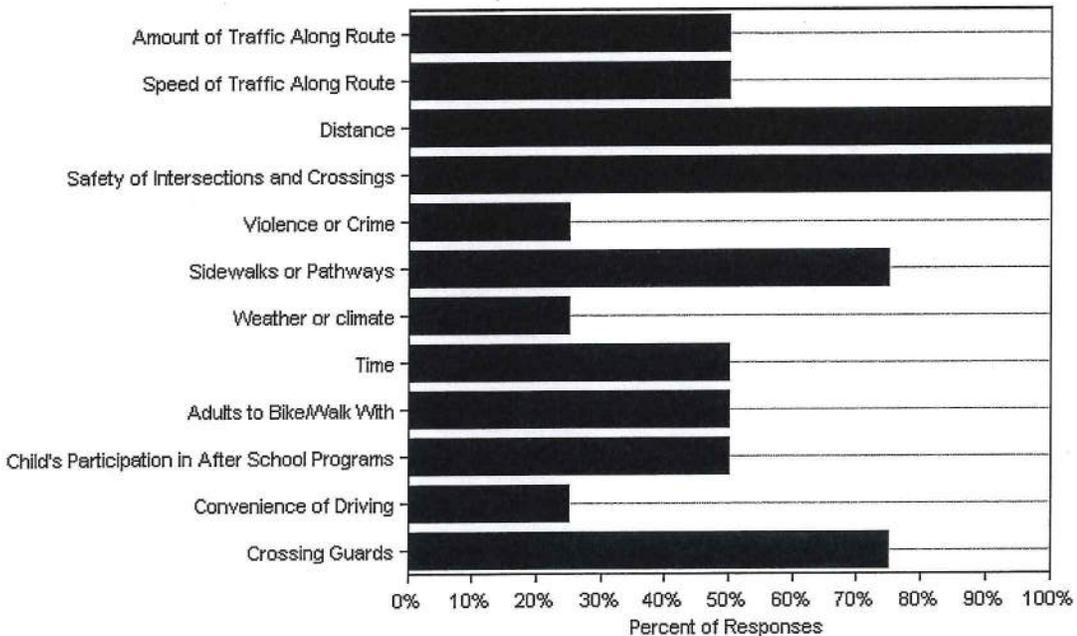
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	41	53%	56%	41%	18%	18%
No	113	47%	44%	59%	83%	82%

Don't know or No response: 8  
 Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

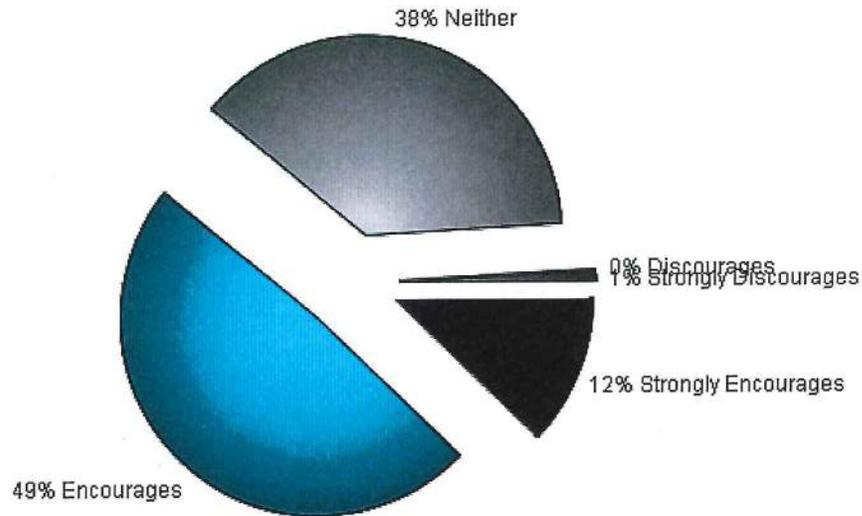
Issue	Child does not walk/bike to school	Child walks/bikes to school
Amount of Traffic Along Route	74%	50%
Speed of Traffic Along Route	73%	50%
Distance	69%	100%
Safety of Intersections and Crossings	65%	100%
Violence or Crime	55%	25%
Sidewalks or Pathways	44%	75%
Weather or climate	39%	25%
Time	36%	50%
Adults to Bike/Walk With	34%	50%
Child's Participation in After School Programs	21%	50%
Convenience of Driving	20%	25%
Crossing Guards	14%	75%
<b>Number of Respondents per Category</b>	<b>109</b>	<b>4</b>

No response: 49

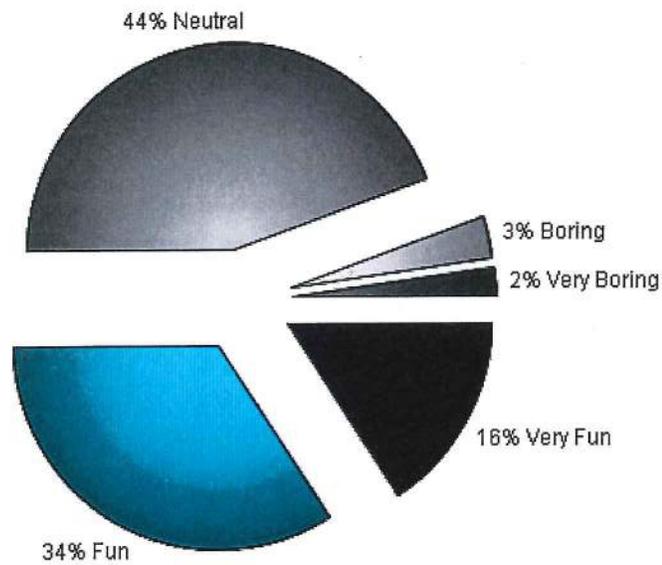
Note:

- Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.
- Each column may sum to > 100% because respondent could select more than issue
- The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

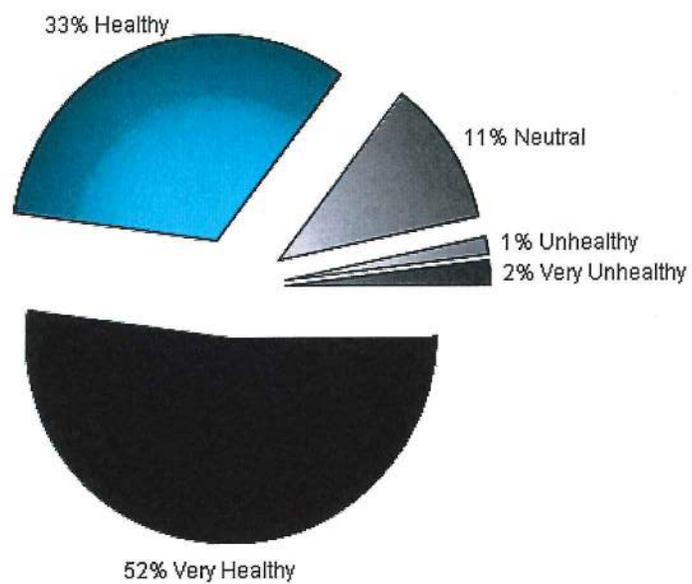
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child



Parents' opinions about how healthy walking and biking to/from school is for their child



## Comments Section

SurveyID	Comment
938245	MY MAIN REASON FOR NOT ALLOWING THIS IS BECAUSE THEY HAVE TO CROSS BUENAVENTURA (ON LAKESIDE) W/NO CROSSWALK. ALSO ITS A BIT FAR FOR ELEMENTARY. I WOULD ALLOW THEM TO BIKE IN H.S. (JUNIOR HIGH IS TOO FAR)
938298	I WOULD ONLY FEEL COMFORTABLE IF THERE WAS AN ADULT TO ACCOMPANY MY DAUGHTER ON HER WALK. UNFORTUNATELY THAT IS NOT ALWAYS POSSIBLE AS BOTH PARENTS WORK.
938308	<b>DUE TO TRAFFIC</b> & CRIME - IN NEIGHBORHOOD WALKING/BIKING WOULD NOT BE PERMITTED.
938311	ONCE OUR CHILDREN ARE ATTENDING A SCHOOL CLOSER TO OUR HOME. THEY WILL BE RIDING THEIR BIKES TO SCHOOL. THEY WILL BE ATTENDING SEQUOIA NEXT YEAR AND SHOULD BE SAFE TO RIDE THEN.
938316	WALKING IS GREAT & I ALLOW MY OLDER KIDS TO WALK. AGE HAS A LOT TO DO WITH MY DECISIONS. MY CHILD WHEN BROUGHT THIS SURVEY IS ONLY 6.
938328	I WOULD ALLOW MY CHILD TO WALK/RIE BIKE TO AND FROM SCHOOL IF WE <b>LIVED CLOSER</b> TO THE SHCOOL.
938335	CHILD HAS SPLIT CUSTODY MOM TAKES TO SCHOOL AND LIVES IN SHASTA LAKE CITY.... 20 MIN. DRIVE. DAD PICKS UP CHILD STRAIGHT FROM WORK AND ONLY LIVES 1/4 TO 1/2 AWAY BUT IS ALREADY IN CAR. CHILD IS TOO YOUNG TO WALK BY HERSELF.
938349	QUESTION #9 - ONLY B/C WE LIVE TO FAR AWAY QUESTION #13 - N/A BUT SHE'D PROBABLY THINKS IT'S VERY FUN
938358	NO SIDEWALK OR PAVED TRAIL ALONG BUENAVENTURA/STARLIGHT TO HOLIDAY MARKET. CARS TRAVEL TOO FAST & ENTER BIKE LINES ON BUENAVENTURA TOO FAST ALONG STARLIGHT.
938363	QUESTION #10 - WEATHER OR CLIMATE - INCENDIOS BAD RAINING
938373	<b>IF THERE WERE CONTINUOUS SIDEWALKS FROM CUMBERLAND TO PLEASANT ST - OUR KIDS WOULD RIDE THEIR BIKES!</b>
938237	FOR ME I AM VERY CONCERNED ABOUT KIDNAPPING AND I AM NOT COMFORTABLE WITH HIM RIDING/WALKING TO SCHOOL ON HIS OWN.
938247	QUESTION #10 - VIOLENCE OR CRIME - THIS IS SOMETHING THAT CAN NOT BE CHANGED
938250	WE LIVE 20 MILES AWAY ALL FREEWAY NOT POSSIBLE TO RIDE A BIKE. WE DO RIDE THE RIVER TRAIL OFTEN.
938262	I WOULD LOVE FOR MY SON TO RIDE HIS BIKE TO SCHOOL IN THE CAREFREE WAY I DID HOWEVER DUE TO CRIME & <b>THE VERY BUSY INTERSECTION WE LIVE NEAR BIKING TO SCHOOL IS NOT AN OPTION</b>
938272	<b>THIS CITY IS NOT REALLY CONDUSIVE FOR BIKERS. DRIVERS ARE TO DISTRACTED AND I HAVE SEEN THEM SWERVE INTO BIKE LANES AT TIMES.</b> I WOULD ALSO WORRY ABOUT PEDIPHILES ON THE LOOSE.
938278	QUESTION #9 - I WOULD FOLLOW HIM TO SCHOOL.
938281	WALKING SCHOOL BUS IS AWESOME BUT WE LIVE FAR AWAY ENOUGH WE HAVE TO DRIVE TO THE "TERMINAL" TO PARTICIPATE. THANKS FOR DOING THIS SURVEY!
938282	WITH THE AMOUNT OF CRIMINALS BEING RETURNED TO OUR COUNTY FROM PRISON I WOULD NEVER BE COMFORTABLE LETTING MY CHILDREN BIKE OR WALK TO SCHOOL W/O ADULT SUPERVISION. I WORK IN LAW ENFORCEMENT SO I KNOW WHAT'S OUT THERE.
938286	HI SARA! FROM THE GLOVERS.
938290	I HOPE MONZANITA WILL CONTINUE WALK TO SCHOOL DAYS FROM HOLIDAY MARKET.
938291	MORE TRANSIENTS LATELY = CONCERN

938325	PARENT DRIVERS ARE EXTREMELY INCONSIDERATE WHEN DRIVING IN PARKING LOTS PAST SCHOOLS AND ENTERING AND EXITING PARKING LOTS. WHILE A SPEED LIMIT MAY BE POSTED IT MAY NOT BE SAFE TO GO THAT <b>FAST AND TRAFFIC RULES ARE OFTEN NOT FOLLOWED</b> (I.E. TURNING LEFT IN FRONT OF A PERSON OR PULLING OUT IN FRONT OF A CAR) THE AFFORMENTIONED ITEMS MAKE IT EXTREMELY DANGEROUS FOR CHILDREN EVEN AFTER THEY HAVE ARRIVED AT SCHOOL. MANZANITA HAS BEEN THE MOST CONSIDERATE SCHOOL. I BELIEVE IT IS DUE TO THE DUTIES WITH STOP SIGNS FOR CORSSING.
938332	WE DO NOT LIVE IN THE SCHOOL DISTRICT OR MANZANITA BOUNDRIES SO WALKING IS NOT AN OPTION FOR US.
938334	THERE ARE 10 SCHOOL AGE KIDS THAT RIDE THE BUS THAT COULD/WOULD CROSS @ LAKESIDE AND BUENAVENTURA IF THERE WERE A CROSS-WALK PROVIDED.
938357	QUESTION #9 - HS
938370	NORMALLY WE ALLOWED THEM TO WALK TO SCHOOL THROUGH A TRAIL BUT THERE HAS BEEN AN ISSUE WITH TRANSIEANTS AND <b>THERE IS NO SIDEWALKS</b> SO I'M NO LONGER COMFORTABLE WITH THEM WALKING THERE AND BACK WISH THERE WAS SOMETHING TO EASE MY FEARS. QUESTION #10 - CORSSING GUARDS - NOT REALLY SURE HOW THIS WOULD WORK
938371	<b>IF CUMBERLAND TO PLEASANT ST. HAD SIDEWALKS CONTINUOUSLY - ABSOLUTELY I WOULD LET MY KIDS BIKE TO SCHOOL.</b>
938376	VIOLENCE & CRIME IS THE MOST IMPORTANT REASON TO NOT ALLOW MY CHILD TO WALK/BIKE TO SCHOOL. A PARENT WOULD HAVE TO BE PRESENT WHICH IS DIFFICULT WITH WORK AND YOUNGER SIBLINGS TO WATCH.
938378	I WOULDN'T LET HIM WALK HOME DUE TO VARIABLES @ HIS AGE - HOWEVER IT WOULD BE SAFE (W/ GUARD) TO WALK DIRECTLY ACROSS THE SCHOOL TO OUR FAMILY FRIEND "SVEN" RETIRED FIRE CDF CAPTAIN. I'M SURPRISED SUCH YOUNGER KDIS DO WALK PRETTY FAR - W/ NO "BUDDY" - KINDA DANGEROUS. QUESTION #9 - LOCATION DEPENDING
938233	THERE ARE FAR TOO MANY SEX OFFENDERS IN SHASTA COUNTY FOR CHILDREN TO WALK ALONE OR IN GROUP ANYWHERE!!!
938267	THERE SHOULD NOT BE A "CENTRALIZED" BUS STOP. <b>IT IS NOT SAFE FOR THESE KIDS TO HAVE TO WALK TO A STOP WHERE THERE ARE NO SIDEWALKS.</b>
938271	I THINK THE CONCEPT IS A GREAT IDEA. HOWEVER THE <b>MAIN ROAD TO SCHOOL IS MUCH TO BUSY TO ALLOW MY CHILD TO BIKE &amp; TOO FAR TO WALK.</b>
938302	I AM MORE NERVOUS ABOUT STRANGERS APPROACHING MY CHILD THAN TRAFFIC. I AM AN AVID RUNNER AND ALTHOUGH I FEEL RELATIVELY SAFE IN REDDING THERE A LOT OF TRANSIENTS & YAHOOOS THAT ARE AGGRESSIVE HERE.
938337	IN TODAY'S ENVIRONMENT WITH TRAFFIC & CRIME & TWO PARENTS WORKING WALKING & BIKING IS NOT AN OPTION FOR ANY CHILD YOUNGER THAN 5TH GRADE AND ANY CHILD HAVING TO GO MORE THAN 2 MILES. QUESTION #9 - BELOW 5TH QUESTION #10 - FOR 5TH GRADE OR HIGHER
938365	QUESTION #13 - N/A
938252	DUE TO THE DISTANCE WE LIVE FROM SCHOOL; MY CHILD IS NOT ABLE TO PARTICIPATE. IF WE LIVED CLOSER THEN WE WOULD LOVE TO WALK OR BIKE TO SCHOOL. IT IS A GREAT WAY TO START THE DAY.
938270	WE LIVE TOO FAR AWAY FROM THE SCHOOL AT THIS TIME. HOWEVER WE PROMOTE HEALTHY EATING & EXERCISE OUTSIDE OF SCHOOL HOURS.
938279	<b>IF THE STREET THAT HE HAS TO CROSS HAD A STOP LIGHT I WOULD CONSIDER IT. BUT THE TRAFFIC IS TO FAST ON THAT ROAD FOR ME TO FEEL COMFORTABLE.</b>
938377	KIDS LOVE THE MONTHLY WALK OR BIKE TO SCHOOL DAY THAT MANZANITA DOES.
938327	CHILD IS TOO YOUNG.
938264	IF WE LIVED CLOSER TO SCHOOL AND HE HAD AT LEAST ONE OTHER RESPONSIBLE PERSON TO WALK/RIDE WITH I WOULD ENCOURAGE HIM TO DO SO. <b>HE WISHES HE COULD AT LEAST SOMETIMES</b>
938322	I HAVE 3 OLDER STUDENTS WHO WALK TO SCHOOL. DISTANCE IS FACTOR. <b>MANZANITA IS WALKABLE WITHIN PLACER/EUREKA WAY BLOCKS. NOT OUTSIDE.</b>

938227	WE LIVE ON FIG SO WE HAVE TO WALK THEM THRU THE BACK FIELD THAT HAS POISON OAK CAUSE THE OTHER WAY TRAFFIC IS TO DANGEROUS IT WOULD BE NICE IF THEY HAD A PATH FOR THEM TO WALK ON.
938339	MY CHILDREN WILL NOT WALK TO SCHOOL BECAUSE WE LIVE MUCH TOO FAR AND HAVE TO TRAVEL A HIGHWAY TO GET THERE. WALKING IS HEALTHY BUT NOT POSSIBLE FOR MY KIDS. QUESTION #9 - TOO FAR QUESTION #14 - NOT SAFE
938230	WITH THE CRIME IN THIS CITY I WOULD NEVER ALLOW MY CHILDREN TO WALK OR RIDE BIKES WITHOUT ME.
938249	MY CHILDREN WALKED/BIKED TO SCHOOL BEFORE WE MOVED TO OUR CURRENT HOME. NOW THE SCHOOL IS TOO FAR FOR A CONVENIENT WALK TIME AND WE WOULD BE REQUIRED TO CROSS A BUSY & DANGEROUS ROAD AT A SPOT WHERE THERE IS NO CROSSING AVAILABLE.
938283	QUESTION #13 - N/A
938384	FOR ? #12 MAZANITA DOES A ONCE A MONTH WALK TO SCHOOL WHERE PARENT/KIDS CAN MEET AND WALK TO SCHOOL TOGETHER. FOR ?'S 13 & 14 MY CHILD DOESN'T WALK/BIKE TO SCHOOL.
938313	I CANNOT ANSWER QUESTIONS 12-14 BECAUSE WE ARE NEW TO THE SCHOOL AND I WOULD NOT ALLOW MY CHILDREN TO TRAVEL BY BIKE OR FOOT ON PLACER EVEN IF IT IS HEALTHIER.
938385	THIS TOWN IS JUST TO FULL OF VIOLENCE CRIME AND DRUGS FOR OUR SON TO WALK TO SCHOOL IT IS JUST FAR TO DANGEROUS IN ANY PART OF REDDING.



2008-2012 American Community Survey 5-Year Estimates

\$1903

MEDIAN INCOME IN THE PAST 12 MONTHS (IN 2012 INFLATION-ADJUSTED DOLLARS)

Note: This is a modified view of the original table.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Total		California		Redding city, California	
	Estimate	Margin of Error	Median income (dollars)		Median income (dollars)	
			Estimate	Margin of Error	Estimate	Margin of Error
Households	12,466,331		61,400	+/-154	34,943	43,667
Other race--						
White	67.8%		64,213	+/-177	91.4%	43,895
Black or African American	6.6%		44,609	+/-404	0.7%	35,259
American Indian and Alaska Native	0.8%		44,909	+/-1,385	2.2%	39,712
Asian	12.3%		76,337	+/-469	2.3%	45,673
Native Hawaiian and Other Pacific Islander	0.3%		62,890	+/-2,366	0.1%	70,500
Some other race	9.6%		45,437	+/-277	1.5%	57,344
Two or more races	2.7%		58,006	+/-964	1.7%	35,259
Hispanic or Latino origin (of any race)	27.3%		47,332	+/-188	5.4%	47,674
White alone, not Hispanic or Latino	51.4%		71,357	+/-243	87.9%	44,114
HOUSEHOLD INCOME BY AGE OF HOUSEHOLDER						
15 to 24 years	3.8%		31,097	+/-386	5.6%	21,719
25 to 44 years	36.4%		64,522	+/-261	30.5%	47,787
45 to 64 years	39.8%		73,909	+/-281	36.7%	58,300
65 years and over	20.0%		42,408	+/-209	27.1%	35,492
FAMILIES						

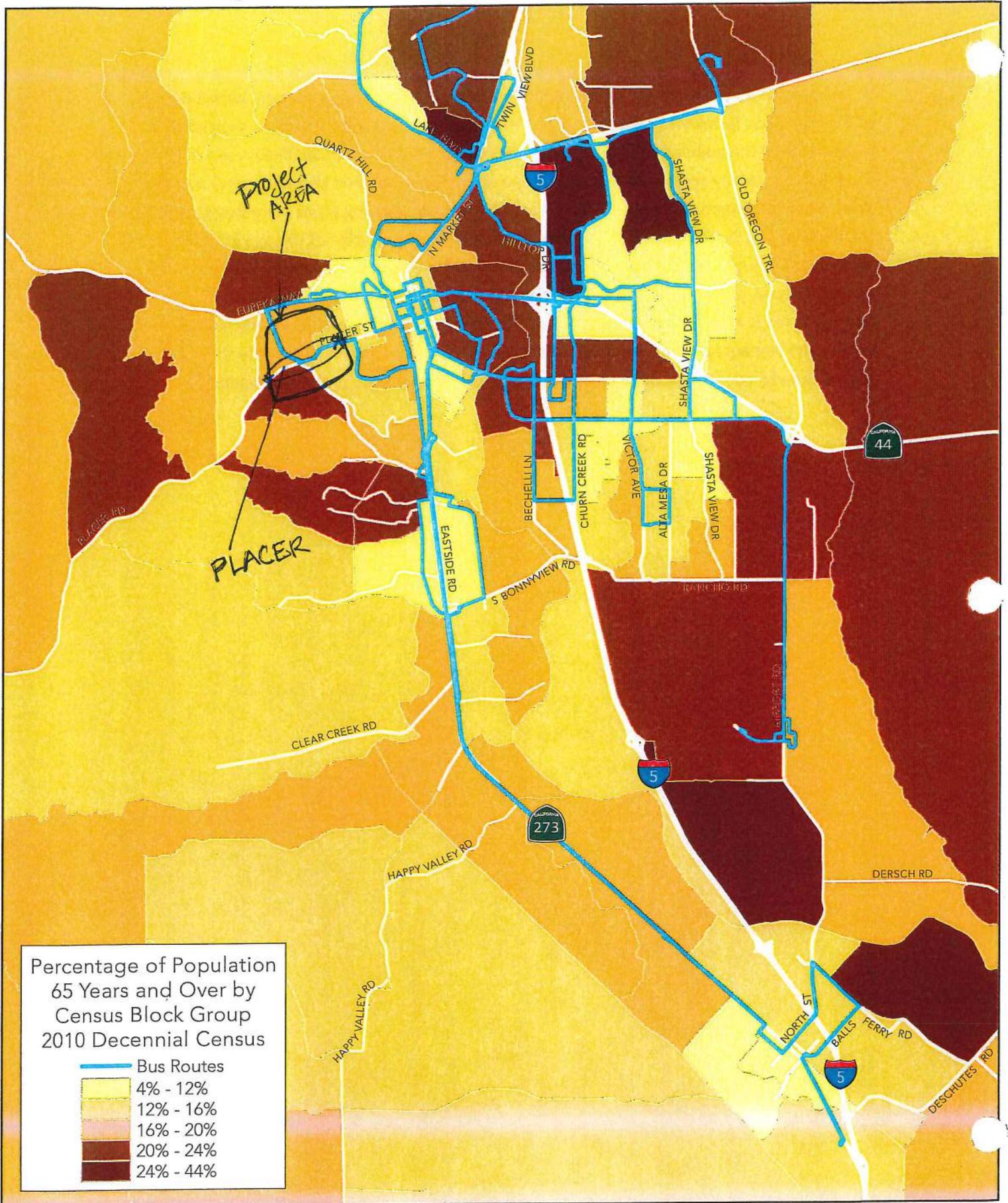


NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see <http://www.census.gov/prod/cen2000/doc/st3.pdf>

Subject	California		Redding city, California	
	Number	Percent	Number	Percent
<b>MEANS OF TRANSPORTATION AND CARPOOLING</b>				
Workers 16 and over	14,525,322	100.0	33,223	100.0
Car, truck, or van	12,545,775	86.4	30,301	91.2
Drove alone	10,432,462	71.8	26,664	80.3
Carpooled	2,113,313	14.5	3,637	10.9
In 2-person carpool	1,564,905	10.8	3,012	9.1
In 3-person carpool	330,732	2.3	374	1.1
In 4-person carpool	119,364	0.8	137	0.4
In 5- or 6-person carpool	57,036	0.4	68	0.2
In 7-or-more-person carpool	41,276	0.3	46	0.1
Workers per car, truck, or van	1.10	(X)	1.07	(X)
Public transportation	736,037	5.1	426	1.3
Bus or trolley bus	549,425	3.8	396	1.2
Streetcar or trolley car (público in Puerto Rico)	21,158	0.1	20	0.1
Subway or elevated	107,711	0.7	0	0.0
Railroad	41,022	0.3	0	0.0
Ferryboat	6,831	0.0	6	0.0
Taxicab	9,890	0.1	4	0.0
Motorcycle	36,262	0.2	42	0.1
Bicycle	120,567	0.8	170	0.5
Walked	414,581	2.9	787	2.4
Other means	115,064	0.8	198	0.6
Worked at home	557,036	3.8	1,299	3.9
<b>TRAVEL TIME TO WORK</b>				
Workers who did not work at home	13,968,286	100.0	31,924	100.0
Less than 10 minutes	1,605,146	11.5	8,354	26.2
10 to 14 minutes	1,930,263	13.8	9,163	28.7
15 to 19 minutes	2,157,970	15.4	7,192	22.5
20 to 24 minutes	2,004,060	14.3	2,903	9.1

# RABA - Redding to Anderson

Seniors (Age 65 and Over) - Percentage of Population by Census Block Group



City of Redding Placer Street Improvements



Source: U.S. Census Bureau, City of Redding, and Shasta County  
January 2013

Redding Police Department  
Traffic Unit

5/8/2014  
Page 1

Traffic Collision History Report  
Midblock Collisions

City: PLACER RD  
 Report No: PLACER ST  
 Date Range: THOMPSON LN

Total Number of Collisions: 8  
 Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
1-14833	3/7/08 21:45	220' East of	Placer Rd/Thompson Ln	Head-On	Other Motor Vehicle	East	Crossed Into Opposing Lane -	West	Proceeding Straight	Wrong Side of Road	Fatal
1-58658	9/7/08 11:43	45' East of	Placer Rd/Campo Calle St	Other	Not Stated	Not Stated	Ran Off Road	Wrong Side of Road	Wrong Side of Road	Wrong Side of Road	Other Visible Injury
1-54936	8/20/10 19:50	25' East of	Placer Rd/Campo Calle St	Hit Object	Fixed Object	East	Making Right Turn	East	Making Right Turn	Driving Under Influence	Property Damage Only
1-85097	12/29/10 12:32	0' In Int.	Placer St/Oconnor Ave	Sideswipe	Other Motor Vehicle	West	Proceeding Straight	West	Making Right Turn Improper Passing	Property Damage Only	Property Damage Only
1-32398	5/27/11 07:16	0' In Int.	Placer St/Oconnor Ave	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto R/W Violation	Complaint of Pain
1-53568	8/23/11 13:14	0' In Int.	Placer Rd/Boston Ave	Broadside	Other Motor Vehicle	North	Making Right Turn	East	Proceeding Straight	Auto R/W Violation	Complaint of Pain
1-58099	9/14/11 08:28	0' In Int.	Oconnor Ave/Placer Rd	Broadside	Not Stated	North	Making Left Turn	North	Proceeding Straight	Wrong Side of Road	Property Damage Only
2-24037	4/12/12 17:06	172' East of	Placer Rd/Boston Ave	Hit Object	Fixed Object	West	Proceeding Straight	West	Proceeding Straight	Wrong Side of Road	Property Damage Only

Redding Police Department  
Traffic Unit

5/8/2014  
Page 2

Traffic Collision History Report  
Midblock Collisions

City: Placer  
Arterial: PLACER RD  
Limit 1: PLACER ST  
Limit 2: THOMPSON LN

Total Number of Collisions: 8

Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
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Total Number of Collisions: 8  
Segment Length: 0.52 miles (2,770')

Placer Street Improvement

Settings Used For Query

Parameter	Setting
Limit 1	Include Intersection Related
Limit 2	Include Intersection Related
Intermediate Intersections	Include Intersection Related
Sorted By	'Date and Time'

Redding Police Department  
Traffic Unit

5/8/2014  
Page 1

Traffic Collision History Report  
Midblock Collisions

City: PLACER RD  
 Report No: PLACER ST  
 Date Range: THOMPSON LN

Total Number of Collisions: 8  
 Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
1-14833	3/7/08 21:45	220' East of	Placer Rd/Thompson Ln	Head-On	Other Motor Vehicle	East	Crossed Into Opposing Lane -	West	Proceeding Straight	Wrong Side of Road	Fatal
1-58998	9/7/08 11:43	45' East of	Placer Rd/Campo Calle St	Other	Not Stated	Not Stated	Ran Off Road			Wrong Side of Road	Other Visible Injury
1-54998	8/20/10 19:50	25' East of	Placer Rd/Campo Calle St	Hit Object	Fixed Object	East	Making Right Turn			Driving Under Influence	Property Damage Only
1-85097	12/29/10 12:32	0' In Int.	Placer St/Oconnor Ave	Sideswipe	Other Motor Vehicle	West	Proceeding Straight	West	Making Right Turn Improper Passing		Property Damage Only
1-32398	5/27/11 07:16	0' In Int.	Placer St/Oconnor Ave	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto R/W Violation	Complaint of Pain
1-53998	8/23/11 13:14	0' In Int.	Placer Rd/Boston Ave	Broadside	Other Motor Vehicle	North	Making Right Turn	East	Proceeding Straight	Auto R/W Violation	Complaint of Pain
1-58999	9/14/11 08:28	0' In Int.	Oconnor Ave/Placer Rd	Broadside	Not Stated	North	Making Left Turn			Wrong Side of Road	Property Damage Only
1-24037	4/12/12 17:06	172' East of	Placer Rd/Boston Ave	Hit Object	Fixed Object	West	Proceeding Straight			Wrong Side of Road	Property Damage Only

Redding Police Department  
Traffic Unit

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Traffic Collision History Report  
Midblock Collisions

City: PLACER ST  
Arterial: BUENAVENTURA BLVD  
Limit 1: PLACER RD  
Limit 2:

Total Number of Collisions: 22  
Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
0-26857	4/30/10 16:17	0' In Int.	Placer St/Wisconsin Ave	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto RW Violation	Property Damage Only
0-61841	9/16/10 09:18	24' West of	Placer St/Almaden Dr	Rear-End	Parked Motor Vehicle	West	Proceeding Straight	Not Stated	Parked	Improper Turning	Other Visible Injury 25
0-78042	11/23/10 14:47	126' West of	Placer St/Buenaventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Complaint of Pain 26
0-85697	12/29/10 12:32	0' In Int.	Placer St/Oconner Ave	Sideswipe	Other Motor Vehicle	West	Proceeding Straight	West	Making Right Turn	Improper Passing	Property Damage Only
1-22766	4/13/11 10:36	50' West of	Placer St/Buenaventura Blvd	Sideswipe	Other Motor Vehicle	East	Changing Lanes	East	Stopped In Road	Unsafe Lane Change	Property Damage Only
1-32898	5/27/11 07:16	0' In Int.	Placer St/Oconner Ave	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto RW Violation	Complaint of Pain 27
1-56899	9/14/11 08:28	0' In Int.	Oconner Ave/Placer Rd	Broadside	Not Stated	North	Making Left Turn			Wrong Side of Road	Property Damage Only
2-15110	3/6/12 07:50	145' East of	Placer St/Regent Ave	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Slowing/Stopping	Unsafe Speed	Property Damage Only
2-73241	10/14/12 19:28	0' In Int.	Placer St/Buenaventura Blvd	Head-On	Other Motor Vehicle	South	Proceeding Straight	North	Making Left Turn	Traffic Signals and Signs	Property Damage Only
2-73475	10/15/12 17:52	0' In Int.	Placer St/Buenaventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Property Damage Only
2-77590	11/1/12 15:54	46' East of	Placer St/Buenaventura Blvd	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Property Damage Only

Redding Police Department  
Traffic Unit

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Traffic Collision History Report  
Midblock Collisions

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PLACER ST  
BUENAVENTURA BLVD  
PLACER RD

Total Number of Collisions: 22  
Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
17090	3/17/08 21:02	0' In Int.	Placer St/Buenaventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Complaint of Pain 19
22279	4/11/08 14:17	40' West of	Placer St/Buenaventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Complaint of Pain 20
24160	4/17/08 08:13	159' West of	Placer St/Regent Ave	Hit Object	Fixed Object	West	Proceeding Straight	West	Proceeding Straight	Improper Turning	Property Damage Only
42972	7/3/08 15:25	528' West of	Placer St/Buenaventura Blvd	Hit Object	Non-Collision	West	Ran Off Road	West	Ran Off Road	Unsafe Speed	Other Visible Injury 21
65170	10/3/08 05:33	100' West of	Placer St/Almaden Dr	Overtuned	Fixed Object	East	Ran Off Road	East	Ran Off Road	Wrong Side of Road	Property Damage Only
70566	10/27/08 07:22	0' In Int.	Placer St/Buenaventura Blvd	Sideswipe	Other Motor Vehicle	East	Making Right Turn	East	Making Left Turn	Unknown	Property Damage Only
75124	11/15/08 18:26	0' In Int.	Placer St/Wisconsin Ave	Broadside	Other Motor Vehicle	South	Entering Traffic	West	Proceeding Straight	Auto R/W Violation	Other Visible Injury 22
26574	4/25/09 00:16	10' East of	Placer St/Buenaventura Blvd	Hit Object	Fixed Object	West	Ran Off Road	West	Proceeding Straight	Driving Under Influence	Other Visible Injury 23
46160	7/14/09 13:17	8' West of	Placer St/Cumberland Dr	Broadside	Other Motor Vehicle	North	Proceeding Straight	East	Proceeding Straight	Auto R/W Violation	Property Damage Only
74216	11/9/09 14:59	20' East of	Placer St/Mary Lake Dr	Rear-End	Other Motor Vehicle	West	Stopped In Road	West	Proceeding Straight	Unsafe Speed	Complaint of Pain 24
5160	1/25/10 13:36	100' East of	Placer St/Wisconsin Ave	Sideswipe	Other Motor Vehicle	West	Passing Other Vehicle	West	Proceeding Straight	Following Too Closely	Property Damage Only

Redding Police Department  
Traffic Unit

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Traffic Collision History Report  
Midblock Collisions

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al Number of Collisions: 50  
te Range Reported: 1/1/2008 - 12/31/2012  
Placer Street

PLACER ST  
BUENAVENTURA BLVD  
OLIVE AVE PLEASANT ST.  
Date Dist/Dir Location Type of Collision Motor Veh. Involved With DOT1 MPC 1 DOT2 MPC 2 PCF Highest Injury

Segment Length: 0.89 miles (4,693')

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Settings Used For Query

Parameter	Setting
Include Intersection Related	Include Intersection Related
Include Intersection Related	Include Intersection Related
Include Intersection Related	Include Intersection Related
'Date and Time'	'Date and Time'

Redding Police Department  
Traffic Unit

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Traffic Collision History Report  
Midblock Collisions

City of Redding  
Placer Street Improvements  
Placer St  
Buena Ventura Blvd  
Olive Ave

Total Number of Collisions: 50  
Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
3475	10/15/12 17:52	0' In Int.	Placer St/Buena Ventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Property Damage Only
4029	10/17/12 19:55	0' In Int.	Placer St/Oak St	Broadside	Other Motor Vehicle	East	Making Left Turn	West	Proceeding Straight	Auto RW Violation	Other Visible Injury
7599	11/1/12 15:54	46' East of	Placer St/Buena Ventura Blvd	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Property Damage Only
11309	11/18/12 00:47	90' West of	Placer St/Highland Ave	Hit Object	Fixed Object	West	Ran Off Road			Driving Under Influence	Property Damage Only
15325	12/5/12 17:18	750' East of	Placer St/Buena Ventura Blvd	Hit Object	Fixed Object	West	Proceeding Straight			Wrong Side of Road	Property Damage Only
18294	12/18/12 11:55	0' In Int.	Placer St/Walnut Ave	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Complaint of Pain

Redding Police Department  
Traffic Unit

5/8/2014  
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Traffic Collision History Report  
Midblock Collisions

City: PLACER ST  
Address: BUENAVENTURA BLVD  
Mileage: OLIVE AVE

Total Number of Collisions: 50  
Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
1-53550	8/23/11 12:13	0' In Int.	Placer St/Pleasant St	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Complaint of Pain 13
1-67270	10/20/11 03:55	95' East of	Placer St/Cottonwood Ave	Hit Object	Fixed Object	West	Ran Off Road				Property Damage Only
1-77001	12/6/11 17:12	0' In Int.	Placer St/Airpark Dr	Vehicle - Pedestrian	Pedestrian	East	Proceeding Straight	South	Proceeding Straight	Driving Under Influence	Other Visible Injury 14
1-35007	1/17/12 05:47	0' In Int.	Placer St/Airpark Dr	Vehicle - Pedestrian	Pedestrian	South	Other	East	Proceeding Straight	Pedestrian Violation	Other Visible Injury 14
1-49000	1/23/12 16:32	42' West of	Placer St/Mesa St	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Property Damage Only 15
1-79220	2/4/12 21:36	96' West of	Placer St/Pleasant St	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Making Right Turn	Unsafe Speed	Complaint of Pain 15
1-37006	5/31/12 14:45	27' East of	Placer St/Olive Ave	Not Stated	Other Motor Vehicle	East	Changing Lanes	West	Proceeding Straight	Improper Turning	Property Damage Only 14
1-37974	6/3/12 18:01	3' West of	Placer St/Mesa St	Rear-End	Other Motor Vehicle	West	Slowing/Stopping	West	Stopped In Road	Unsafe Speed	Complaint of Pain 14
2-40431	6/12/12 22:48	53' East of	Placer St/Buenaventura Blvd	Overtaken	Fixed Object	West	Proceeding Straight			Unsafe Lane Change	Property Damage Only
2-70012	10/1/12 13:01	18' West of	Placer St/Highland Ave	Rear-End	Motor Vehicle on Other Roadway	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Property Damage Only
2-73241	10/14/12 19:28	0' In Int.	Placer St/Buenaventura Blvd	Head-On	Other Motor Vehicle	South	Proceeding Straight	North	Making Left Turn	Traffic Signals and Signs	Property Damage Only

Redding Police Department  
Traffic Unit

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Traffic Collision History Report  
Midblock Collisions

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PLACER ST  
BUENAVENTURA BLVD  
OLIVE AVE

Total Number of Collisions: 50

Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
22564	9/18/10 15:29	27' West of	Placer St/Amark Dr	Sideswipe	Other Motor Vehicle	East	Making Right Turn	East	Proceeding Straight	Driving Under Influence	Property Damage Only
7804	11/23/10 14:47	126' West of	Placer St/Buenaventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Complaint of Pain / Z
8074	12/6/10 14:12	250' West of	Placer St/San Francisco St	Hit Object	Fixed Object	East	Ran Off Road			Other Than Driver or Ped	Property Damage Only
3304	12/16/10 17:15	450' East of	Placer St/Buenaventura Blvd	Sideswipe	Other Motor Vehicle	North	Making Left Turn	East	Proceeding Straight	Unknown	Property Damage Only
1056	2/17/11 12:26	15' West of	Placer St/Olive Ave	Rear-End	Other Motor Vehicle	East	Stopped In Road	East	Proceeding Straight	Unsafe Speed	Property Damage Only
1296	3/1/11 15:34	0' In Int.	Pleasant St/Placer St	Hit Object	Fixed Object	North	Making Left Turn			Improper Turning	Property Damage Only
1601	3/16/11 13:05	10' West of	Placer St/Cottonwood Ave	Hit Object	Fixed Object	West	Proceeding Straight			Improper Turning	Property Damage Only
18197	3/26/11 15:22	10' West of	Placer St/Olive Ave	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Proceeding Straight	Unsafe Speed	Property Damage Only
22166	4/13/11 10:36	50' West of	Placer St/Buenaventura Blvd	Sideswipe	Other Motor Vehicle	East	Changing Lanes	East	Stopped In Road	Unsafe Lane Change	Property Damage Only
25320	4/27/11 13:18	0' In Int.	Placer St/Pleasant St	Rear-End	Other Motor Vehicle	South	Parked	East	Backing	Driving Under Influence	Property Damage Only
50689	8/11/11 08:55	120' East of	Placer St/Buenaventura Blvd	Not Stated	Other Motor Vehicle	West	Proceeding Straight	West	Slowing/Stopping	Unsafe Speed	Property Damage Only

Redding Police Department  
Traffic Unit

5/8/2014  
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Traffic Collision History Report  
Midblock Collisions

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PLACER ST  
BUENAVENTURA BLVD  
OLIVE AVE

Total Number of Collisions: 50  
Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
25868	4/22/09 09:56	265' West of	Placer St/Airpark Dr	Sideswipe	Other Motor Vehicle	West	Crossed Into Opposing Lane -	East	Proceeding Straight	Wrong Side of Road	Complaint of Pain
26574	4/25/09 00:16	10' East of	Placer St/Buenaventura Blvd	Hit Object	Fixed Object	West	Ran Off Road			Driving Under Influence	Other Visible Injury
36400	6/5/09 12:20	88' East of	Placer St/Airpark Dr	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Starting or Backing	Complaint of Pain
36601	6/6/09 14:04	0' In Int.	Placer St/Walnut Ave	Vehicle - Pedestrian	Pedestrian	South	Making Left Turn	East	Not Stated	Ped R/W Violation	Other Visible Injury
65334	9/30/09 09:56	400' East of	Placer St/Buenaventura Blvd	Other	Parked Motor Vehicle	West	Backing	Not Stated	Parked	Unsafe Starting or Backing	Property Damage Only
45904	1/22/10 17:54	178' East of	Placer St/Pleasant St	Rear-End	Other Motor Vehicle	West	Slowing/Stopping	West	Stopped In Road	Unsafe Speed	Other Visible Injury
23225	4/15/10 15:54	200' East of	Placer St/Buenaventura Blvd	Broadside	Other Motor Vehicle	East	Making Left Turn	West	Proceeding Straight	Auto R/W Violation	Other Visible Injury
28318	5/6/10 14:54	0' In Int.	Placer St/Olive Ave	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Making Left Turn	Unsafe Speed	Property Damage Only
55839	8/24/10 12:06	14' West of	Placer St/Mesa St	Rear-End	Other Motor Vehicle	West	Proceeding Straight	Not Stated	Stopped In Road	Unsafe Speed	Complaint of Pain
61543	9/14/10 17:41	114' West of	Placer St/Jay St	Rear-End	Other Motor Vehicle	South	Backing	West	Proceeding Straight	Unsafe Starting or Backing	Property Damage Only
61532	9/14/10 17:15	126' West of	Placer St/Pleasant St	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped In Road	Unsafe Speed	Property Damage Only

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Redding Police Department  
Traffic Unit

Traffic Collision History Report  
Midblock Collisions

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PLACER ST  
BUENAVENTURA BLVD  
OLIVE AVE

Total Number of Collisions: 50  
Date Range Reported: 1/1/2008 - 12/31/2012

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	Highest Injury
17090	3/17/08 21:02	0' In Int.	Placer St/Buena Ventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Complaint of Pain
18067	3/21/08 20:00	0' In Int.	Placer St/Olive Ave	Hit Object	Fixed Object	South	Proceeding Straight	East	Driving Under Influence	2	Other Visible Injury
22799	4/11/08 14:17	40' West of	Placer St/Buena Ventura Blvd	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	Complaint of Pain
44277	7/8/08 16:53	0' In Int.	Placer St/Walnut Ave	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto R/W Violation	Property Damage Only
56875	8/30/08 10:17	36' West of	Placer St/Jay St	Broadside	Other Motor Vehicle	North	Entering Traffic	East	Proceeding Straight	Auto R/W Violation	Property Damage Only
70566	10/27/08 07:22	0' In Int.	Placer St/Buena Ventura Blvd	Sideswipe	Other Motor Vehicle	East	Making Right Turn	East	Making Left Turn	Unknown	Property Damage Only
73295	11/7/08 19:29	0' In Int.	Placer St/Olive Ave	Broadside	Other Motor Vehicle	East	Proceeding Straight	West	Making Left Turn	Traffic Signals and Signs	Property Damage Only
80949	12/10/08 17:22	0' In Int.	Placer St/Olive Ave	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto R/W Violation	Other Visible Injury
831060	12/11/08 09:27	528' East of	Placer St/Buena Ventura Blvd	Sideswipe	Other Motor Vehicle	East	Proceeding Straight	East	Proceeding Straight	Unknown	Property Damage Only
831461	12/12/08 17:59	0' In Int.	Placer St/Pleasant St	Broadside	Other Motor Vehicle	East	Making Left Turn	West	Proceeding Straight	Traffic Signals and Signs	Property Damage Only
85600	1/25/09 10:17	0' In Int.	Placer St/Mesa St	Sideswipe	Other Motor Vehicle	West	Passing Other Vehicle	West	Proceeding Straight	Improper Passing	Property Damage Only

Redding Police Department  
Traffic Unit

Traffic Collision History Report

5/9/2014  
Page 1

City of Redding Placer Street  
Location: Placer St / Cumberland Dr

Date Range Reported: 1/1/2007 - 12/31/2007

Total Number of Collisions: 1

Report No.	Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil
04-9152	2/9/07	18:10	21	South	Vehicle - Pedestrian	Pedestrian	South	Making Left Turn	West	Proceeding Straight	Pedestrian Violation	1	0

Total Number of Collisions: 1

Settings Used For Query

Parameter	Setting
Street Name	PLACER ST
Cross Street	CUMBERLAND DR
Starting Date	1/1/2007
Ending Date	12/31/2007
Intersection	Intersection Related



Redding Police Department  
Traffic Unit

Traffic Collision History Report

5/9/2014  
Page 1

City: Redding  
Location: Placer St / Pleasant St  
Date Range Reported: 1/1/2007 - 12/31/2007  
Total Number of Collisions: 3

Report No.	Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil
07-1372	1/6/07	18:23	0	In Int.	Vehicle - Pedestrian	Pedestrian	Not Stated	Other	Not Stated	Entering Traffic	Unknown	1	0
07-69547	10/17/07	16:39	75	East	Rear-End	Other Motor Vehicle	West	Stopped In Road	West	Proceeding Straight	Unsafe Speed	0	0
08-2080	12/13/07	18:47	0	In Int.	Broadside	Other Motor Vehicle	East	Making Left Turn	West	Proceeding Straight	Traffic Signals and Signs	0	0

Total Number of Collisions: 3

Settings Used For Query

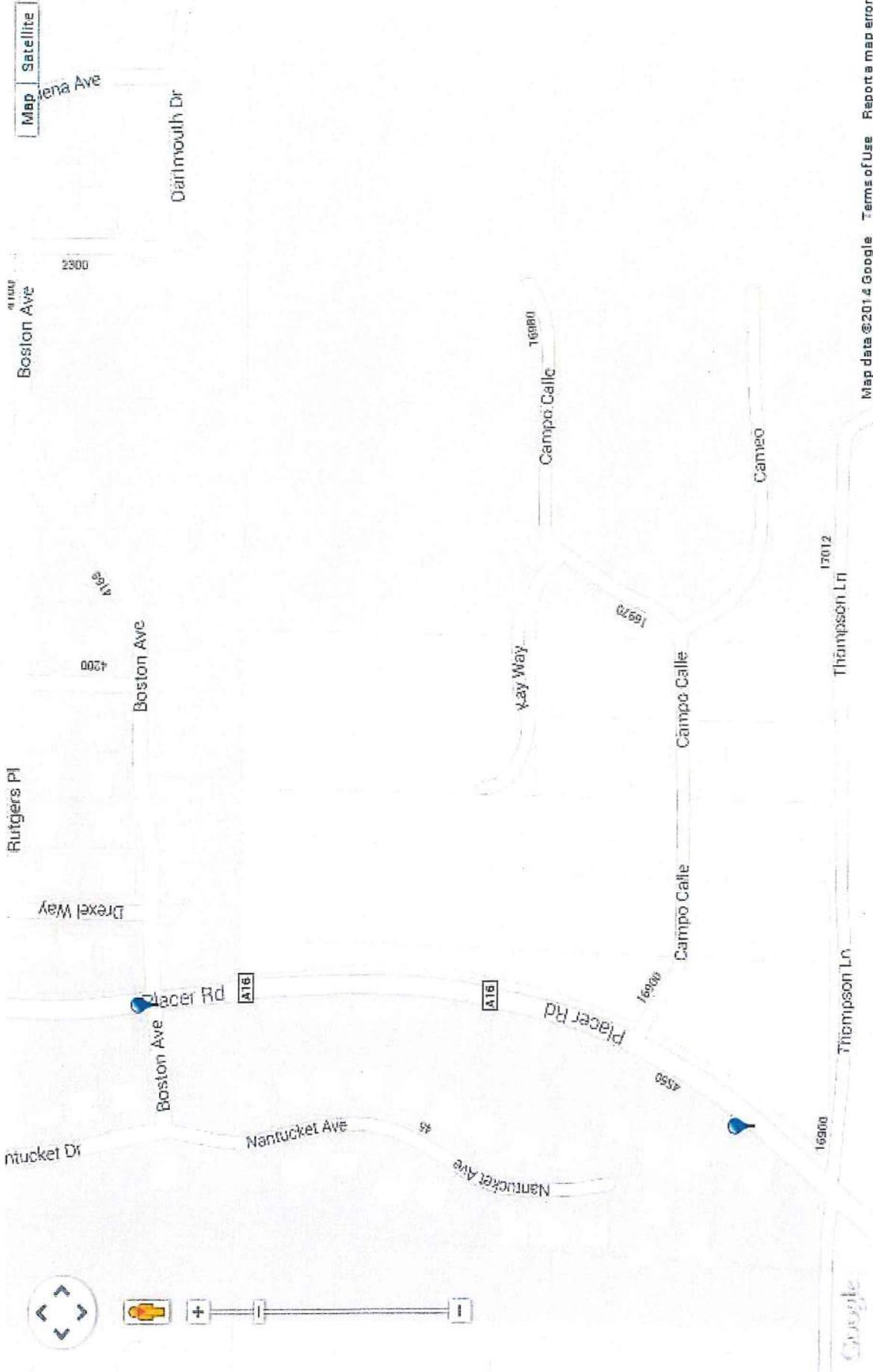
Parameter	Setting
Street Name	PLACER ST
Cross Street	PLEASANT ST
Starting Date	1/1/2007
Ending Date	12/31/2007
Intersection	Intersection Related





### City of Redding Placer Street Improvements

Map data ©2014 Google Terms of Use (Report a map error)



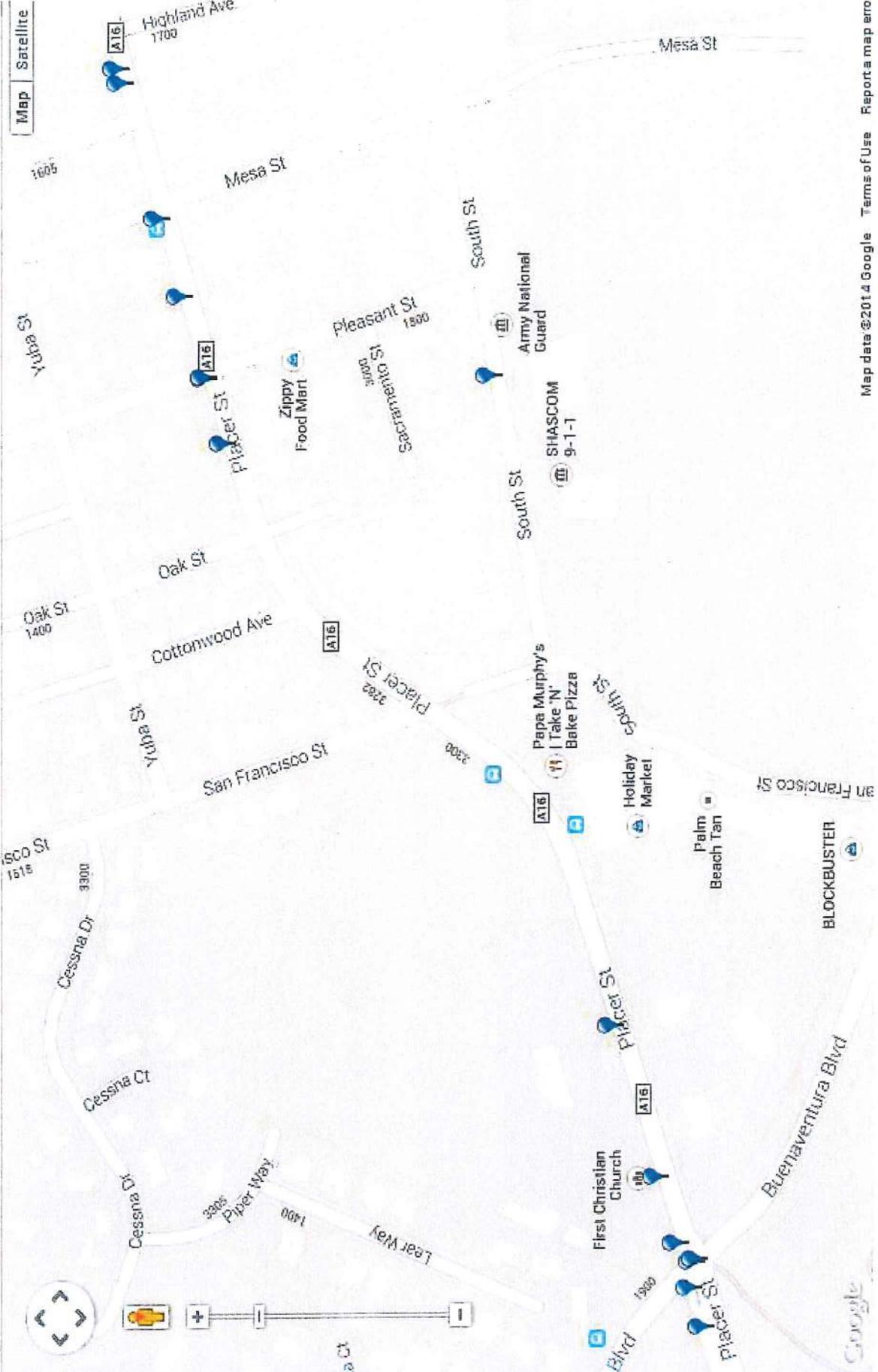
### City of Redding Placer Street Improvements



# City of Redding Placer Street Improvements







City of Redding Placer Street Improvements

**Benefit / Cost Calculation Result**

**1. Project Information**

Application ID	Placer ATP	Version	1
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**2. Countermeasures and Crash Data**

Crash Data Time Period	01/01/2008	to	12/31/2012	Years	5
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- Install sidewalk / pathway (to avoid walking along roadway)

CM Number	Project Type	Crash Type	CRF	Life
R37	Ped and Bike	Ped & Bike	80	20

Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain	Property Damage Only	Total
Ped & Bike	1	0	0	0	0	1

Annual Benefit	\$ 641,424	Cost	\$ 1,378,462
Life Benefit	\$ 12,828,480	B/C Ratio	9.31

- Install bike lanes

CM Number	Project Type	Crash Type	CRF	Life
R36	Ped and Bike	Ped & Bike	35	20

Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain	Property Damage Only	Total
Ped & Bike	1	0	0	0	0	1

Annual Benefit	\$ 280,623	Cost	\$ 590,769
Life Benefit	\$ 5,612,460	B/C Ratio	9.50

- Install raised medians / refuge islands (NS.I.)

CM Number	Project Type	Crash Type	CRF	Life
NS16	Ped and Bike	Ped & Bike	45	20

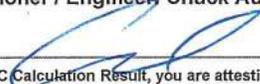
Crash Type	Fatality (Death)	Severe Injury	Injury - Other Visible	Injury - Complaint of Pain	Property Damage Only	Total
Ped & Bike	1	0	0	0	0	1

Annual Benefit	\$ 360,801	Cost	\$ 590,769
Life Benefit	\$ 7,216,020	B/C Ratio	12.21

**3. Benefit Cost Result**

Total Benefit	\$ 25,656,960
Total Cost	\$ 2,560,000
B/C Ratio	10.02

Safety Practitioner / Engineer: **Chuck Aukland**

Signature: 

By signing this B/C Calculation Result, you are attesting to your authority / responsibility at your local agency for this work and you are attesting to the accuracy of the values on this page and that they have been entered into the HSIP Application Form correctly, **DO NOT SIGN** if any of this is not the case.

ESTIMATED BENEFIT	units	average \$ per unit	daily impact	
<b>Improving Walking and Cycling Conditions Impact</b>				
100 people x 2 miles	200			
User benefits		0.25	\$50.00	
Option value		0.35	\$70.00	
Equity objectives		0.35	\$70.00	
<b>Increased Walking and cycling activity</b>				
walking miles per day	100			
Fitness and health – walking		\$0.50	\$50.00	
bicycling miles per day	500			
Fitness and health – cycling		\$0.20	\$100.00	
<b>Reduced Motor Vehicle Travel Impact</b>				
Vehicle cost savings	500	\$0.23	\$112.50	1% of 12,000 ADT * 2miles
Avoided chauffeuring miles (driver's time)	100	\$0.58	\$58.00	50 trips * 2 miles
Congestion reduction	240	\$0.06	\$14.40	
Reduced barrier effect	240	\$0.01	\$2.40	
Roadway cost savings	240	\$0.04	\$10.08	
Parking cost savings	240	\$0.36	\$86.40	
Energy conservation	240	\$0.03	\$7.20	
Pollution reductions	240	\$0.04	\$10.56	
		estimated impact	\$641.54	per day

Based on Todd Litman's paper: "Evaluating Active Transport Benefits and Costs" published by the Victoria Transport Policy Institute in 2014

Program Funds Requested (Cost)	\$2,592,519
days in 20 years	7300
Estimated daily impact over 20 Years (Benefit)	\$4,683,242
<b>Benefit/ Cost ratio over 20 years</b>	<b>\$1.8064</b>

## Abshier, John

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**From:** Wallace, Melanie@CCC <Melanie.Wallace@ccc.ca.gov>  
**Sent:** Wednesday, May 14, 2014 10:14 AM  
**To:** Abshier, John  
**Cc:** Johnson, Nicholas@CCC; Wolsey, Scott@CCC  
**Subject:** FW: City of Redding ATP Proposal - Placer Street Improvements

Hi John,

I am responding to your ATP proposal on behalf of Virginia Clark, CCC Region Deputy. We are interested in partnering with your office in the landscaping, irrigation and planting portions of this project. Please feel free to include this email in your application.

Thank you,

Melanie Wallace  
Region I Analyst  
California Conservation Corps  
(916)341-3153  
1719 24<sup>th</sup> Street  
Sacramento, CA 95816

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**From:** Johnson, Nicholas@CCC  
**Sent:** Monday, May 12, 2014 11:22 AM  
**To:** Wallace, Melanie@CCC  
**Cc:** Simpson, Trish@CCC; Wolsey, Scott@CCC; Clark, Virginia@CCC; Johnson, Nicholas@CCC  
**Subject:** RE: City of Redding ATP.pdf - Adobe Acrobat Standard

Melanie,

We would be interested in the landscaping, irrigation and planting portion of this project.

Nicholas Johnson  
Conservation Supervisor  
California Conservation Corps  
(530) 241-3030 office  
(530) 351-2394 cell  
[Nicholas.johnson@ccc.ca.gov](mailto:Nicholas.johnson@ccc.ca.gov)



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**From:** Wallace, Melanie@CCC  
**Sent:** Monday, May 12, 2014 11:10 AM  
**To:** Wolsey, Scott@CCC; Johnson, Nicholas@CCC

## Abshier, John

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**From:** Calcc Calcc <callocalcorps@gmail.com>  
**Sent:** Thursday, May 15, 2014 9:34 AM  
**To:** Abshier, John; virginia.clark@ccc.ca.gov  
**Subject:** Re: Mailed in City of Redding ATP application

Good morning,

Thank you for contacting CALCC. Unfortunately, no local corps will be able to participate due to the geographic location of this project. This email should serve as confirmation that you have contacted the local corps and that they have declined to participate. Feel free to attach this email to your final application.

Thanks,  
Cynthia

Cynthia Vitale

Conservation Strategy Group

1100 11th Street, Suite 200

Sacramento, CA 95814

(916) 558-1516 ext. 126

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On Tue, May 13, 2014 at 2:01 PM, Aaron Heredia <[aaron@csgcalifornia.com](mailto:aaron@csgcalifornia.com)> wrote:

Aaron Heredia

Conservation Strategy Group