

**ALL CELL PHONES AND ELECTRONIC DEVICES MUST BE  
TURNED OFF IN THE COUNCIL CHAMBERS**

**A G E N D A  
REEDLEY CITY COUNCIL MEETING**

**7:00 P.M.**

**TUESDAY, October 22, 2019**

**Meeting Held in the Council Chambers  
845 "G" Street, Reedley, California**

The Council Chambers are accessible to the physically disabled. Requests for additional accommodations for the disabled, including auxiliary aids or services, should be made one week prior to the meeting by contacting the City Clerk at 637-4200 ext. 212.

Any document that is a public record and provided to a majority of the City Council regarding an open session item on the agenda will be made available for public inspection at City Hall, in the City Clerk's office, during normal business hours. In addition, such documents may be posted on the City's website.

Unless otherwise required by law to be accepted by the City at or prior to a Council meeting or hearing, no documents shall be accepted for Council review unless they are first submitted to the City Clerk by the close of business one day prior to said Council meeting/hearing at which the Council will consider the item to which the documents relate, pursuant to the adopted City Council Protocols.

City of Reedley's Internet Address is [www.reedley.ca.gov](http://www.reedley.ca.gov)

Frank Piñon, Mayor

Mary Fast, Mayor Pro Tem  
Anita Betancourt, Council Member

Robert Beck, Council Member  
Ray Soleno, Council Member

**MEETING CALLED TO ORDER**

**INVOCATION** – Sylvia Rios, Reedley Police Chaplain Support Team

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

**AGENDA APPROVAL – ADDITIONS AND/OR DELETIONS**

**PUBLIC COMMENT** – *Provides an opportunity for members of the public to address the City Council on items of interest to the public within the Council's jurisdiction and which are not already on the agenda this evening. It is the policy of the Council not to answer questions impromptu. Concerns or complaints will be referred to the City Manager's office. Speakers should limit their comments to not more than three (3) minutes. No more than ten (10) minutes per issue will be allowed. For items which are on the agenda this evening, members of the public will be provided an opportunity to address the Council as each item is brought up for discussion.*

## NOTICE TO PUBLIC

**CONSENT AGENDA** items are considered routine in nature and voted upon as one item. Under a **CONSENT AGENDA** category, a recommended course of action for each item is made. Any Council Member may remove any item from the **CONSENT AGENDA** in order to discuss and/or change the recommended Course of action, and the Council can approve the remainder of the **CONSENT AGENDA**. A Council Member's vote in favor of the **CONSENT AGENDA** is considered and recorded as a separate affirmative vote in favor of each action listed. Motions in favor of the **CONSENT AGENDA** are deemed to include a motion to waive the full reading of any ordinance on the **CONSENT AGENDA**. For **adoption of ordinances**, only those that have received a unanimous vote upon introduction are considered **CONSENT** items.

### CONSENT AGENDA (Item 1- 6)

Motion \_\_\_\_\_ 2<sup>nd</sup> \_\_\_\_\_

1. RATIFY CITY MANAGER'S AUTHORIZATION TO EXECUTE AND SUBMIT AN AGREEMENT WITH GIANTS COMMUNITY FUND TO ALLOW THE CITY OF REEDLEY TO PROVIDE THE JR. GIANTS BASEBALL PROGRAM. – (Community Services)  
Staff Recommendation: Approve
2. APPROVE AND AUTHORIZE THE CITY MANAGER TO ENTER INTO AND SIGN A MASTER DUAL JURISDICTION COOPERATIVE AGREEMENT BETWEEN THE CITY OF REEDLEY AND COUNTY OF FRESNO FOR ROADWAY AND RELATED INFRASTRUCTURE PROJECTS THAT FALL WITHIN AND IMPACT BOTH JURISDICTIONS. – (Engineering)  
Staff Recommendation: Approve
3. ADOPT RESOLUTION 2019-077, CONFIRMING THE APPOINTMENT OF MANUEL MADRID TO THE PUBLIC SAFETY SALES TAX CITIZENS OVERSIGHT COMMITTEE, AS COUNCIL MEMBER BECK'S REPRESENTATIVE.- (City Clerk)  
Staff Recommendation: Approve
4. ADOPT RESOLUTION NO. 2019-092 OF THE CITY COUNCIL OF THE CITY OF REEDLEY SUPPORTING PROJECT DELIVERY SCHEDULES AND IMPLEMENTING TIMELY USE OF CONGESTION MITIGATION AIR QUALITY FUNDING FOR THE INSTALLATION OF SIDEWALKS ON LINCOLN/JEFFERSON/WASHINGTON AVENUES BETWEEN EAST AVENUE AND COLUMBIA AVENUES. – (Engineering)  
Staff Recommendation: Approve
5. ADOPT RESOLUTION NO. 2019-093 OF THE CITY COUNCIL OF THE CITY OF REEDLEY SUPPORTING PROJECT DELIVERY SCHEDULES AND IMPLEMENTING TIMELY USE OF SURFACE TRANSPORTATION BLOCK GRANT FUNDING FOR THE MANNING AVENUE PHASE 3 ROADWAY REHABILITATION PROJECT SELECTED FOR FUNDING. – (Engineering)  
Staff Recommendation: Approve
6. ADOPT RESOLUTION NO. 2019-094 OF THE CITY COUNCIL OF THE CITY OF REEDLEY ADOPTING THE CITY OF REEDLEY 2019 STANDARD PLANS AND SPECIFICATIONS. – (Engineering)  
Staff Recommendation: Approve

## **PUBLIC HEARING**

7. PUBLIC HEARING REGARDING THE PLACEMENT OF STOP SIGNS ON DEL ALTAIR AVENUE BETWEEN DAVIS AND SHIMIZU AVENUES AND RECEIVE COMMENTS FROM THE GENERAL PUBLIC. - Report, discussion and/or other Council action to approve, modify, and/or take other action as appropriate. – (Engineering)  
Staff Recommendation: Approve
  
8. CONSIDER ADOPTION OF ORDINANCES REGARDING A BALLOT MEASURE PERTAINING TO A TRANSACTIONS AND USE TAX FOR THE MARCH 3, 2020 CALIFORNIA PRIMARY ELECTION
  - A) ADOPT ORDINANCE NO. 2019-005, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REEDLEY ADDING SECTION 3-1-14, TO CHAPTER 1, OF TITLE 3 OF THE REEDLEY MUNICIPAL CODE PERTAINING TO THE IMPOSITION OF AN ADDITIONAL TRANSACTIONS AND USE TAX.
  
  - B) ADOPT UNCODIFIED ORDINANCE NO. 2019-006, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REEDLEY IMPOSING AN ADDITIONAL TRANSACTIONS AND USE TAX TO BE ADMINISTERED BY THE CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION.

Report, discussion and/or other Council action to approve, modify, and/or take other action as appropriate. – (Administrative Services)  
Staff Recommendation: Approve

9. ADOPT RESOLUTION NO. 2019-097 APPROVING A FINDING OF PUBLIC CONVENIENCE OR NECESSITY RELATED TO CONDITIONAL USE PERMIT APPLICATION NO. 2019-6, AUTHORIZING THE SALE OF BEER AND WINE FOR OFF-SITE CONSUMPTION LOCATED AT 1577 E. MANNING AVENUE. - Report, discussion and/or other Council action to approve, modify, and/or take other action as appropriate. – (Community Development)  
Staff Recommendation: Approve

## **ADMINISTRATIVE BUSINESS**

10. APPROVE AND AUTHORIZE THE CITY MANAGER TO EXECUTE ALL DOCUMENTS AND PLAN CHANGES NECESSARY FOR THE PROVISION OF DENTAL, MEDICAL & VISION COVERAGE FOR ELIGIBLE CITY EMPLOYEES, RETIREES, AND DEPENDENTS FOR THE 2020 CALENDAR YEAR. - Report, discussion and/or other Council action to approve, modify, and/or take other action as appropriate. – (Administrative Services)  
Staff Recommendation: Approve

## **RECEIVE INFORMATION & REPORTS**

*These items are formal transmittals of information to the Reedley City Council. They are not voted upon by the Reedley City Council. Members of the public who have questions on these items are suggested to call City staff members during regular business hours.*

11. RECEIVE, REVIEW, AND FILE THE QUARTERLY INVESTMENT REPORT FOR 1<sup>ST</sup> QUARTER ENDING SEPTEMBER 30, 2019 FOR FISCAL YEAR 2019-20. – Administrative Services.

12. MINUTES OF THE REGULAR MEETING OF SEPTEMBER 5, 2019 OF THE REEDLEY PLANNING COMMISSION. - Community Development

**COUNCIL REPORTS**

13. BRIEF REPORT BY COUNCIL MEMBERS ON CITY RELATED ACTIVITIES AS AUTHORIZED BY THE BROWN ACT AND REQUESTS FOR FUTURE AGENDA ITEMS.

**STAFF REPORTS**

14. UPDATES AND/OR REPORTS BY CITY MANAGER AND/OR STAFF MEMBERS.

**ADJOURNMENT**

**Dates to Remember:**

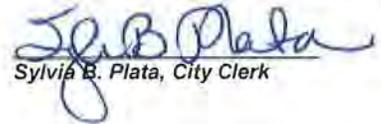
November 12, 2019 – Regular Council Meeting

November 26, 2019 – May go dark

December 10, 2019 – Regular Council Meeting

December 24, 2019 – May go dark

*I hereby certify under penalty of perjury, under the laws of the State of California that the foregoing revised agenda was posted in accordance with the applicable legal requirements. Dated this 17th day of October 2019.*

  
Sylvia B. Plata, City Clerk



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO:   1  

**DATE:** October 22, 2019

**TITLE:** RATIFYING CITY MANAGER'S AUTHORIZATION TO EXECUTE AND SUBMIT AN AGREEMENT WITH GIANTS COMMUNITY FUND TO ALLOW THE CITY OF REEDLEY TO PROVIDE THE JR. GIANTS BASEBALL PROGRAM.

**SUBMITTED:** Sarah Reid, Community Services Director

**APPROVED:** Nicole R. Zieba, City Manager

### RECOMMENDATION

Ratifying City Manager's authorization to execute and submit an agreement with the Giants Community Fund to allow the City of Reedley to provide the Jr. Giants Baseball Program for the 2020 season.

### EXECUTIVE SUMMARY

Jr. Giants Baseball is a free program offered during the summer months to children ages 5-13. The program serves 350 players. The Giants Community Fund provides all needed equipment, uniforms and hats. Four years ago, the Giants Community Fund started providing one staff member to assist City staff. The Boys and Girls Club pays for one staff member to assist at the Jr. Giants games. The City is responsible for the league oversight.

### BACKGROUND

The Community Services Department has offered the Jr. Giants Program for the past 13 years. The program hasn't changed, but the Giants Community Fund requires that the City enter into an agreement annually. Staff is asking for the approval to continue offering this program.

### FISCAL IMPACT

Staff time is accounted for in the 2019-20 FY Budget.

### ATTACHMENTS

Agreement with Giants Community Fund

Motion: \_\_\_\_\_

Second: \_\_\_\_\_

# 2020 Junior Giants League Agreement

## 1. Introduction

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**Please note:** You must initial each policy before moving on to the next page. If you have any questions or issues on specific policies in this agreement, please contact your Junior Giants Coordinator/Manager as soon as possible.

If you need to complete the survey in multiple sittings, click "Save and continue later" at the top of the page.

Thank you in advance for your time!

### 1. League

Reedley

### 2. Your organization's full name (to be listed online/printed on fliers)

City of Reedley

### 3. Your name

First : Sarah

Last : Reid

### 4. Your email (you'll receive a copy of your response)

sarah.reid@reedley.ca.gov

### 5. Junior Giants Coordinator/Manager

Nicole Catchatoorian

## 2. Contact Information

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Please update your contact information for email/phone communication. Your shipping address is where all league shipments will be sent.

### 6. Commissioner contact information

Name (first and last) : TBD

Office phone number : 559 637-4203

Cell phone number : TBD

Email address : sarah.reid@reedley.ca.gov

7. Please note that the contact information listed above (except cell phone number) will be posted on gojrgiants.org and our registration site if participants have registration questions.

If you prefer different contact information to be listed online, please enter it below. If not, you can skip this question.

### 8. Current league shipping address

\*Please note this is where all your materials will be delivered.

Address : 100 N. East Ave

City : Reedley

State : CA

Zip : 93654

**9. Assistant Commissioner contact information**

*If none, you can skip this question.*

Name (first and last) : Sarah Reid  
Office phone number : 559 637-4203  
Cell phone number : 559 360-8657  
Email address : sarah.reid@reedley.ca.gov

**10. Please enter any other contacts you would like included on group emails from the GCF (Commissioner and Assistant Commissioner are already included).**

*If none, you can skip this question.*

Name	Email
Contact	
Contact	
Contact	

**3. 2019 Projections**

**11. Here are the standard Junior Giants divisions:**

- T-ball: 5-6 years old
- Minors (baseball/softball): 7-9 years old
- Majors (baseball/softball): 10-13 years old
- Seniors (baseball/softball): 14-18 years old

Note: you may not host each of these divisions, but these are the standard divisions we offer.

Which applies to your league?

We run different divisions (i.e., 6-7 years old, 8-10 years old, 11-13 years old)

**12. Please fill in the following grid to let us know about your divisions.**

If you have less than 6 divisions, you can leave them blank. If you have more than 6 divisions, please use the comments to fill in the remaining information.

Note: we are asking for the number of teams you expect in each division, not players. Remember that standard Junior Giants teams are built to 15 players.

	What is this division called (i.e. T-ball)?	What ages are in this division (i.e. 6-7)?	How many teams do you expect in this division in 2020 (i.e. 4)?
Division 1	T- Ball	5-6	8
Division 2	Minors	7-9	8
Division 3	Majors	10-13	4
Division 4			
Division 5			
Division 6			

Comments:

13. How many players per team do you expect?

Note: We strongly suggest building teams to 15 players per team. We will be sending supplies (WOW packs & shirts) in sets of 15.

15 players

#### 4. Flier Order

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The Giants Community Fund provides custom fliers to each league to help promote and recruit for the Junior Giants program.

The flier size is 8.5 x11 and is double-sided, one side in English, and the other in Spanish. They are in color and will have your league's information inserted in the text box.

**THE FOLLOWING INFORMATION WILL BE PRINTED ON YOUR LEAGUE'S FLIERS. PLEASE ONLY LIST WHAT YOU WOULD LIKE PRINTED.**

14. Please indicate below what form(s) of promotion you are interested in receiving this season.

Fliers + PDF File

15. Flier Quantity

I acknowledge that the flier quantity listed in the League Agreement email is accurate.

16. Please pick a date between Wednesday, April 1 and Wednesday, April 15 to your registration to open. You can keep your registration open as long as needed after this date.

04/01/2020

Comments:

17. Since not all families have Internet access at home, please arrange for at least one opportunity for participants to register online in person.

In-person registration can be held on one or more designated registration days/nights (i.e. April 21 from 5-7 PM) or on consistent days over a period of weeks (i.e. Monday-Friday from noon to 6 PM). Computers with Internet access should be made available for families to use and volunteers or staff members should be present to answer questions.

Please choose which of the following options work best for your organization and the families in your community.

One or more designated registration days/nights

18. How many registration dates will you host?

3

19. Registration Day #1

04/14/2020

Comments:

20. Time for Registration Day #1

Please include AM/PM and copy the formatting example for consistency.

Start time (ex. 6:00 AM) : 5:00pm

End time (ex. 5:00 PM) : 6:00pm

21. Registration Day #2

04/21/2020

**22. Time for Registration Day #2**

Please include AM/PM and copy the formatting example for consistency.

Start time (ex. 6:00 AM) : 5:00pm  
End time (ex. 5:00 PM) : 6:00pm

**23. Registration Day #3**

04/28/2020

Comments:

**24. Time for Registration Day #3**

Please include AM/PM and copy the formatting example for consistency.

Start time (ex. 6:00 AM) : 5:00pm  
End time (ex. 5:00 PM) : 6:00pm

**25. Location for in-person registration date(s)**

*Please be sure to use accurate capitalization.*

Location (i.e. City Hall) : Reedley Boys and Girls Club  
Address : 100 N. East Ave.  
City : Reedley

**26. If applicable, please add any other pertinent registration information (for example, a school district disclaimer).**

**27. Contact information to be printed on fliers:**

First and last name (please capitalize first letter) : City of Reedley  
Phone number ( xxx-xxx-xxxx) : 559 637-4203  
Email address : sarah.reid@reedley.ca.gov

**5. Flier Preview**

28. Please review the following information that will be printed on your fliers. If you have any edits, please click the "back" button on the survey.

**City of Reedley**

**Sign up at gojrgiants.org starting 04/01/2020 or in person**

**04/14/2020 from 5:00pm to 6:00pm, 04/21/2020 from 5:00pm to 6:00pm & 04/28/2020 from 5:00pm to 6:00pm**

**Reedley Boys and Girls Club, 100 N. East Ave., Reedley**

**City of Reedley – 559 637-4203 – sarah.reid@reedley.ca.gov**

**League starts mid-June - Ages # to # (will be updated based on your divisions)**

Please initial that this information is correct. If you have any comments, please leave them below.

SR

Comments:

**Other notes for recruitment:**

Fliers should be distributed among schools, community centers, faith-based organizations, other youth-serving organizations and neighborhood parks in underserved areas.

PDF fliers should be distributed via email blasts, websites, social media, etc.

Junior Giants should be listed in the Parks & Recreation Activity Guide for leagues that are operated by cities.

For public relations assistance, please contact W2O at [JrGiants@w2ogroup.com](mailto:JrGiants@w2ogroup.com).

**6. 2020 Junior Giants League Agreement**

Junior Giants, the flagship program of the Giants Community Fund, is a free, noncompetitive and coed baseball/softball & youth development program for boys and girls ages 5-18 years old.

Junior Giants leagues are hosted by youth-serving organizations that exist separately from any association with the Junior Giants program (e.g., Park and Recreation Districts, Police Activities Leagues, YMCAs, Boys and Girls Clubs, etc.).

This Agreement is entered into by and between the Giants Community Fund ("GCF") and City of Reedley ("the Organization"), which is hosting the Reedley Junior Giants League ("the League") for the 2020 season.

As a condition of participation in the Junior Giants program and hosting the League, the Organization agrees to the following terms:

(Please initial each item. If you have any questions or issues with specific items, please write them in the comments section.)

## 7. 2020 League Information

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29. Registration must go live between April 1st and April 15th.

Prior to going live with registration, the Giants Community Fund must receive the following:

- This League Agreement
- Current Proof of Insurance

Please initial below to acknowledge these requirements.

SR

Comments:

30. You will be required to host at least (1) [First Pitch Meeting](#), (1) [Volunteer Meeting](#), (1) Make-Up Volunteer Meeting & (1) [Fundamentals Clinic](#) before your practices begin.

Please initial below to indicate you are aware of the following responsibilities:

- Choosing dates between May 25 and June 14 to host the meetings
- Reserving the appropriate facilities for the events
- Promoting the dates to your league in advance (dates should be chosen prior to registration opening)
- Requiring attendance from all families

SR

## 8. League Operation

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31. 2020 Season Schedule

The Organization shall ensure that its Junior Giants season will be 8 weeks in duration (including practices) and follow the Junior Giants Season & Program Schedule below:

Week of June 15: Week 1: Introduction to Junior Giants (practices only or 1 game and 1 practice for each team)

Week of June 22: Week 2: Health (practices only or 1 game and 1 practice for each team)

Week of June 29: Week 3: Strike Out Bullying (begin playing games if games have not already started. Remainder of season should consist of 1 practice and 1 game each week for each team.)

Week of July 6: Week 4: Education

Week of July 13: Week 5: Confidence

Week of July 20: Week 6: Teamwork

Week of July 27: Week 7: Leadership

Week of August 3: Week 8: Integrity

We will be able to adhere to this schedule

### 32. League Guidelines

The Organization ensures that:

The League has a minimum 150 participants.

Over 50% of our Junior Giants participants are above the T-ball age (5-6 years old).

All Junior Giants players must be at least 5 years old on or before July 1, 2020.

Practices and games will be held on weekends and/or weeknights after 5:30 PM so parents can be actively involved in the League.

SR

Comments:

### 33. Commissioner/Agency Responsibilities

The Acting Commissioner of the League shall attend the mandatory Commissioners Camp at Oracle Park in early 2020 (date to be announced) along with the Assistant Commissioner or an additional league organizer. If the Acting Commissioner is unable to attend Commissioners Camp, the League must send another representative who is involved with running the League.

The Organization will provide secure, year-round storage for all equipment provided by the Giants Community Fund with the exception of equipment that is no longer safe to use.

The Organization will not use the equipment/supplies provided for other programs/leagues (with the exception of rewards from previous seasons).

The Organization will make sure at least (1) staff member is at the field with the Ambassador during the entirety of game days.

The Organization will run the program according to the Junior Giants Code of Ethics.

The Organization will pass out incentives and WOW packs to coaches/players on a weekly basis, not all at the beginning or end of the season, to incentivize players to fully participate in the Junior Giants programs.

SR

Comments:

### 34. Ambassador

I understand that Ambassadors will become AmeriCorps members and their role may change. I will learn more at my league meeting and Commissioners Camp.

SR

### 35. Nondiscrimination

The Organization will refrain from discriminating on the basis of race, color, creed, national origin, gender, gender identity and expression, sexual orientation, disability, and military status in any of its activities or operations. The Organization shall foster an inclusive and welcoming environment for all players, coaches, volunteers, and families. The Organization shall provide equal opportunities for both females and males to play and coach.

SR

Comments:

## 9. Online Registration & Background Checks

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### 36. Online Registration

The organization shall:

Conduct all player, coach, and team parent registration through GCF's online sports management system, SportsEngine\*.

Not accept any other form of registration (i.e. paper registration).

Require each participants' parent(s)/guardian(s) to sign a Player Waiver & each volunteer to sign the Coach Waiver upon registration through SportsEngine prior to any participation in Junior Giants.

*\*Specific platform subject to change*

SR

Comments:

### 37. Wait Lists & Roster Upkeep

If the League uses a wait list for participants, the League shall use its best efforts to give children on the wait list an opportunity to play. If there is a League wait list, the League shall implement a "3 Strikes, You're Out" policy for participants who do not attend three events (meetings, practices, or games) without giving prior notice.

The League shall monitor attendance and manage our rosters weekly. When dropping players to make room for wait-listed players, leagues must move players onto a "fake" team, rather than unregistering players from the system. Please move players onto specific teams that signify when players were dropped, i.e., "Never attended," "Dropped during Weeks 1-4," etc.

SR

Comments:

38.

### Background Checks

The Organization will take all precautions to protect the safety of all participants in the League, including, without limitation, screening all adults who will interact with child participants in the league. The Organization will require all coaches, other volunteers affiliated with the Junior Giants program and all other adults who have contact with players to complete a background check through GCF's online sports management system, SportsEngine, by Friday, June 12, 2020. If any coach, volunteer or other adult does not complete a background check or clear a background check, such person will not be permitted to be associated with the Junior Giants program or otherwise serve as a coach or volunteer. Under no circumstances, may a person begin volunteering for the League until he/she has passed the SportsEngine background check.

The Organization shall not permit any adult to participate in any manner with the League if such adult's background check reveals: (i) a conviction for any crime involving or against a minor; (ii) a conviction for any violent crime; (iii) a conviction for Driving While Intoxicated if the person's services to the league would include driving; and/or (iv) the person is listed in a Sexual Offenders registry. Moreover, the League may prohibit any adult from participating in the League in any capacity if the background check reveals any information which the Head of the League determines could lead to a safety risk for the League.

All League teams shall have a background-checked adult of each gender over the age of 21 present at all times. At no time during any League activity should any adult, over 18 years of age, be alone with any member of the team, without another adult of the opposite gender present, except for his/her own child.

The Organization shall handle the results of all background checks with confidentiality and respect. Only the Commissioner of the League and his/her designees with a need to know may be informed of the results of the background checks.

The GCF may immediately suspend or terminate the league's affiliation in the Junior Giants program for failure to comply with the Background Check requirements described in this section.

SR

Comments:

39.

### Volunteer Shirts/Supplies

The Organization will not pass out any supplies to volunteers before they have cleared their background check. This includes, but is not limited to, a volunteer shirt, WOW packs, baseball/softball equipment, etc.

The Organization will ensure that volunteers wear their volunteer shirt at every game, practice and Junior Giants event to signify to parents at the field that they have passed their background check.

SR

Comments:

## **10. Use of Marks (Liability & Indemnification)**

40.

The GCF grants the League a non-exclusive, non-transferable limited license to use the trademarks, service marks and copyright rights belonging to the GCF (the "GCF/Junior Giants Marks") subject to the terms and conditions of this Agreement. The Organization will not alter the GCF/Junior Giants Marks in any manner, without the prior written approval of the GCF. The League acknowledges that it cannot associate the name of a local sponsor with the GCF/Junior Giants Marks without the prior written approval of the GCF. No approval will be granted where a local sponsor is in a category that is competitive to a Giants sponsor.

Prior to any publication, distribution or display by the Organization of any GCF/Junior Giants Marks other than for its intended usage, the Organization shall furnish a written proposal identifying such usage to the GCF for its prior written approval. The Organization must not publish, distribute or display any GCF/Junior Giants Marks without first receiving written approval from the GCF. Following receipt of the GCF's approval, the Organization must not alter the GCF/Junior Giants Marks. The Organization shall seek GCF's prior written authorization in the event it desires to use the GCF/Junior Giants Marks other than as provided herein.

The Organization shall not use the GCF/Junior Giants Marks in any way that: (a) advertises, promotes, expresses or implies endorsement of any third party, cause, belief product or service by the GCF or the San Francisco Giants; (b) advertises, promotes or expresses endorsement or sponsorship of the league by any third party, product or service without the prior written approval of the GCF; or (c) reflects adversely on the reputation of the San Francisco Giants or the GCF. In addition, the Organization shall not, without the prior written permission of the GCF, use the GCF/Junior Giants Marks in connection with any event or in any manner other than in connection with the League.

With respect to profiles, commentary, writings, photographs, images, logos, and audio or video files (collectively "Content") posted on social media outlets including, but not limited to, Facebook, Instagram, Twitter, blogs, podcasts, message boards and websites (collectively "Social Media"), the Organization/League hereby agrees that it shall: (a) obtain prior written consent from the GCF before using the GCF/Junior Giants Marks on any Social Media outlet or linking to any website on any Social Media outlet; (b) refrain from displaying Content via Social Media that could be reasonably construed as an official GCF, Giants and/or Junior Giants communication; (c) refrain from posting any false or misleading Content on any Social Media outlet relating to the GCF, the Junior Giants program and/or the Giants; and (d) (i) accept any Facebook "Favorite Pages" request from the GCF; (ii) "Like" the GCF Organizational Page on Facebook; (iii) accept any GCF request to follow League's Twitter account; and (iv) accept any request from the GCF to connect to any other Social Media that represents the League.

The Organization hereby acknowledges the proprietary nature of the GCF/Junior Giants Marks and any other trademarks, service marks and copyright rights provided to the League by the GCF in connection with the GCF or the San Francisco Giants (collectively, "Giants Rights"). The League represents that it has not made and will not make any unauthorized use of the Giants Rights and agrees that during or after the term of this Agreement, it will make no such use of any Giants Rights, other than as provided in this Agreement, without the prior written consent of the GCF. Any use the Organization has made or will make of such Giants Rights has not conferred or will not confer any rights or benefits upon it whatsoever, and any rights created by such use shall inure to the benefit of the GCF and the Giants. The Organization further acknowledges that for purposes of this Paragraph, use shall include, but is not be limited to, trademark, fair, incidental, descriptive or functional uses.

The Organization must obtain all necessary licenses, consents or releases permitting it to use any third party proprietary material not furnished by the GCF including, but not limited to any: (a) name, likeness or voice of any individual (including, without limitation, Major League Baseball ("MLB") players, coaches, managers, broadcasters and announcers); (b) name, likeness or voice of any individual in the League, including players, coaches and managers; and (c) any copyright, trademark or other property or identifications other than the GCF/Junior Giants Marks. The Organization shall be solely responsible for determining which licenses, consents and releases must be obtained.

SR

Comments:

## 11. Organization Shall Not Profit

41. Our organization acknowledges and agrees that the Giants Community Fund has no obligation to make any payment directly to our organization for any purpose.

SR

Comments:

42. Our organization will not earn a financial profit from items provided by the Giants Community Fund. This includes, but is not limited to, Giants or Minor League affiliate tickets, giveaway items and incentives, and equipment.

SR

Comments:

43. The Organization will not charge a fee for participants to play in the League, including any type of Organization membership fee. The Organization will not ask participants to fundraise in order to play in the League.

If a picture day is offered, there must be free options for players to receive their photo (players must receive a free printed photo or photos must be available for download at no charge).

SR

Comments:

## 12. Insurance

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44. The Organization will secure and continuously maintain, at its own expense, the following coverage:

a. An Insurance Services Office occurrence based Commercial General Liability Insurance Policy, providing coverage for bodily injury and property damage and personal and advertising injury, including contractual liability, participants liability, products/completed operations liability and Abuse & Molestation coverage with minimum limits of:

\$2,000,000 Each Occurrence;

\$4,000,000 General Aggregate;

\$4,000,000 Products/Completed Operations Aggregate.

b. Automobile Liability Insurance, covering owned, non-owned, leased or hired automobiles, with a minimum combined single limit of \$2,000,000 Each Accident.

All insurance policies must be issued by an admitted insurance carrier with an A.M. Best rating of A-8 or better. The Giants Community Fund and San Francisco Baseball Associates, LLC, The Office of the Commissioner of Baseball, its Bureaus, Committees, Subcommittees and Councils, MLB Advanced Media, L.P., Major League Baseball Enterprises, Inc., Major League Baseball Properties, Inc. (doing business in its own name and as Major League Baseball Productions and Major League Baseball International), The MLB Network, LLC, the Clubs of Major League Baseball, and each of their subsidiaries and affiliated entities, and their respective directors, officers and employees ("Additional Insureds") must be named as Additional Insureds under the Commercial General Liability Policy (using ISO Form CG2010 or its equivalent), Commercial Automobile and Umbrella Liability Policies.

All liability insurance policies must contain Cross Liability Endorsements, or their equivalents. Further, coverage for the Additional Insureds shall apply on a primary basis irrespective of any other insurance, whether collectible or not. The General Liability Policy shall include no third-party-over action exclusions or similar endorsements or limitations. No policy shall contain a self-insured retention. No policy shall contain a deductible in excess of \$25,000 and any/all deductibles shall be the sole responsibility of the League and shall not apply to the Additional Insureds. All policies shall be endorsed to provide a waiver of subrogation in favor of the Additional Insureds. All policies shall be endorsed to provide that in the event of cancellation, non-renewal or material modification the GCF shall receive at least thirty (30) days written notice thereof. The League shall furnish the GCF with certificates of insurance evidencing compliance with all insurance provisions noted above prior to the commencement of the League and annually at least ten (10) days prior to the expiration of each required insurance policy. The insurance requirements sets forth will in no way modify, reduce, or limit the indemnification herein made by the League. Receipt by GCF of a certification of insurance, endorsement or policy of insurance which is more restrictive than the contracted for insurance shall not be construed as a waiver or modification of the insurance requirements above or an implied agreement to modify same, nor is any verbal agreement to modify same permissible or binding.

SR

Comments:

## 13. Term of Agreement: Right to Discontinue

45.

Unless earlier terminated and/or discontinued in accordance with this paragraph, this Agreement shall be in effect until December 31, 2020. The GCF reserves the right to discontinue the Junior Giants program or any aspect of the program or require that the Organization disassociate itself from Junior Giants and the GCF at any time and for any reason. In addition, the GCF may suspend or discontinue the program in its entirety at any time for any reason.

SF

Comments:

## 15. Signature

---

46. The foregoing terms accurately set forth the terms of our understanding and agreement.

### AGREED AND ACCEPTED BY:

First Name : Nicole  
Last Name : Zieba  
Organization : City of Reedley  
Title : City Manager  
Date : 9/30/2019

47. Please use your mouse to sign in the box below.

A handwritten signature in black ink that reads "Nicole R. Zieba". The signature is written in a cursive, slightly slanted style.

Signature of: Nicole R. Zieba

48. *If you have issues using the signature box, please type your name here as your electronic signature.*

## 16. Thank You!

---

Thank you for your time and consideration in completing this League Agreement. You will be emailed a copy of this agreement, as well as important dates, to [sarah.reid@reedley.ca.gov](mailto:sarah.reid@reedley.ca.gov) for your records. If you do not receive an email with a copy of this agreement, please contact us and we will send you a copy.

If you have any questions or concerns, please contact Nicole Catchatoorian as soon as possible.

We look forward to a successful 2020 Junior Giants season with you!



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 2

**DATE:** October 22, 2019

**TITLE:** APPROVE AND AUTHORIZE THE CITY MANAGER TO ENTER INTO AND SIGN A MASTER DUAL JURISDICTION COOPERATIVE AGREEMENT BETWEEN THE CITY OF REEDLEY AND COUNTY OF FRESNO FOR ROADWAY AND RELATED INFRASTRUCTURE PROJECTS THAT FALL WITHIN AND IMPACT BOTH JURISDICTIONS

**SUBMITTED:** John S. Robertson, P.E. *JSR*  
City Engineer

**APPROVED:** Nicole R. Zieba *NZ*  
City Manager

### RECOMMENDATION

Approve and authorize the City Manager to enter into and sign a Master Dual Jurisdiction Cooperative Agreement between the City of Reedley and County of Fresno for roadway and related infrastructure projects that fall within and impact both jurisdictions.

### BACKGROUND

Many of the City's roadways at the edges of City limits will have one side of the roadway within the City of Reedley (City) city limits and other side fall within the County of Fresno's (County) jurisdiction. Both agencies are responsible for the sections of roadway within their boundaries and typically do not want to spend their limited roadway funds within another jurisdictions limits. Both the City and County recognize that it will be to their mutual benefit to perform, as a cooperative endeavor, certain construction projects for the improvement, repair or maintenance of roads and associated traffic signals, bridges, and facilities located across City/County jurisdictional boundaries, as to which the City and County share jurisdictional responsibility.

Additionally, from a roadway preservation standpoint and from the users perspective it makes constructability and fiscal sense to improve both sections of roadway at the same time. This master agreement (Agreement) sets the framework and each agency's obligations to a specific identified project, provides agreement regarding cost allocations and required share of cost, guidelines for each agency's responsibility during design and construction, indemnification requirements, and post construction obligations.

The Agreement identifies the agency representatives allowed to enter into these supplemental project

specific agreements. By granting this authority the agencies will have flexibility to enter into these agreements in a timely manner in order to keep the projects moving forward. Regardless, all City funds to be used for these projects will either be identified in the annual budget documents or brought before City Council for approval as a budget amendment. These steps allow Council to maintain authority and approval for the use of any funds spent on these specific projects.

**FISCAL IMPACT**

There is no fiscal impact to the City for entering into the Master Agreement with the County of Fresno. All projects subject to the Master Agreement require the creation of a Project Specific Agreement to be entered into. These projects will either be included in the annual budget document process or will come before the Council as a budget amendment for approval.

**ATTACHMENTS**

1. Master Dual Jurisdiction Agreement
2. Draft Project Specific Agreement

Motion: \_\_\_\_\_

Second: \_\_\_\_\_



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subject to the terms of a subsequently executed PSS between the Parties.

3. **Scope.** This Agreement shall govern the following types of collaborations:
  - a. **Dual Jurisdiction Projects.** Projects located within both City and County jurisdictions as to which a separate PSS has been executed between the Parties, including, but not limited to, road pavement overlay projects.
  - b. **Limitations.** This Agreement shall not govern projects which are occasioned by conditions imposed upon private development projects.
4. **Term.** This Agreement shall expire on December 31, 2025 (the "Expiration Date"), unless otherwise terminated hereunder, provided, that this Agreement shall continue in effect beyond the Expiration Date as to those Projects for which a PSS is executed prior to the Expiration Date. The term of this Agreement may be extended by mutual agreement of the Parties.
5. **Initiation of Process and Selection of Projects.**
  - a. Either of the Parties may propose to the other the undertaking of a specific cooperative project pursuant to the provisions hereof.
  - b. Upon approval of City's Engineer and/or Director of Public Works and County's Director of Public Works and Planning, a PSS will be prepared for execution by the authorized representatives of each of the Parties with respect to that Project. (As used hereinafter, either City's Engineer or Director of Public Works, or County's Director, may be referred to as "Director" as appropriate, and any reference thereto shall be deemed to include a reference to any authorized designee of said Director.)

- 1 6. **Project Specific Supplemental Agreements.** For each Project hereunder, the  
2 Parties shall enter into a Project Specific Supplement Agreement substantially in  
3 the form attached hereto as Exhibit A. Each PSS shall:  
4  
5 a. Identify location and boundaries of the Project;  
6  
7 b. Set forth each Party's jurisdictional share (the percentage of the estimated  
8 project cost for which each Party is responsible, which shall be based upon  
9 the percentage of the Project scope that lies within each Party's jurisdiction);  
10  
11 c. Identify the anticipated funding source(s) for the Project and any specific  
12 requirements attached thereto; and  
13  
14 d. Identify the Lead Agency for Project coordination and completion. The other  
15 party to the PSS will be the Participating Agency.
- 16 7. **Project Execution Obligations.**
- 17 a. **Construction Contract.** Each Project shall be performed and administered  
18 by the Lead Agency, or its agents thereof, and shall be constructed under  
19 a single construction contract.
- 20 b. **Project Engineering.** Lead Agency, either with its own staff or by  
21 contracting with a consultant, shall provide Project Engineering in  
22 accordance with the requirements of the funding agencies and all federal,  
23 state, and local laws, including:
- 24 i. Administering California Environmental Quality Act Environmental  
25 and National Environmental Policy Act compliance, as applicable.
- 26 ii. Providing Design Engineering services; including preparation of  
27 plans, specifications, and engineer's estimates and other Project  
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- documents necessary for the bidding and construction of the Project.
- iii. Oversight of consultant(s) employed by Lead Agency for Project design.
- iv. Ensuring that the project design complies with all applicable design standards, including, but not limited to, standards associated with the Americans with Disabilities Act.
- v. Preparation and administration of applicable permits.
- vi. Advertisement, bidding, and award of the Project construction contract.
- vii. Public outreach.
- c. **Plan Review and Approval.** Lead Agency shall provide Participating Agency the plans, specifications, and engineer's estimates for each Project for review and approval. Participating Agency shall indicate its approval via the signature of its Director upon the title sheet of the Project plans.
- d. **Right-of-Way Engineering.** Lead Agency or a consultant contracted by Lead Agency to perform right of way services, shall perform Right-of-Way Engineering and identify all rights-of-way needed to construct the Project, within all applicable jurisdictions. Right-of-Way Engineering shall include, but not be limited to, preparation of legal descriptions and drawings. Each Party shall be responsible for review and approval of deeds for property within its boundaries.
- e. **Right-of-Way Acquisition.** Unless otherwise agreed upon pursuant to a specific Project PSS, the Party within whose jurisdiction the right-of-way to

1 be acquired is situated shall be responsible for acquisition of such right-of-  
2 way. ROW Acquisition includes, but is not limited to, obtaining title reports,  
3 performing appraisals, and conducting negotiations and such legal  
4 proceedings as subsequently may become necessary.  
5

6 f. **Construction Engineering.** Lead Agency shall be responsible for  
7 Construction Engineering, including general administration of the  
8 construction contract and furnishing all necessary field engineering,  
9 inspection, and testing for performance of the construction work.  
10 Participating Agency may, at its option and at its sole and independent cost,  
11 inspect the construction contractor's work.  
12

13 g. **Permits.** If allowed by the provisions of the Participating Agency's  
14 applicable ordinances and the applicable PSS, the Participating Agency  
15 shall issue a "no fee" encroachment permit for Project work done within the  
16 Participating Agency's jurisdiction.  
17

18 8. **Award of Construction Contract.**

19 a. If the lowest responsive and responsible bid for Project's construction  
20 contract does not exceed the engineer's estimate, including contingency,  
21 by more than ten percent (10%), Lead Agency's Director shall recommend  
22 to its governing body that the construction contract be awarded to that  
23 bidder.  
24

25 b. In the event that the lowest responsive and responsible bid for Project's  
26 construction contract exceeds the engineer's estimate by more than ten  
27 percent (10%), then Lead Agency's Director will not recommend that its  
28

1 governing body award the construction contract, unless mutually agreed  
2 upon in writing by both Lead Agency's Director and Participating Agency's  
3 Director.

4  
5 c. If the lowest responsible bidder's proposal is more than ten percent (10%)  
6 above the engineer's estimate, including contingency, and award of the  
7 Project is mutually agreed upon in accordance with Subsection 8(b) above,  
8 then in such event, Participating Agency's percentage share of cost will be  
9 adjusted to reflect the increased cost; however, Participating Agency's  
10 share of cost shall not exceed the percentage share of cost specified in the  
11 applicable PSS unless mutually agreed upon in writing by City's and  
12 County's respective Directors.

13  
14 d. All recommendations by Lead Agency's Director involving bids over the  
15 engineer's estimate shall consider the availability of funding or budgetary  
16 appropriations.

17  
18 9. **Cost Allocation.**

19 a. **Cost Share.** Generally, unless otherwise agreed in the PSS for that Project  
20 or as specifically provided in Subsection 11(c) below, each party shall be  
21 responsible for costs in proportion to the percentage of the Project located  
22 within the party's jurisdiction. Participating Agency and Lead Agency shall  
23 each be responsible for the actual costs of the Participating Agency and  
24 Lead Agency obligations identified in the Preliminary Engineer's Estimates  
25 attached as an Exhibit to the applicable PSS.

26  
27 b. **Revisions to Participating Agency's Project Costs.** Any addenda or  
28

1 revisions to the Project's approved construction documents for  
2 improvements performed within Participating Agency's jurisdiction (except  
3 for adjustments made to account for actual quantities used in construction  
4 of the Project), resulting in an increase in bid item quantity or cost of any  
5 bid item by more than ten percent (10%), shall be approved by both  
6 Directors.  
7

8 c. **Cost Increases.** Participating Agency's share of costs, as shown in the  
9 Preliminary Engineer's Estimate of probable costs (an Exhibit to the  
10 applicable PSS), shall not be increased by more than ten percent (10%)  
11 (except for adjustments made to account for actual quantities used in  
12 construction of the Project), unless otherwise approved in writing by  
13 Participating Agency's Director.  
14

15 10. **Deposit by Participating Agency.** Unless otherwise agreed in the PSS for a  
16 specific Project, within sixty (60) days after award of Project's construction contract  
17 by the Lead Agency's governing body, Participating Agency shall deposit with Lead  
18 Agency an amount equal to ninety percent (90%) of Participating Agency's  
19 estimated cost share as determined in accordance with the PSS.  
20

21 11. **Reconciliation of Costs.**  
22

23 a. Final Project costs and Participating Agency's share thereof will not be  
24 determined until construction is completed and the Project is accepted by  
25 both Lead Agency and Participating Agency and closed out in accordance  
26 with each agency's policies.  
27

28 b. Following final acceptance of the Project by Lead Agency and Participating

1 Agency, and within sixty (60) days of Participating Agency's receipt of an  
2 invoice from Lead Agency requesting Participating Agency's payment of the  
3 remaining balance of Participating Agency's share of costs as adjusted (if  
4 necessary), in accordance with actual costs and the terms of this  
5 Agreement, Participating Agency shall deliver payment in full of such  
6 remaining balance to Lead Agency.  
7

8 c. **Modifications to City Utilities.** Notwithstanding the provisions of  
9 Subsection 9(a) above, the adjustment or modification of any utility facilities  
10 owned and operated by City shall be performed by City at no cost to County,  
11 regardless of which Party has jurisdiction over the location within which  
12 such facilities are situated.  
13

14 d. **Change Orders.** Following the award of a construction contract, any  
15 change order within either Party's jurisdiction (except for adjustments made  
16 to account for actual quantities used in construction of the Project), resulting  
17 in an increase by more than ten percent (10%) of that agency's cost share,  
18 shall be approved by the Director of said agency.  
19

20 12. **Project Acceptance.** Unless otherwise noted, each Party may, at its own  
21 discretion and expense, conduct final inspection of the work prior to accepting  
22 ownership of facilities. Either Party may reject work that is a material deviation  
23 from the approved plans. To the extent necessary, Lead Agency shall work with  
24 Participating Agency to compile a punch list of all work which (1) deviates from  
25 approved plans and (2) is unacceptable to the either Party. Lead Agency shall  
26 coordinate the completion of punch list items.  
27  
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- 1 13. **Post Construction Obligations.** Upon completion of the Project, each Party's  
2 jurisdictional and maintenance responsibilities shall remain unchanged from those  
3 which existed prior to completion of the Project except as modified through any  
4 street maintenance agreement entered into between City and County.  
5
- 6 14. **Dispute Resolution.** The Parties agree to implement the provisions of this  
7 Agreement in a reasonable, good faith manner. In the event of a dispute the  
8 Parties shall engage in informal good faith negotiations at the staff level, which  
9 shall be escalated to Directors. Should no resolution be attainable, the Parties  
10 agree to engage in mediation through a mutually acceptable mediator prior to  
11 institution of legal proceedings to resolve any issues pertaining to the provisions  
12 of this Agreement. The Parties shall each pay fifty percent (50%) of all fees and  
13 costs charged by such mediator.  
14
- 15 15. **Indemnification.** City agrees to indemnify, save, hold harmless, and at County's  
16 request, defend County, its officers, agents, and employees from any and all costs  
17 and expenses, damages, liabilities, claims, and losses occurring or resulting to any  
18 person, firm, or corporation who may be injured or damaged by the performance,  
19 or failure to perform, by City, its officers, agents and employees, under this  
20 Agreement; provided, that nothing herein shall constitute a waiver by City of  
21 governmental immunity that may be available as a defense to any such third-party  
22 claim(s) under or pursuant to Government Code Section 810 et seq. This section  
23 shall survive expiration or termination of this Agreement.  
24  
25 County agrees to indemnify, save, hold harmless, and at City's request, defend  
26 City, its officers, agents, and employees from any and all costs and expenses,  
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1 damages, liabilities, claims, and losses occurring or resulting to any person, firm,  
2 or corporation who may be injured or damaged by the performance, or failure to  
3 perform, by County, its officers, agents and employees, under this Agreement;  
4 provided, that nothing herein shall constitute a waiver by County of governmental  
5 immunity that may be available as a defense to any such third-party claim(s) under  
6 or pursuant to Government Code Section 810 et seq. This section shall survive  
7 expiration or termination of this Agreement.  
8

9 16. **Insurance.** Without limiting the applicability or scope of the indemnification  
10 provisions contained in Section 15, County and City shall maintain, at their sole  
11 expense, insurance policies or self-insurance programs including, but not limited  
12 to, an insurance pooling arrangement and/or Joint Powers Agreement sufficient to  
13 fund their respective liabilities hereunder throughout the term of this Agreement.  
14 Coverage shall be provided for comprehensive general liability, automobile liability,  
15 professional liability, and workers' compensation.  
16

17  
18 17. **Assignment.** Neither Party shall assign, transfer, or sub-contract this Agreement,  
19 nor any of its respective rights or duties hereunder without the written consent of  
20 the other Party.  
21

22 18. **Approvals.** All approvals authorized hereunder shall be in writing.

23 19. **Notices.** All required notices may be sent by first class United States Mail,  
24 facsimile transmission, hand delivery, or express mail, and for time calculations  
25 purposes shall be deemed to have been received by the end of five (5) business  
26 days from the proper sending thereof unless proof of prior actual receipt is  
27 provided. Unless otherwise notified in writing, notices shall be sent to the following  
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addresses:

If to the City:

City of Reedley  
\_\_\_\_\_  
City Engineer  
1733 Ninth Street  
Reedley, CA 93654  
Facsimile: (559) 637-2139

If to the County:

County of Fresno  
Steven E. White, Director of Public Works and Planning  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 20. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which when executed will be deemed to constitute one and the same instrument and agreement.
- 21. **Severable.** The provisions of this Agreement are severable. The invalidity or unenforceability of any one provision of this Agreement shall not affect the other provisions.
- 22. **Amendment.** This Agreement may be modified only by written instrument executed by duly authorized representatives of both City and County.
- 23. **Entire Agreement.** Each party acknowledges that it has read and fully understands the contents of this Agreement and represents that this entire Agreement between City and County with respect to the subject matter contained herein and that this Agreement supersedes all prior negotiations, representations, or agreements, either written or oral.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of  
the day and year first herein above written.

[SIGNATURES ON FOLLOWING PAGE]

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CITY OF REEDLEY  
A California municipal corporation

By: \_\_\_\_\_  
Nicole Zieba , City Manager

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Scott G. Cross  
City Attorney

ATTEST:

By: \_\_\_\_\_  
Sylvia Plata, City Clerk

COUNTY OF FRESNO

By: \_\_\_\_\_  
Sal Quintero, Chairman  
Board of Supervisors of The County of  
Fresno

ATTEST:  
BERNICE E. SEIDEL  
Clerk to the Board of Supervisors  
County of Fresno

By: \_\_\_\_\_



1 NOW, THEREFORE, in consideration of the mutual acknowledgments, covenants,  
2 and conditions herein contained, it is hereby agreed as follows:

3  
4 1. **Recitals.** Each and all of the foregoing recitals of background facts are  
5 incorporated herein by this reference as though set forth herein verbatim.

6 2. **Master Agreement.** Unless otherwise noted herein, all applicable terms and  
7 provisions contained in the Master Agreement shall apply to the Project.

8  
9 3. **Lead Agency.** The Lead Agency for the Project will be \_\_\_\_\_

10 4. **Participating Agency.** The Participating Agency for the Project will be  
11 \_\_\_\_\_

12  
13 5. **Engineer's Estimate.** A Preliminary Engineer's Estimate is attached hereto as  
14 "Exhibit B" and is incorporated herein by this reference. Exhibit B may be revised  
15 by the parties at any time, by written approval of both respective Directors, to reflect  
16 the estimated costs of modifications and refinements to the Project.

17  
18 6. **Jurisdictional Cost Share.** [The primary anticipated funding source for the  
19 Project will be \_\_\_\_\_.] Each party  
20 shall be responsible for the actual costs of its respective obligations, as initially  
21 identified in the Preliminary Engineer's Estimate, and as revised pursuant to  
22 Section 5 above once the actual construction costs have been finally determined.  
23 Generally, unless otherwise provided either in the Master Agreement or herein,  
24 each party shall be responsible for costs in proportion to the percentage of the  
25 Project located within its jurisdiction as set forth in Recital C. The estimated cost  
26 for the City is \_\_\_\_\_ and the estimated cost for County is  
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7. **Special Terms.** The parties agree that the following special or specific terms shall apply to the performance of the Project:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. **Assignment.** Neither Party shall assign, transfer, or sub-contract this Agreement, nor any of its respective rights or duties hereunder without the written consent of the other Party.

9. **Waiver.** Waiver of any breach of this Agreement by any party hereto shall not constitute a continuing waiver or a waiver of any breach of the same or another provision of this Agreement.

10. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which when executed will be deemed to constitute one and the same instrument and agreement.

11. **Severable.** The provisions of this Agreement are severable. The invalidity or unenforceability of any one provision of this Agreement shall not affect the other provisions.

12. **Amendment.** This Agreement may be modified only by written instrument executed by duly authorized representatives of both City and County.

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13. **Entire Agreement.** Each party acknowledges that it has read and fully understands the contents of this Agreement and represents that this entire Agreement between City and County with respect to the subject matter contained herein and that this Agreement supersedes all prior negotiations, representations, or agreements, either written or oral.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first herein above written.

[SIGNATURE PAGE TO FOLLOW]

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CITY OF REEDLEY,  
A California municipal corporation

COUNTY OF FRESNO

By: \_\_\_\_\_  
\_\_\_\_\_, City Engineer

By: \_\_\_\_\_  
Steven White, Director  
Public Works and Planning

APPROVED AS TO FORM:

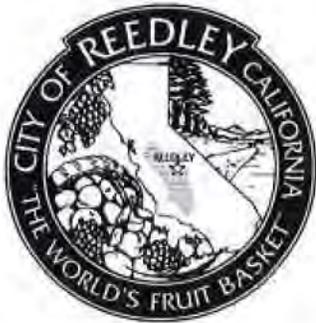
By: \_\_\_\_\_  
Scott G. Cross  
City Attorney

ATTEST:  
BERNICE E. SEIDEL  
Clerk to the Board of Supervisors  
County of Fresno

ATTEST:

By: \_\_\_\_\_  
Sylvia Plata, City Clerk

By: \_\_\_\_\_



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 3

**DATE:** October 22, 2019

**TITLE:** ADOPT RESOLUTION 2019-077, CONFIRMING THE APPOINTMENT OF MANUEL MADRID TO THE PUBLIC SAFETY SALES TAX CITIZENS OVERSIGHT COMMITTEE, AS COUNCIL MEMBER BECK'S REPRESENTATIVE.

**SUBMITTED:** Sylvia B. Plata, City Clerk *SBP*

**APPROVED:** Nicole R. Zieba, City Manager *NZ*

### RECOMMENDATION

That the Reedley City Council adopt Resolution 2019-077, acknowledging Council Member Beck's selection in the appointment of Manuel Madrid to the Public Safety Sales Tax Citizens Oversight Committee, also known as the Measure "G" Oversight Committee as his Representative. Mr. Madrid's term will coincide with Council Member Beck's term in office.

### EXECUTIVE SUMMARY

Ordinance 2007-05 adopted by Reedley City Council on November 7, 2007 required the City Council to establish a five member Citizen Oversight Committee with the responsibility of annually reviewing expenditures and appropriations of tax revenues. Each Council Member is responsible for selecting and appointing a member of the community to serve on the Public Safety Sales Tax Citizens Oversight Committee for a term that coincides with his/her own. Chris Zaczek, Council Member Beck's former Representative is no longer able to continue because of conflicts with his work schedule. Council Member Beck is appointing Mr. Madrid to continue as his Representative.

### FISCAL IMPACT

None.

### ATTACHMENT

Resolution no. 2019-077

**RESOLUTION NO. 2019-077**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REEDLEY APPOINTING MANUEL MADRID TO THE PUBLIC SAFETY SALES TAX CITIZEN'S OVERSIGHT COMMITTEE**

**WHEREAS**, the City Council of the City of Reedley has established a five member Citizen's Oversight Committee to annual review expenditures and appropriations of the tax revenues to ensure that all such revenues are spent or appropriated for the purposes and uses set forth in Ordinance No. 2007-05, Section 5-11-12, paragraphs (A) and (C), in accordance with the allocation percentages set forth in paragraph (B). The Citizen's Oversight Committee is also authorize to make recommendations to the City Council regarding the allocation percentages set forth in paragraph (B); and

**WHEREAS**, each Committee Member shall be a resident of the City at the time of appointment and shall remain a resident of the City while serving on the Committee; and

**WHEREAS**, each member of the Committee shall have a term coinciding with the term of the appointing Council Member; and

**WHEREAS**, with the vacancy of Former Committee Member Zaczek, Council Member Beck has selected Manuel Madrid as his appointee to this Committee; and

**WHEREAS**, the Committee shall receive the assistance of City Staff and shall issue an annual public report on the expenditures and appropriations of the tax revenues. The committee shall undertake such additional duties as the Council may designate; and

**WHEREAS**, except as otherwise provided in paragraph (D), the Committee and its members shall be subject to the provisions of Chapter 1 of Title 2 of the Reedley Municipal Code, beginning with Section 2-1-1.

**NOW, THEREFORE, BE IT RESOLVED** that the following citizens have been appointed to the Citizen's Oversight Committee.

Kathleen M. Hayes	Re-Appointed by Mayor Frank Piñon, District 1
Carl Smith	Appointed by Mayor Pro-Tempore Mary Fast, District 2
Manuel Madrid	Appointed by Council Member Robert Beck, District 3
Robert Takacs	Appointed by Council Member Ray Soleno, District 4
Donna Suemoto	Appointed by Council Member Anita Betancourt, District 5

This foregoing resolution is hereby approved the 22<sup>th</sup> day of October, 2019, in the City of Reedley, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

\_\_\_\_\_  
Frank Piñon, Mayor

ATTEST:

\_\_\_\_\_  
Sylvia B. Plata, City Clerk



# REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 4

**DATE:** October 22, 2019

**TITLE:** ADOPT RESOLUTION NO. 2019-092 OF THE CITY COUNCIL OF THE CITY OF REEDLEY SUPPORTING PROJECT DELIVERY SCHEDULES AND IMPLEMENTING TIMELY USE OF CONGESTION MITIGATION AIR QUALITY FUNDING FOR THE INSTALLATION OF SIDEWALKS ON LINCOLN/JEFFERSON/WASHINGTON AVENUES BETWEEN EAST AVENUE AND COLUMBIA AVENUES

**SUBMITTED:** John S. Robertson, P.E.  
City Engineer *JSR*

**APPROVED:** Nicole R. Zieba  
City Manager *NZ*

## RECOMMENDATION

Adopt Resolution No. 2019-092 of the City Council of the City of Reedley supporting project delivery schedules and implementing timely use of Congestion Mitigation Air Quality funding for the installation of sidewalks on Lincoln/Washington/Jefferson Avenues between East Avenue and Columbia Avenues

## EXECUTIVE SUMMARY

Assembly Bill 1012 (AB 1012) was enacted to ensure the timely use of State and Federal funding related to transportation projects. In conformance with AB 1012 the Fresno Council of Governments (COG) requires that all agencies submitting applications for projects to receive federal funding dollars from the 2019-2020 Congestion Mitigation Air Quality (CMAQ) funding source submit a resolution stating that the governing board of the agency is in support of the project, its schedule, and will meet the required funding deadlines per the funding requirements.

The project the City will submit to COG for 2019-2020 CMAQ funding application is the installation of sidewalks on Lincoln, Washington, and Jefferson Avenues between East and Columbia Avenues (Project). The construction of the Project is estimated to cost approximately \$470,945. Additional project expenses include costs for design and plan preparation, acquiring of right of way, and construction management. The total estimated project cost is \$700,190.

The installation of sidewalk on both sides of these three streets, along with the previously funded East

Avenue sidewalk project (Scheduled for construction Spring of 2020) completes a safe path of travel for students attending Jefferson Elementary School.

**FISCAL IMPACT**

There is no fiscal impact to the City to prepare and submit this funding application.

**ATTACHMENTS**

1. Resolution No. 2019-092
2. Project Location Maps

Motion: \_\_\_\_\_

Second: \_\_\_\_\_

**RESOLUTION NO. 2019-092**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REEDLEY SUPPORTING PROJECT DELIVERY SCHEDULES AND IMPLEMENTING TIMELY USE OF CONGESTION MITIGATION AND AIR QUALITY FUNDING FOR THE PROJECTS SELECTED FOR FUNDING**

**WHEREAS**, AB 1012 has been enacted into State Law in part to provide for the "timely use" of State and Federal funding; and

**WHEREAS**, the City of Reedley is able to apply for and receive Federal and State funding under the Federal Transportation Act; and AB 1012 has been enacted into State Law in part to provide for the "timely use" of State and Federal funding; and

**WHEREAS**, the City of Reedley desires to ensure that the sidewalk installation along Lincoln, Jefferson, and Washington Avenues is delivered in a timely manner to preclude the Fresno Region from losing those funds for non-delivery; and

**WHEREAS**, it is understood by the City of Reedley that failure for not meeting project delivery dates for any phase of a any project may jeopardize federal or state funding to the Region; and

**WHEREAS**, the City of Reedley must demonstrate dedicated and available local matching funds.

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of Reedley, using their independent judgment, approves Resolution No. 2019-092, and hereby agrees to ensure that a; project delivery deadlines for all project phases will be met or exceeded.

**BE IT FURTHER RESOLVED**, that failure to meet project delivery deadlines may be deemed as sufficient cause for the Fresno Council of Governments Policy Board to terminate agency's project and reprogram Federal/State funds as deemed necessary.

**BE IT FURTHER RESOLVED**, that the City of Reedley Council does direct its management and engineering staffs to ensure all projects are carried out in a timely manner as per the requirements of AB 1012 and the directive of the City Council of the City of Reedley.

This foregoing resolution is hereby approved and adopted at a regular meeting of the City Council of the City of Reedley held on 22<sup>nd</sup> day of October, 2019, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

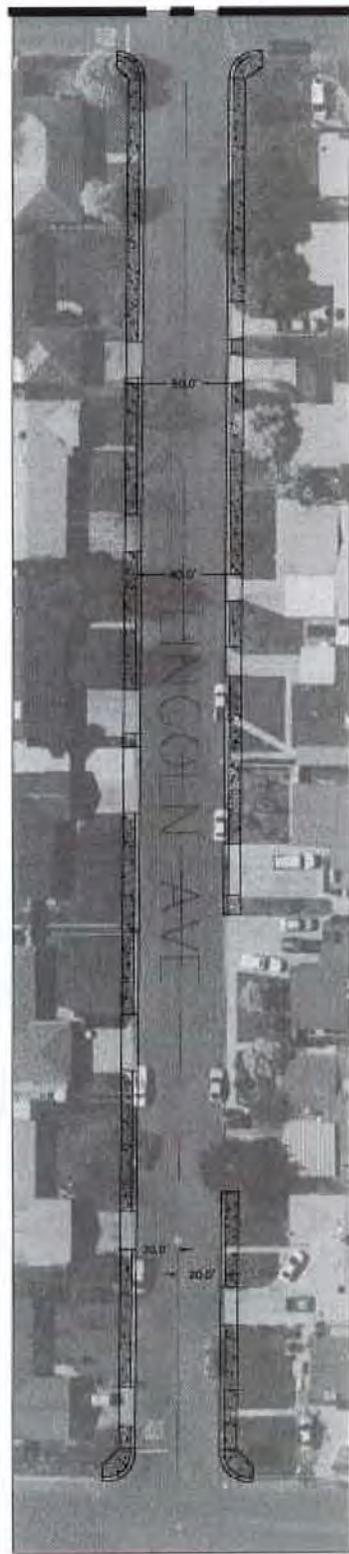
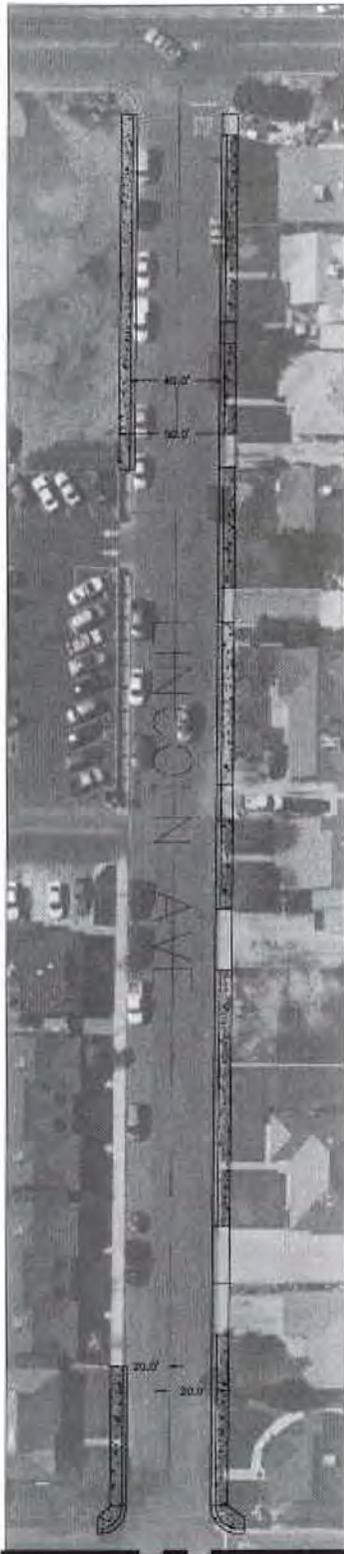
ATTEST:

\_\_\_\_\_  
Frank Piñon, Mayor

\_\_\_\_\_  
Sylvia B. Plata, City Clerk

EAST AVE

MATCH LINE A SUNSET AVE



MATCH LINE A SUNSET AVE

COLUMBIA AVE

PREPARED BY:  
**CITY OF REEDLEY**

ENGINEERING DEPARTMENT  
 1733 9th STREET  
 REEDLEY, CA 93654  
 Phone: (559)637-4200, ext. 295  
 Fax: (559)637-2139

DIAGRAM OF  
 Lincoln, Jefferson and Washington Avenue Sidewalk

DATE:  
 OCT, 16, 2019

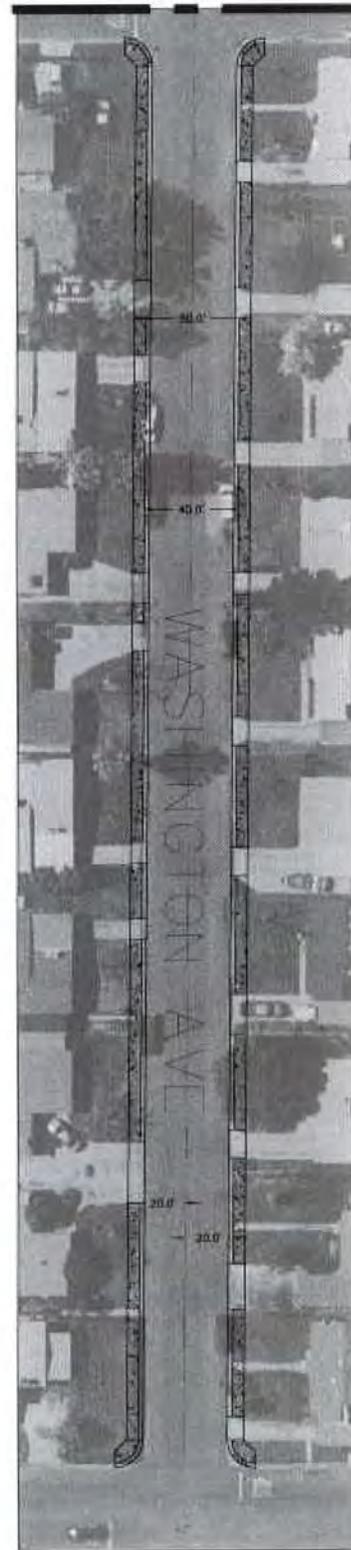
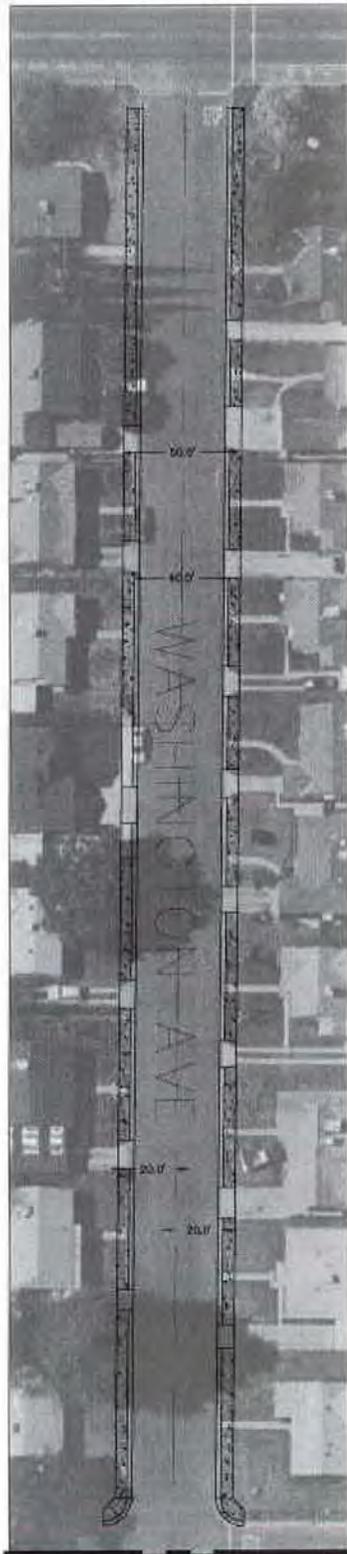
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 Not to Scale

DRAWN BY:  
 SR

SHEET NO. 1 OF 1

EAST AVE

MATCH LINE B SUNSET AVE



MATCH LINE B SUNSET AVE

COLUMBIA AVE

PREPARED BY:

**CITY OF REEDLEY**

ENGINEERING DEPARTMENT

1733 9th STREET

REEDLEY, CA 93654

Phone: (559)637-4200, ext. 295

Fax: (559)637-2139

DIAGRAM OF

Lincoln, Jefferson and Washington Avenue Sidewalk

DATE:  
OCT, 16, 2019

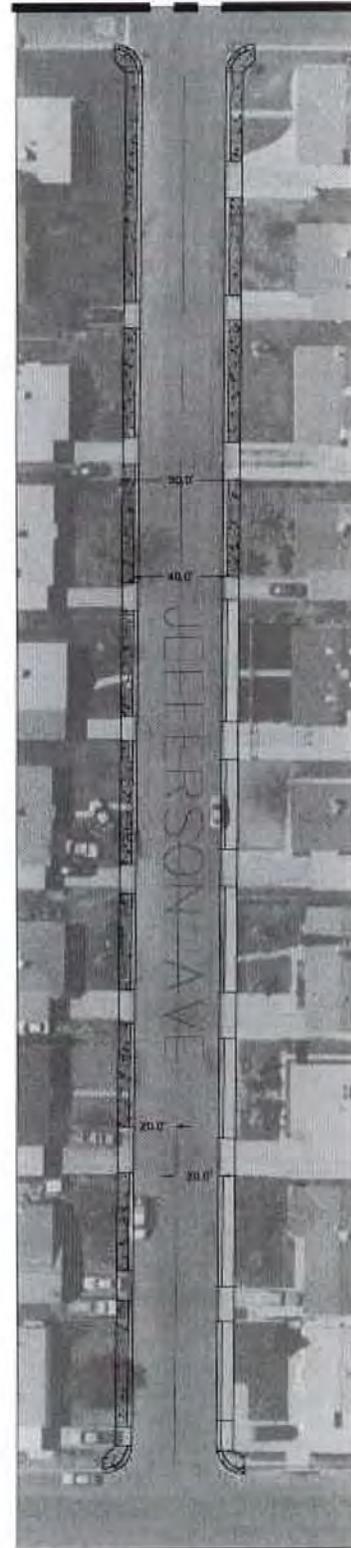
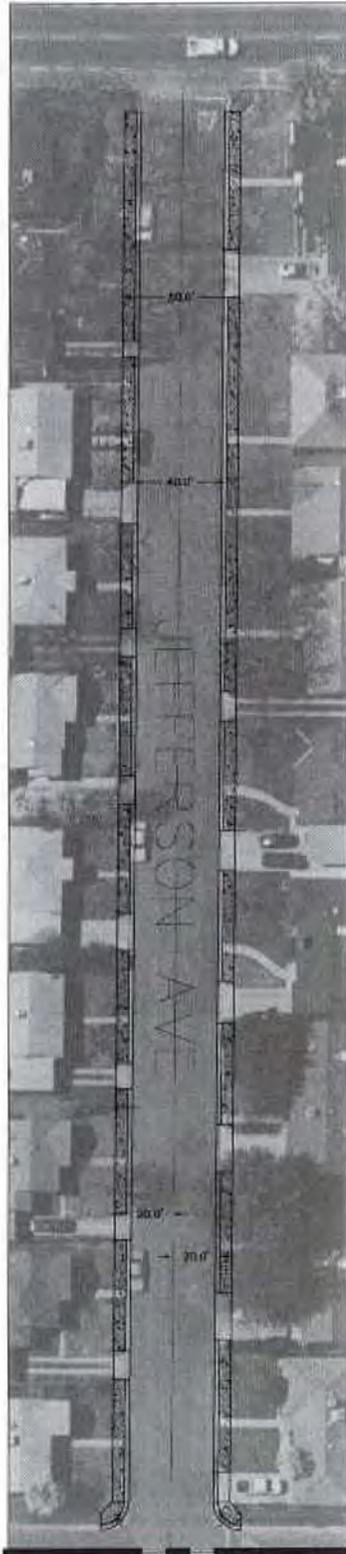
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Not to Scale

DRAWN BY:  
SR

SHEET NO. 1 OF 1

EAST AVE

MATCH LINE C SUNSET AVE



MATCH LINE C SUNSET AVE

COLUMBIA AVE

PREPARED BY:

**CITY OF REEDLEY**

ENGINEERING DEPARTMENT

1733 9th STREET

REEDLEY, CA 93654

Phone: (559)637-4200, ext. 295

Fax: (559)637-2139

DIAGRAM OF

Lincoln, Jefferson and Washington Ave Sidewalk

DATE:

OCT, 16, 2019

SCALE

Not to Scale

DRAWN BY:

SR

SHEET NO. 1 OF 1



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 5

**DATE:** October 08, 2019

**TITLE:** ADOPT RESOLUTION NO. 2019-093 OF THE CITY COUNCIL OF THE CITY OF REEDLEY SUPPORTING PROJECT DELIVERY SCHEDULES AND IMPLEMENTING TIMELY USE OF SURFACE TRANSPORTATION BLOCK GRANT FUNDING FOR THE MANNING AVENUE PHASE 3 ROADWAY REHABILITATION PROJECT SELECTED FOR FUNDING

**SUBMITTED:** John S. Robertson, P.E.  
City Engineer *JSR*

**APPROVED:** Nicole R. Zieba  
City Manager *NZ*

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### RECOMMENDATION

Adopt Resolution No. 2019-093 of the City Council of the City of Reedley supporting project delivery schedules and implementing timely use of Surface Transportation Block Grant funding for the Manning Avenue Phase 3 roadway rehabilitation project selected for funding.

### EXECUTIVE SUMMARY

Assembly Bill 1012 (AB 1012) was enacted to ensure the timely use of State and Federal funding related to transportation projects. In conformance with AB 1012 the Fresno Council of Governments (COG) requires that all agencies submitting applications for projects to receive federal funding dollars from the 2019-2020 Surface Transportation Block Grant (STBG) funding source submit a resolution stating that the governing board of the agency is in support of the project, its schedule, and will meet the required funding deadlines per the funding requirements.

The project the City will submit to COG for 2019-2020 STBG is Manning Avenue Phase 3 – Roadway rehabilitation from Columbia to Buttonwillow Avenue (Project). The construction of the Project is estimated to cost approximately \$1,550,000. This is the last phase of the Manning Avenue roadway surface improvements and is anticipated to begin in the spring of 2021.

Manning Avenue Phase 2 was a roadway rehabilitation from Frankwood to Columbia Avenue project and was completed the summer of 2018 using SB1 and Measure C funds. Manning Avenue Phase 1 from I Street to Frankwood Avenue is also a roadway rehabilitation project and will place a 2 to 3 inch

overlay along the limits of the project. Prior to the road work there is planned water and wastewater improvements to be completed. This project, Phase 1, was scheduled to begin in 2019 but due to right of way negotiations the project has been pushed off to the summer of 2020.

**FISCAL IMPACT**

There is no fiscal impact to the City to prepare and submit this funding application.

**ATTACHMENTS**

1. Resolution No. 2019-093
2. Exhibit A Location Map

Motion: \_\_\_\_\_

Second: \_\_\_\_\_

**RESOLUTION NO. 2019-093**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REEDLEY SUPPORTING PROJECT DELIVERY SCHEDULES AND IMPLEMENTING TIMELY USE OF SURFACE TRANSPORTATION BLOCK GRANT FUNDING FOR THE MANNING AVENUE PHASE 3 ROADWAY REHABILITATION PROJECT SELECTED FOR FUNDING**

**WHEREAS**, AB 1012 has been enacted into State Law in part to provide for the "timely use" of State and Federal funding; and

**WHEREAS**, the City of Reedley is able to apply for and receive Federal and State funding under the Federal Transportation Act; and AB 1012 has been enacted into State Law in part to provide for the "timely use" of State and Federal funding; and

**WHEREAS**, the City of Reedley desires to ensure that the Project, Manning Avenue Phase 3 is delivered in a timely manner to preclude the Fresno Region from losing those funds for non-delivery; and

**WHEREAS**, it is understood by the City of Reedley that failure for not meeting project delivery dates for any phase of any project may jeopardize federal or state funding to the Region; and

**WHEREAS**, the City of Reedley must demonstrate dedicated and available local matching funds.

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of Reedley, using their independent judgment, approves Resolution No. 2019-093, and hereby agrees to ensure that a project delivery deadlines for all project phases will be met or exceeded.

**BE IT FURTHER RESOLVED**, that failure to meet project delivery deadlines may be deemed as sufficient cause for the Fresno Council of Governments Policy Board to terminate an agency's project and reprogram Federal/State funds as deemed necessary.

**BE IT FURTHER RESOLVED**, that the City of Reedley Council does direct its management and engineering staffs to ensure all projects are carried out in a timely manner as per the requirements of AB 1012 and the directive of the City Council of the City of Reedley.

This foregoing resolution is hereby approved and adopted at a regular meeting of the City Council of the City of Reedley held on 22<sup>nd</sup> day of October, 2019, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

\_\_\_\_\_  
Frank Piñon, Mayor

\_\_\_\_\_  
Sylvia B. Plata, City Clerk

EXHIBIT A  
MANNING AVENUE ROADWAY REHABILITATION

PARLIER AVE.



NORTH

MANNING AVE.

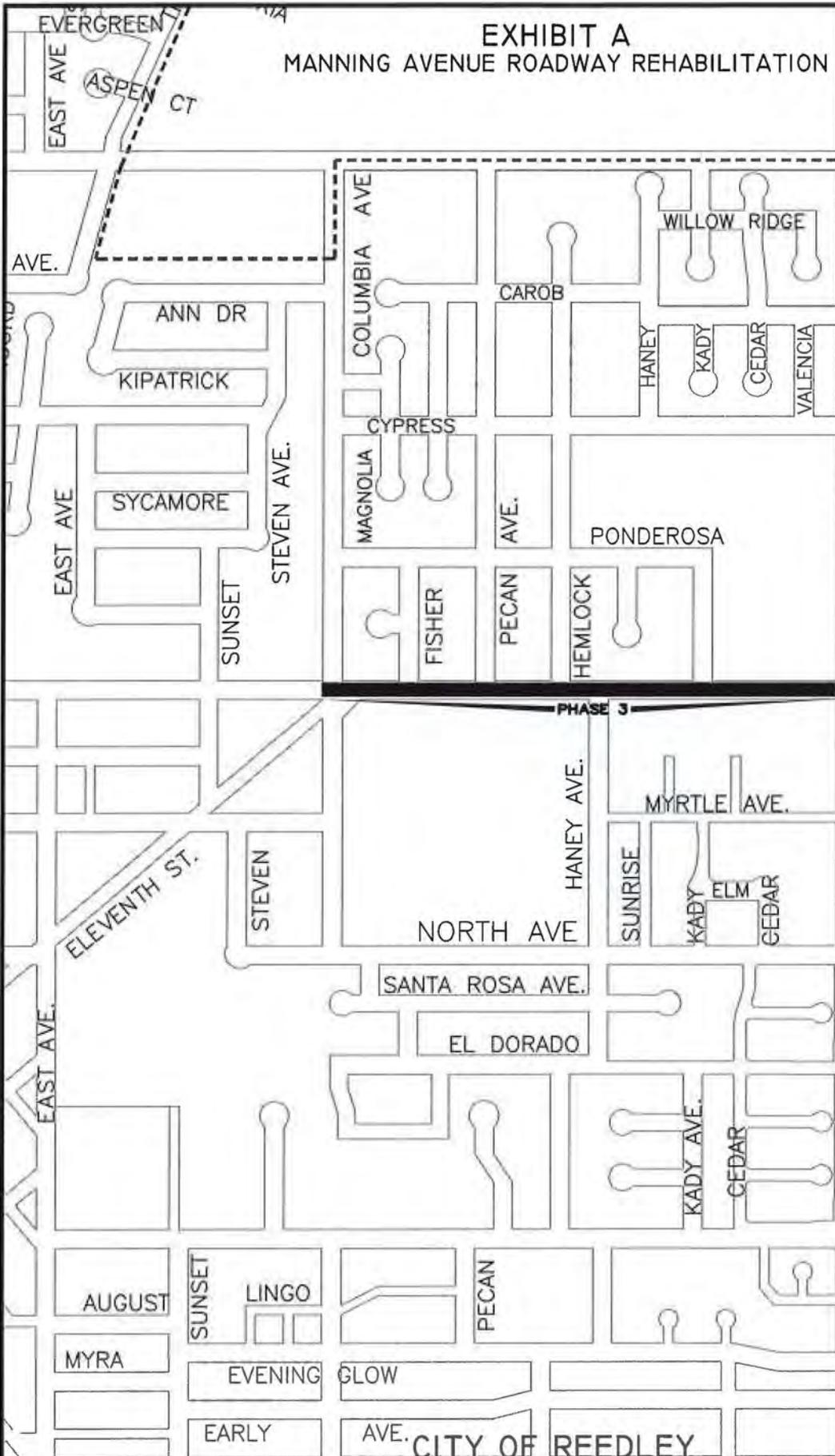
PHASE 3

BUTTONWILLOW AVENUE

SPRINGFIELD AVE

CITY OF REEDLEY

DEC. 2017



PROJECT INFORMATION: PROJECT NUMBER: 17-001, PROJECT NAME: MANNING AVENUE ROADWAY REHABILITATION, DATE: 12/2017



# REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 6

**DATE:** October 22, 2019

**TITLE:** ADOPT RESOLUTION NO. 2019-094 OF THE CITY COUNCIL OF THE CITY OF REEDLEY ADOPTING THE CITY OF REEDLEY 2019 STANDARD PLANS AND SPECIFICATIONS

**SUBMITTED:** John S. Robertson, P.E.  
City Engineer *JSR*

**APPROVED:** Nicole R. Zieba  
City Manager *NZ*

**RECOMMENDATION**

Adopt Resolution No. 2019-094 of the City Council of the City of Reedley adopting the City of Reedley 2019 Standard Plans and Specifications.

**EXECUTIVE SUMMARY**

The Engineering Department has updated the City standard plans and specifications to meet current federal (including ADA requirements), state construction rules and regulations. Additionally, it is necessary to remain current with changing state laws related to labor, handling of storm water, materials, and construction contract administration. The last full update to the standard specifications occurred in 2007. The standard plans were updated in 2016 and are being updated again as it was necessary to make a few modifications to certain drawings in order to remain current with Public Works practices.

These new standards will be used for the construction of all public improvements performed within City right of way related to subdivisions, water, wastewater, storm drain, street lights, parks, other public works and building projects occurring in the City.

Due to ever changing contract laws and construction practices the Engineering Department will bring updated standard drawings and specifications before the City Council for approval and adoption as required.

**RESOLUTION NO. 2019-094**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REEDLEY ADOPTING THE 2019 STANDARD PLANS AND SPECIFICATIONS**

**WHEREAS**, the City of Reedley Engineering Department has recently revised and updated a set of standard plans and specifications dated 2016 and 2007 respectively; and

**WHEREAS**, these plans and specifications have been used as accepted standards for subdivisions, public works and park projects and other building projects; and

**WHEREAS**, the Engineering Department has added, deleted, and modified these documents to fit the City of Reedley's needs; and

**WHEREAS**, these standard plans and specifications will be considered for updates as practices and materials change; and

**WHEREAS**, these updates will occur on an as needed basis but at a minimum every two years; and

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of Reedley, using their independent judgment, does hereby approve Resolution No. 2019-094, adopting the revised standard plans and specifications as the official "City of Reedley 2019 Standard Plans and Specifications".

This foregoing resolution is hereby approved and adopted at a regular meeting of the City Council of the City of Reedley held on 22<sup>nd</sup> day of October, 2019, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

\_\_\_\_\_  
Frank Piñon, Mayor

\_\_\_\_\_  
Sylvia B. Plata, City Clerk

**FISCAL IMPACT**

There is no fiscal impact to the City to update the City standard plans and specifications.

**ATTACHMENTS**

1. Resolution No. 2019-094
2. 2019 City of Reedley Standard Plans
3. 2019 City of Reedley Specifications

Motion: \_\_\_\_\_

Second: \_\_\_\_\_

# CITY OF REEDLEY

ENGINEERING DEPARTMENT

## STANDARD PLANS



**October, 2019**

Copies of this book may be purchased for \$10.00 each  
Please make check payable to:

**CITY OF REEDLEY  
ENGINEERING DEPARTMENT  
1733 NINTH STREET  
REEDLEY, CA 93654**

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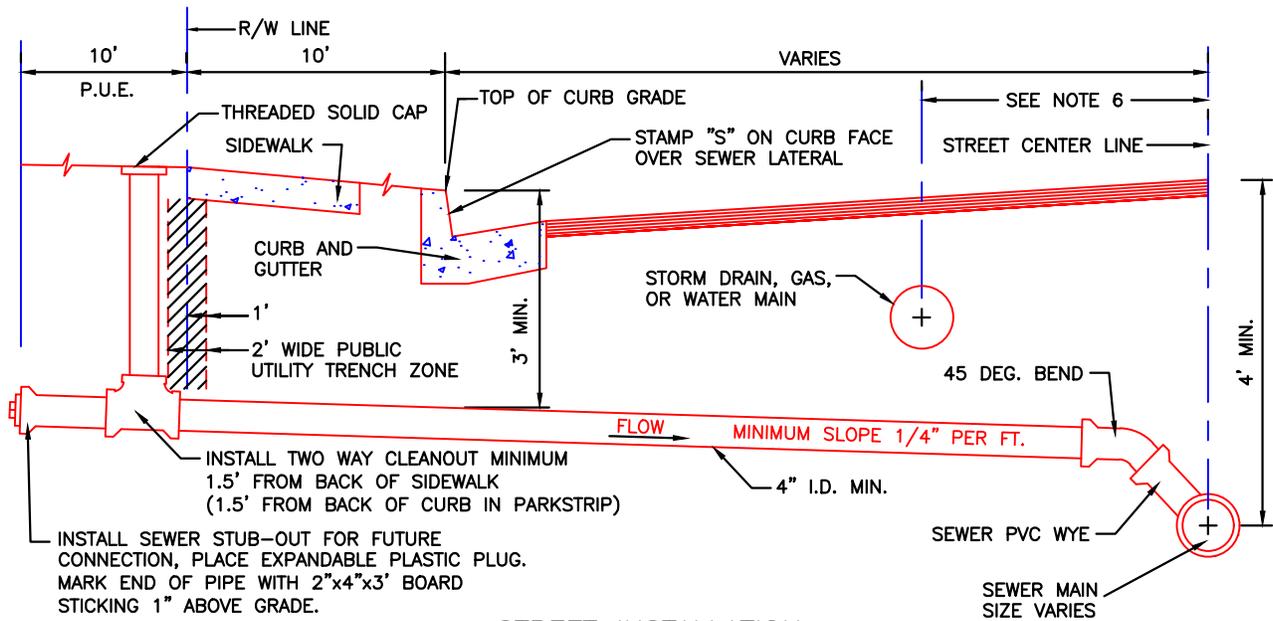
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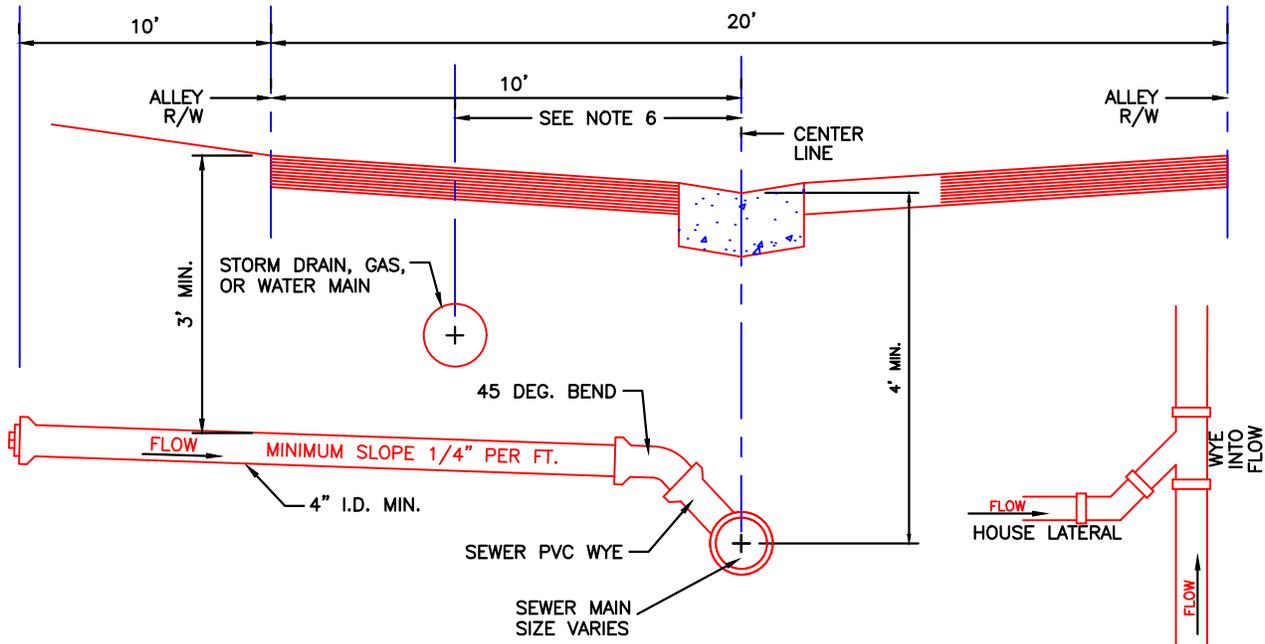
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Traffic Signal Head Locations 3 Thru Lanes, Protected Left .....		TS-1D
Traffic Signal Head Locations 2 Thru Lanes, 2 Protected Left .....		TS-1E
Traffic Signal Head Locations 3 Thru Lanes, 2 Protected Left .....		TS-1F
Loop Detector Placement .....		TS-2
Loop Detector Placement .....		TS-2A
Vehicle Signal Terminal Location .....		TS-3
Pedestrian Signal Terminal Locations .....		TS-3A
Service Pedestal Schematic .....		TS-4
Traffic Signal Installation .....		TS-5
Traffic Signal Installation, Dual Ramp .....		TS-5A



**STREET INSTALLATION**

**NOTES:**

1. SEWER SERVICE LATERAL WITHIN A RESIDENTIAL SUBDIVISION SHALL BE LOCATED 10 FT OFF FROM CENTER OF LOT.
2. COMPACT SOIL UNDER AND AROUND PVC SEWER WYE TO AVOID SHEAR.
3. LATERALS LOCATED SO AS NOT TO CONFLICT WITH PUBLIC UTILITIES.
4. P.U.E. = PUBLIC UTILITY EASEMENT
5. SEWER SERVICE LATERAL TO BE SDR-35 or 21 W/GASKETS. PVC W/ MIN. PIPE STIFFNESS OF 46 AT 5% DEFECTION.
6. REFER TO CITY STD. ST-72 FOR LOCATION OF UNDERGROUND UTILITIES AND MINIMUM CLEARANCES.



**ALLEY INSTALLATION**

**PLAN VIEW**

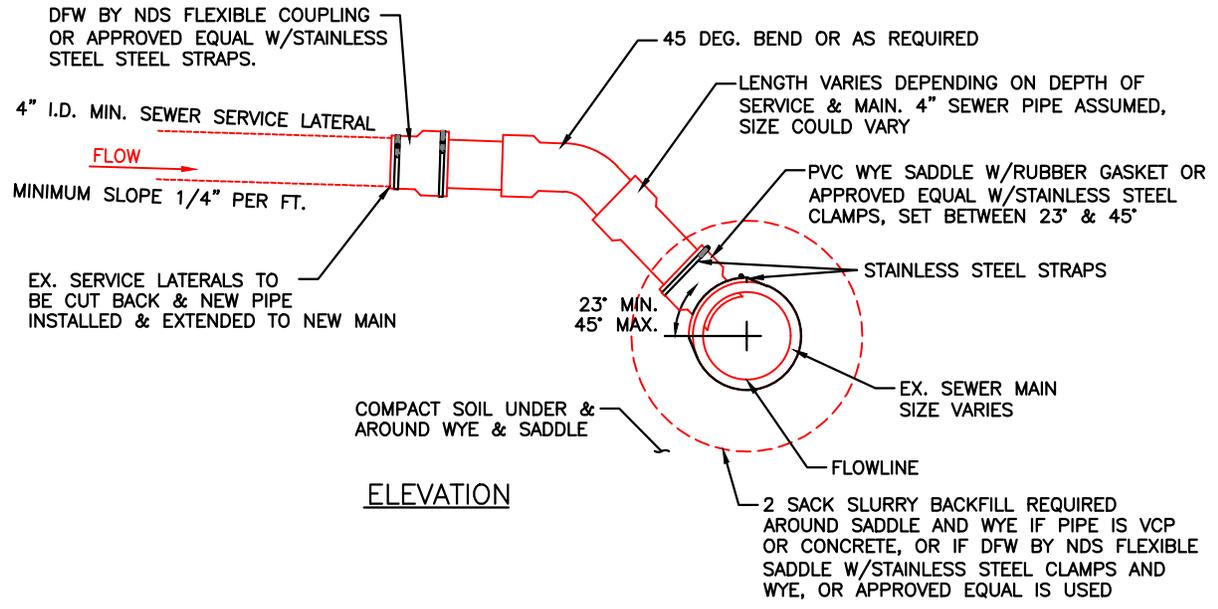
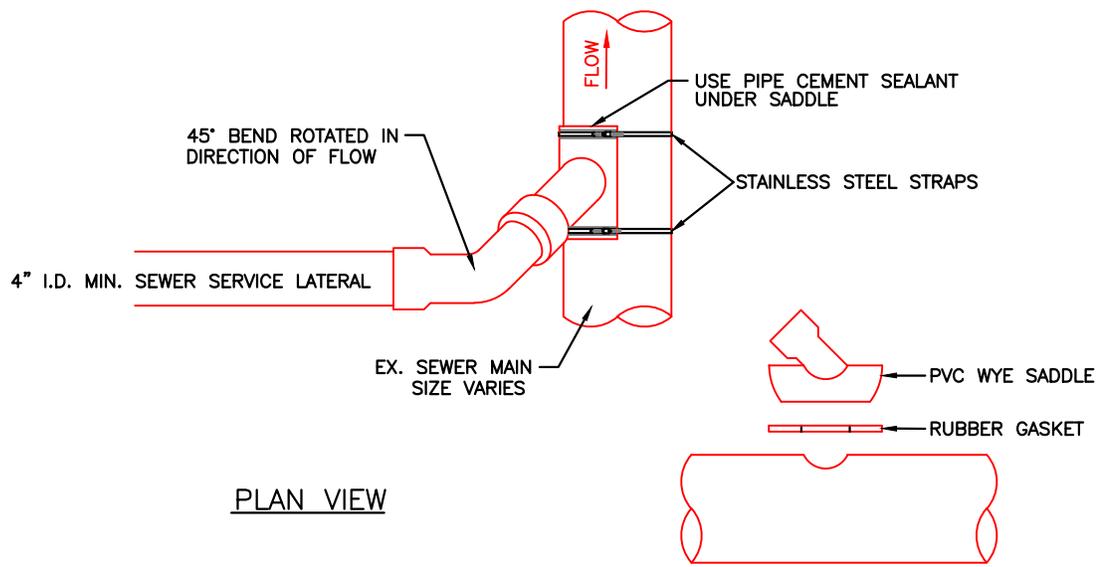


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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-72

**SEWER SERVICE LATERAL  
CONNECTION INTO  
NEW SEWER MAIN**

*CITY OF REEDLEY*

**S-1**



- NOTES:**
1. FOR PIPES 6" TO 12" IN DIAMETER, A LICENSED CONTRACTOR (C36) WHO HAS THE PROPER EQUIPMENT AND PERMITS IS CONSIDERED AN APPROVED AGENT AND MAY CORE INTO THE CITY'S SEWER MAINS OR REMOVE A SECTION AND INSTALL A WYE OR TEE. (SEE NOTE 8)
  2. FOR SEWER MAINS 18" OR LARGER, A MANHOLE MUST BE CONSTRUCTED WHERE CONNECTIONS ARE MADE.
  3. THE CITY PUBLIC WORKS INSPECTOR MUST OBSERVE ALL SADDLE & CORE CONNECTIONS TO EXISTING CITY SEWER MAINS.
  4. VITRIFIED CLAY PIPE SADDLES SHALL BE EXTRA STRENGTH CLAY PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF THE "WEST COAST STANDARDS OF THE CLAY PIPE INSTITUTE".
  5. OPENINGS INTO EXISTING SEWER MAINS SHALL BE MADE ONLY LARGE ENOUGH TO ADMIT ALL OF SADDLE FITTINGS.
  6. THIS STANDARD DETAIL IS ONLY TO BE USED WHEN CONNECTING TO EXISTING SEWER MAIN LINES. NEW LINES SHALL HAVE WYES AS PER CITY STD. PLAN S-1.
  7. APPLY SILICON SEALANT TO COMPRESSION SCREWS AND WRAP STAINLESS STEEL STRAP WITH THREE (3) LAYERS OF PVC TAPE.
  8. IF CONTRACTOR CUTS PIPE TO INSTALL A TEE OR WYE, CUTS SHALL BE SQUARE. USE STRONG BACK RC SERIES REPAIR COUPLING WITH STAINLESS BANDS.



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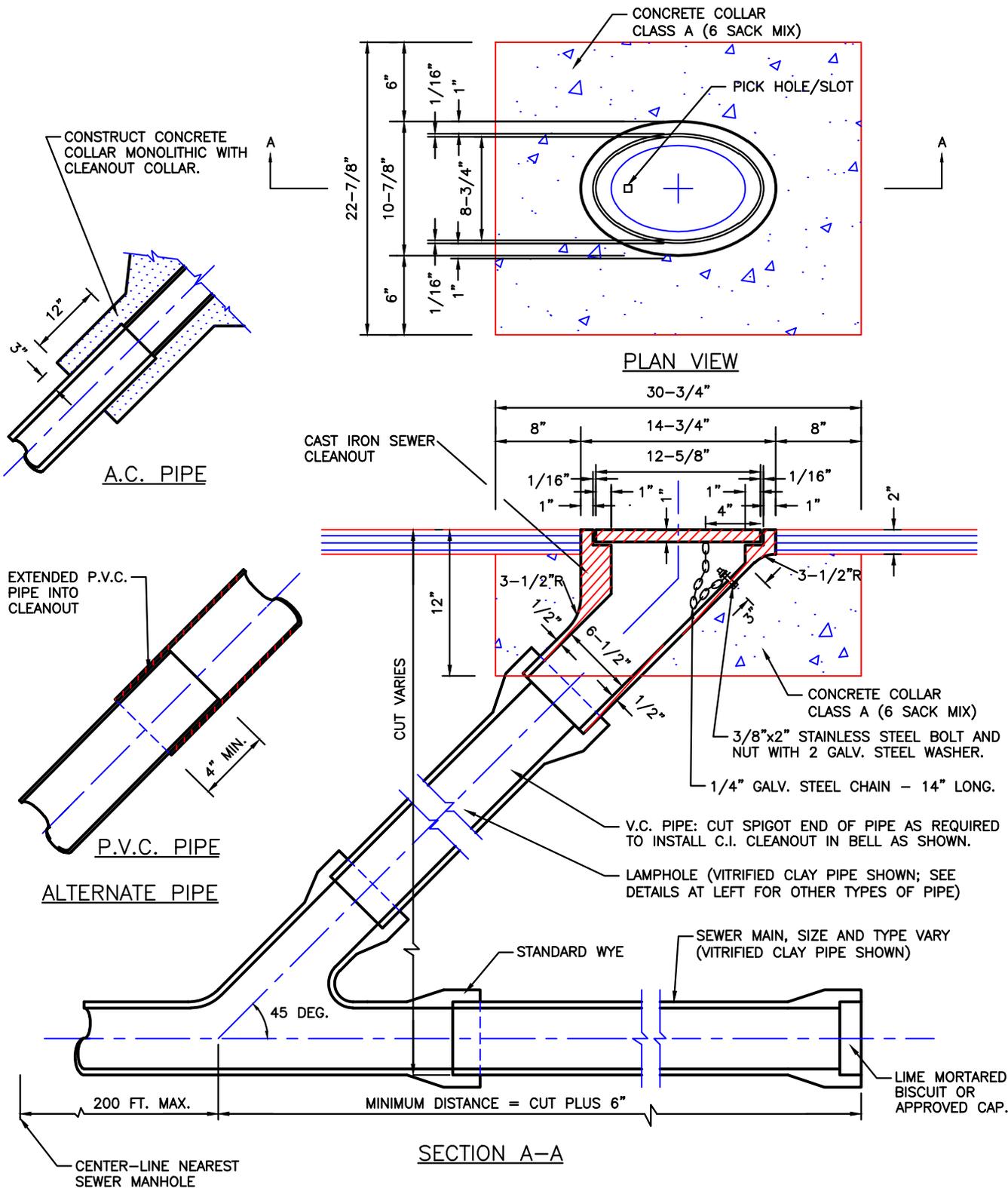
REVISED:  
OCT. 2019

REF. STD. DWG.:

**SEWER LATERAL SERVICE CONNECTION INTO EXISTING SEWER MAIN**

*CITY OF REEDLEY*

**S-2**



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REVISED:  
OCT. 2019

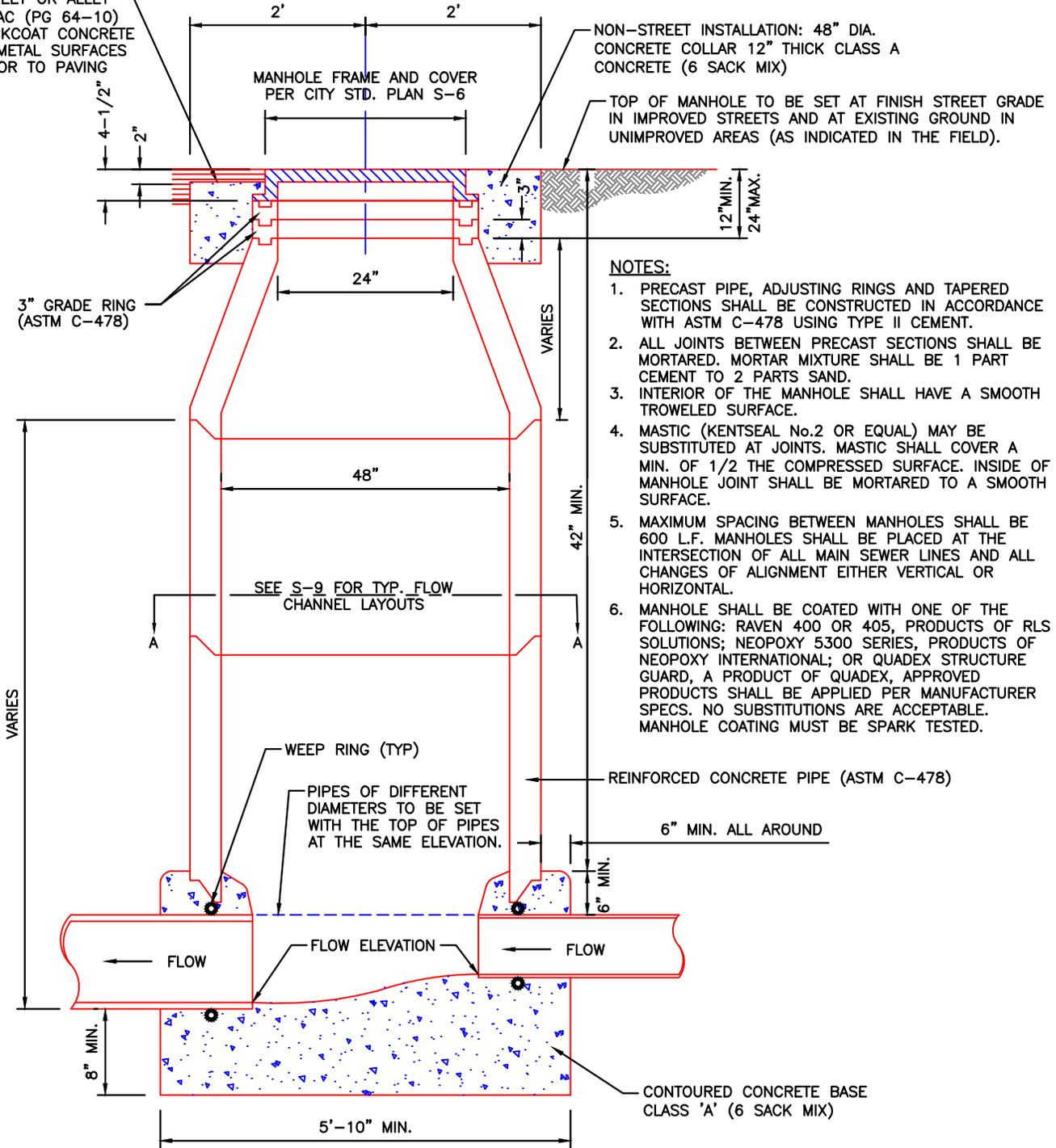
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# SEWER CLEANOUT

CITY OF REEDLEY

S-3

TO BE PAVED IN STREET OR ALLEY W/AC (PG 64-10) TACKCOAT CONCRETE & METAL SURFACES PRIOR TO PAVING



**NOTES:**

1. PRECAST PIPE, ADJUSTING RINGS AND TAPERED SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 USING TYPE II CEMENT.
2. ALL JOINTS BETWEEN PRECAST SECTIONS SHALL BE MORTARED. MORTAR MIXTURE SHALL BE 1 PART CEMENT TO 2 PARTS SAND.
3. INTERIOR OF THE MANHOLE SHALL HAVE A SMOOTH TROWELED SURFACE.
4. MASTIC (KENTSEAL No.2 OR EQUAL) MAY BE SUBSTITUTED AT JOINTS. MASTIC SHALL COVER A MIN. OF 1/2 THE COMPRESSED SURFACE. INSIDE OF MANHOLE JOINT SHALL BE MORTARED TO A SMOOTH SURFACE.
5. MAXIMUM SPACING BETWEEN MANHOLES SHALL BE 600 L.F. MANHOLES SHALL BE PLACED AT THE INTERSECTION OF ALL MAIN SEWER LINES AND ALL CHANGES OF ALIGNMENT EITHER VERTICAL OR HORIZONTAL.
6. MANHOLE SHALL BE COATED WITH ONE OF THE FOLLOWING: RAVEN 400 OR 405, PRODUCTS OF RLS SOLUTIONS; NEOPOXY 5300 SERIES, PRODUCTS OF NEOPOXY INTERNATIONAL; OR QUADEX STRUCTURE GUARD, A PRODUCT OF QUADEX, APPROVED PRODUCTS SHALL BE APPLIED PER MANUFACTURER SPECS. NO SUBSTITUTIONS ARE ACCEPTABLE. MANHOLE COATING MUST BE SPARK TESTED.



SCALE:  
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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
S-6 & S-9

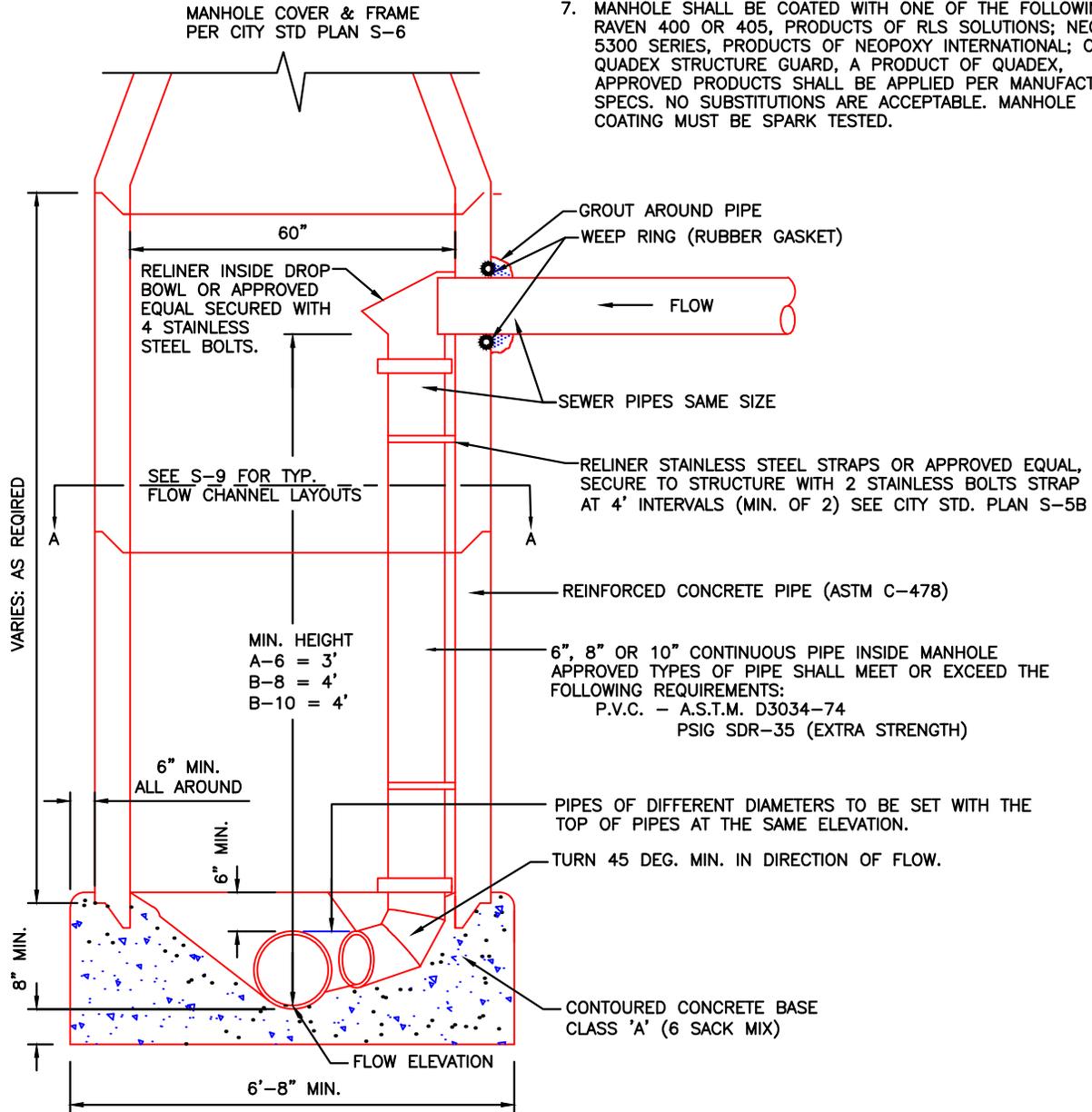
**SEWER MANHOLE**

*CITY OF REEDLEY*

**S-4**

**NOTES:**

1. DROP MANHOLE WILL ONLY BE ALLOWED WITH THE APPROVAL OF CITY ENGINEER.
2. DROP MANHOLE IS ALLOWED ONLY IF THE DROP DISTANCE IS 2.5 FT. OR GREATER.
3. ALL JOINTS BETWEEN PRECAST SECTIONS SHALL BE MORTARED MIXTURE SHALL BE 1 PART CEMENT TO 2 PARTS SAND.
4. MASTIC (KENTSEAL No.2 OR EQUAL) MAY BE SUBSTITUTED AT JOINTS. MASTIC SHALL COVER A MIN. OF 1/2 THE COMPRESSED SURFACE. INSIDE OF MANHOLE JOINT SHALL BE MORTARED TO A SMOOTH SURFACE.
5. PRECAST PIPE, ADJUSTING RINGS AND TAPERED SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 USING TYPE II CEMENT.
6. IF MAXIMUM SPACING BETWEEN MANHOLES SHALL BE 600 L.F. MANHOLES SHALL BE PLACED AT THE INTERSECTION OF ALL MAIN SEWER LINES AND ALL CHANGES OF ALIGNMENT EITHER VERTICAL OR HORIZONTAL.
7. MANHOLE SHALL BE COATED WITH ONE OF THE FOLLOWING: RAVEN 400 OR 405, PRODUCTS OF RLS SOLUTIONS; NEOPOXY 5300 SERIES, PRODUCTS OF NEOPOXY INTERNATIONAL; OR QUADEX STRUCTURE GUARD, A PRODUCT OF QUADEX, APPROVED PRODUCTS SHALL BE APPLIED PER MANUFACTURER SPECS. NO SUBSTITUTIONS ARE ACCEPTABLE. MANHOLE COATING MUST BE SPARK TESTED.



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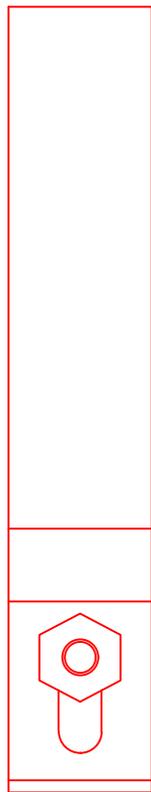
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OCT. 2019

REF. STD. DWG.:  
ST-5B, 6 & 9

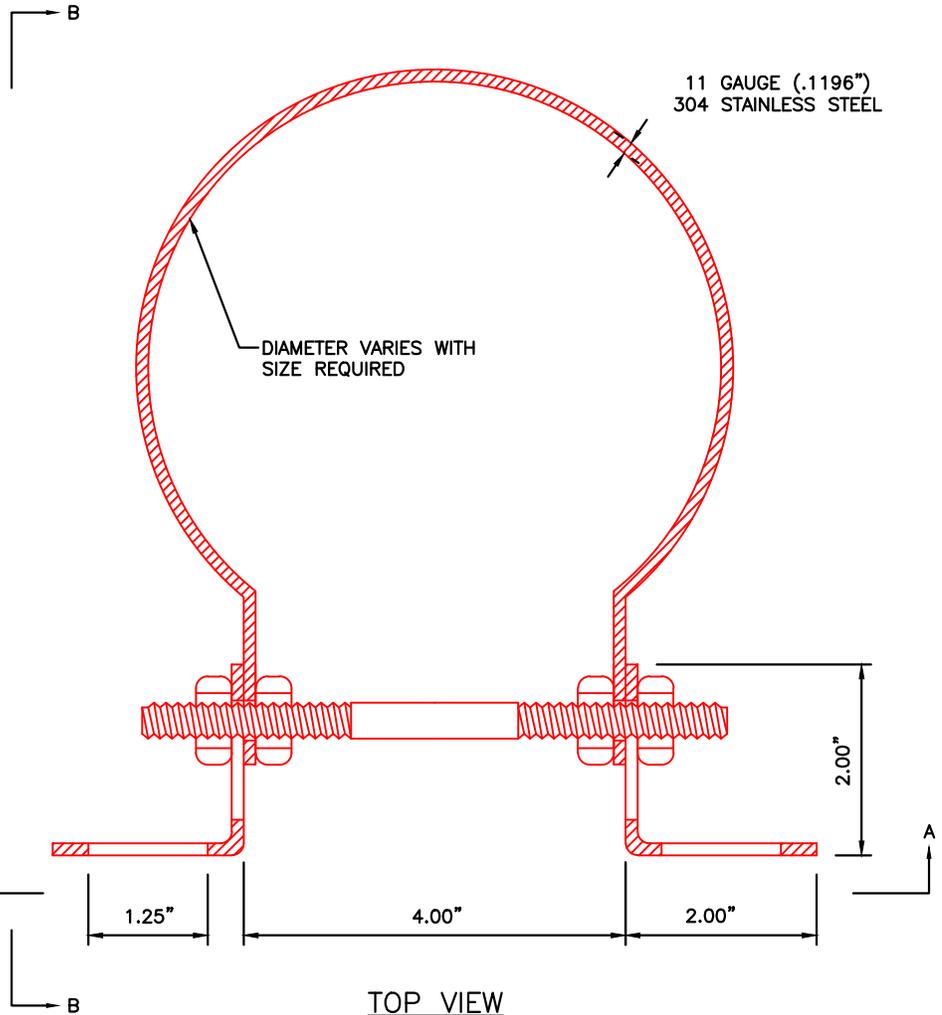
**SEWER DROP MANHOLE**

*CITY OF REEDLEY*

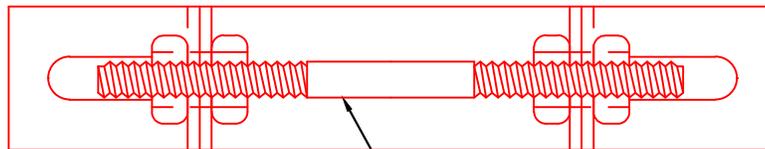
**S-5**



SECTION B-B



TOP VIEW



SECTION A-A

NOTES:

1. STAINLESS STEEL ADJUSTABLE CLAMPING BRACKET AS MANUFACTURED BY RELINER-DURAN, INC OR APPROVED EQUAL.
2. CLAMP AND BRACKETS IS TYPE 304 STAINLESS STEEL, 11 GAUGE (.1196").
3. 3/8"  $\phi$  PINCH BOLT AND NUTS IS TYPE 18-8 STAINLESS STEEL.

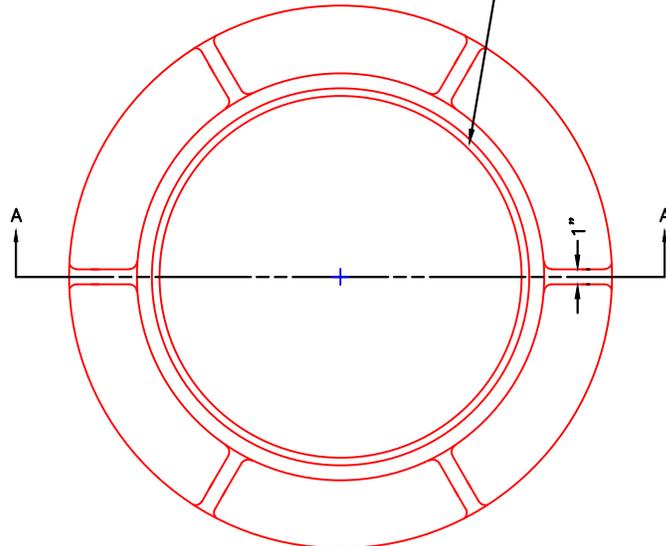
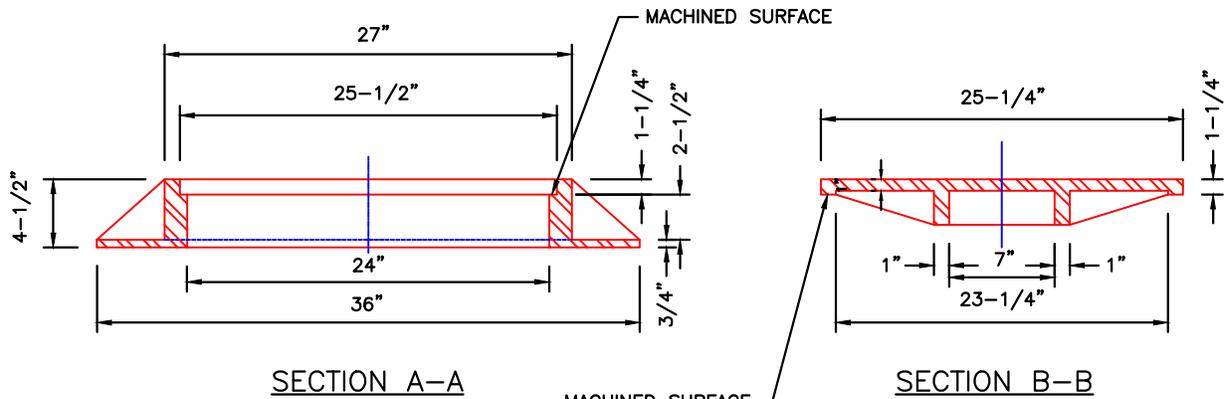


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REF. STD. DWG.:

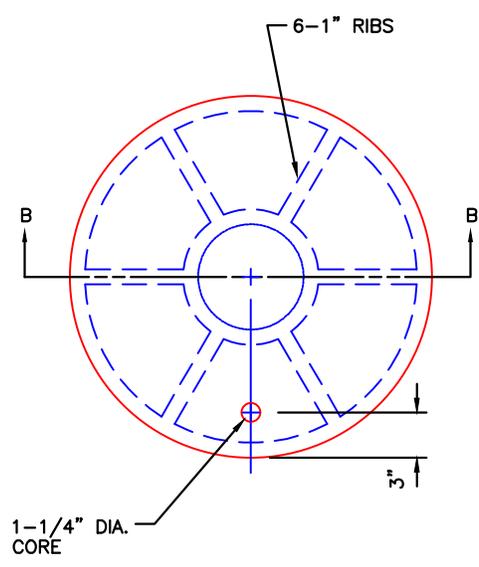
**STAINLESS STEEL  
ADJUSTABLE CLAMPING  
BRACKETS**

*CITY OF REEDLEY*

**S-5B**



PLAN VIEW  
MANHOLE FRAME



PLAN VIEW  
MANHOLE COVER

**NOTES:**

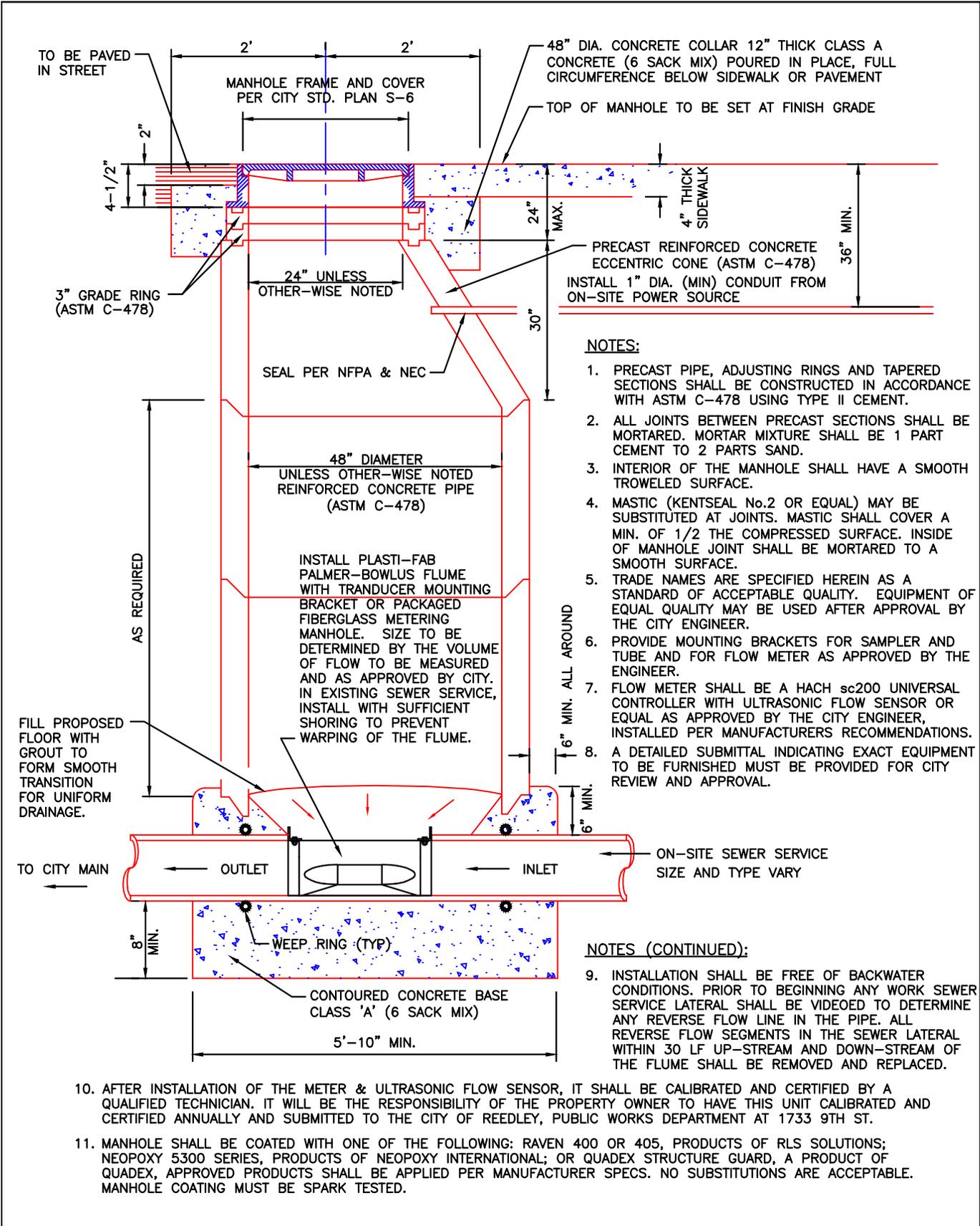
1. ALL DIMENSIONS ARE FINISHED DIMENSIONS.
2. MATERIAL SHALL BE CAST IRON.
3. FRAME AND COVER TO BE CONSTRUCTED IN ACCORDANCE WITH A.S.T.M. DESIGNATION A48, CLASS 25.
4. MANHOLE COVER DESIGN, AS A MINIMUM, IS TO HAVE THE WORDS "STORM SEWER" OR "SANITARY SEWER" MOLDED INTO THE COVER.
5. FRAME AND COVER SHALL MATCH CROSS SLOPE.
6. NEENAH TYPE C MODEL NO. R-1593 CHECKERED TOP DESIGN WITH "SANITARY SEWER" MOLDED INTO COVER.



SCALE:  
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REVISED:  
OCT. 2019  
REF. STD. DWG.:

MANHOLE FRAME  
AND COVER

CITY OF REEDLEY  
S-6



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NOT TO SCALE

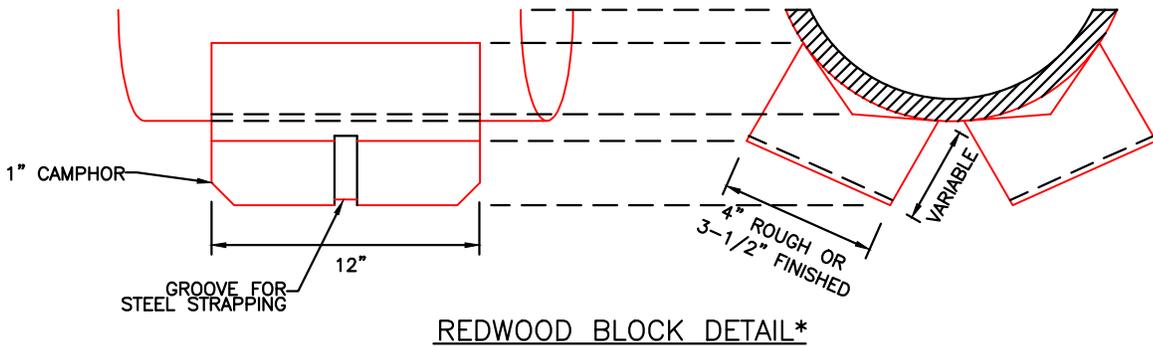
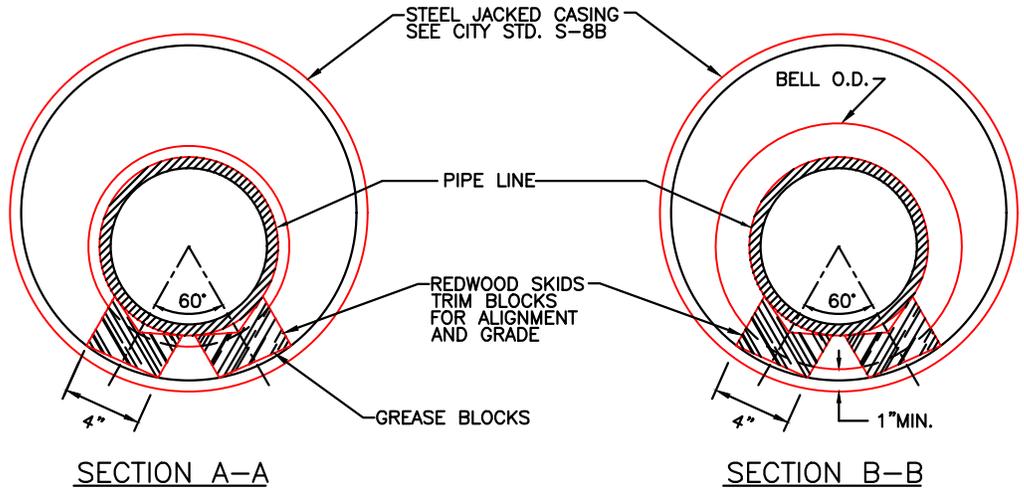
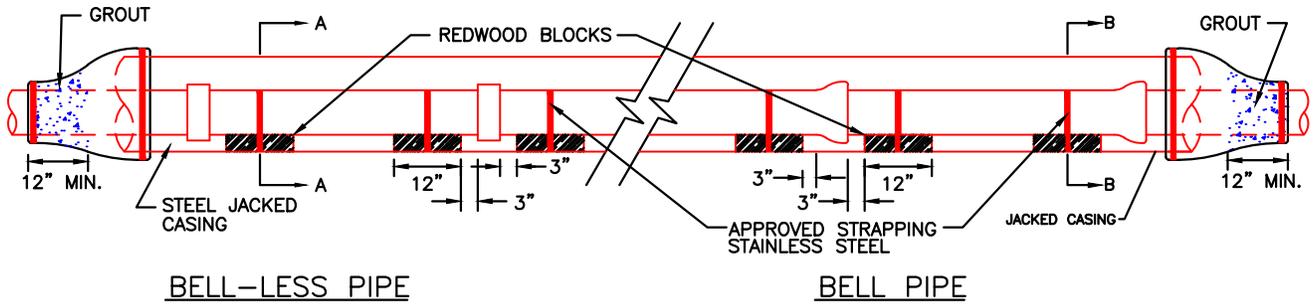
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OCT. 2019

REF. STD. DWG.:  
S-6

## SEWER MONITORING MANHOLE

CITY OF REEDLEY

S-7



- NOTES:**
1. REDWOOD BLOCKS SHALL BE CONSTRUCTION GRADE.
  2. REDWOOD BLOCKS SHALL BE VEED TO FIT CONTOUR OF PIPE.
  3. WHEN JACKING CASING GRADE SHALL BE SET SO CENTERLINE OF CASING SHALL COINCIDE WITH CENTERLINE OF SEWER PIPE.
  4. REDWOOD BLOCKS SHALL BE STRAPPED TO THE PIPE WITH STEEL STRAPPING OR APPROVED WIRE BANDS.
  5. PLUG ENDS OF CASING WITH 12 INCHES MINIMUM OF CONCRETE.
  6. CONCRETE SHALL BE CLASS B.
- \*ALTERNATE: SST CASING SPACERS W/ GLASS FILLED POLYMER RUNNERS.



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:  
S-8B

## INSTALLATION OF CARRIER PIPE IN JACKED STEEL CASING

*CITY OF REEDLEY*

# S-8A

NOMINAL DIAMETER (INCHES)	WHEN COATED OR CATHODICALLY PROTECTED NOMINAL THICKNESS (INCHES)	WHEN NOT COATED OR CATHODICALLY PROTECTED NOMINAL THICKNESS (INCHES)
12-3/4 AND UNDER	0.188	0.188
14	0.188	0.250
16	0.219	0.281
18	0.250	0.312
20 AND 22	0.281	0.344
24	0.312	0.375
28	0.344	0.406
30	0.375	0.438
32	0.406	0.469
34 AND 36	0.438	0.500
38	0.469	0.531
40	0.500	0.562
42	0.531	0.594
44 AND 46	0.562	0.625
48	0.594	0.656
50	0.656	0.688
52	0.688	0.719
54	0.719	0.750
56 AND 58	0.750	0.781
60	0.781	0.812
62	0.812	0.844
64	0.844	0.875
66 AND 68	0.875	0.906
70	0.906	0.969
72	0.938	1.000

**NOTE:**

THIS TABLE WAS REFERENCED FROM AREMA MANUAL FOR RAILWAY ENGINEERING.

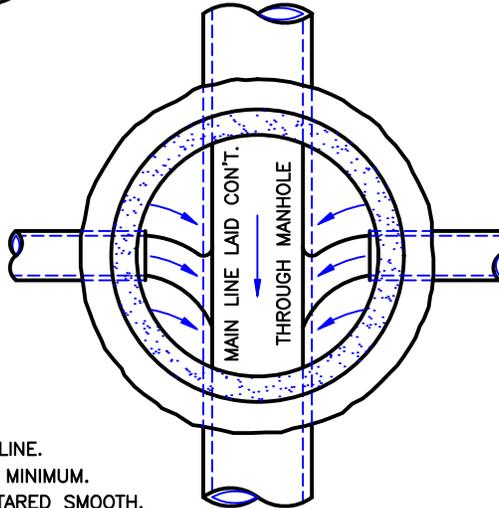
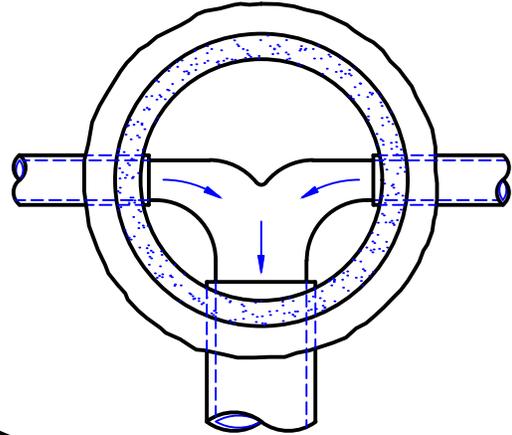
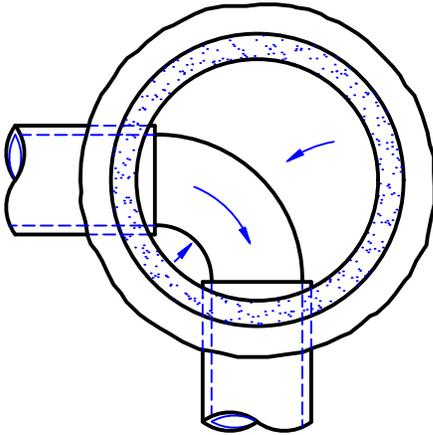
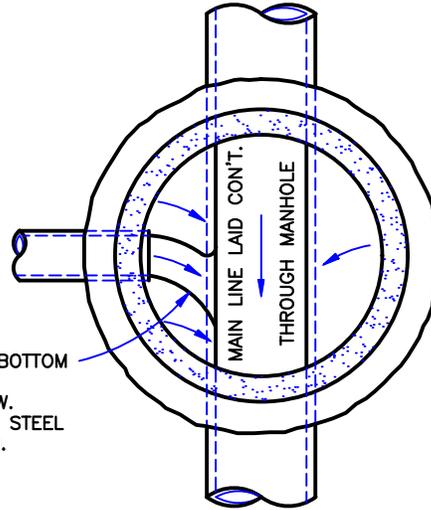
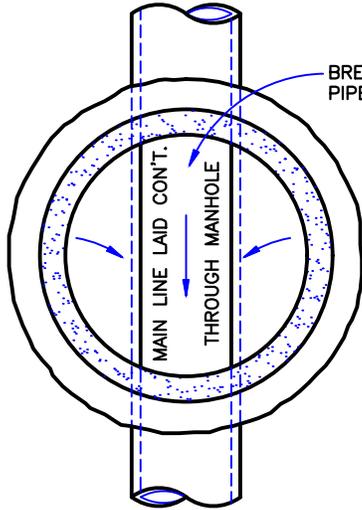


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

**JACKED STEEL CASING  
SIZE AND THICKNESS**

*CITY OF REEDLEY*

**S-8B**



**NOTES:**

1. SLOPE BENCHES TOWARD MAIN LINE.
2. OPENING IN PIPE MUST BE 44" MINIMUM.
3. EDGES TO BE SMOOTH OR MORTARED SMOOTH.
4. BENDS IN MANHOLES MUST HAVE CENTERLINE RADIUS OF 24" IN 48" MANHOLES AND 30" IN 60" MANHOLES.



SCALE:  
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REVISED:  
OCT. 2019  
REF. STD. DWG.:

**TYPICAL FLOW CHANNELS  
FOR SEWER MANHOLES**

*CITY OF REEDLEY*

**S-9**

NOTES:

1. THE SIZE AND DETAILS OF ALL INTERCEPTORS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE, CURRENT EDITION. HEREINAFTER REFERRED TO AS CPC. ALL INTERCEPTORS SHALL BE SEALED AND WATER TIGHT.
2. INTERCEPTORS SHALL BE CONSTRUCTED AND VENTED IN ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN THE CPC.
3. THE LOCATION OF THE INTERCEPTOR SHALL BE APPROVED BY BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
4. ALL CAST IN PLACE OR PRECAST INTERCEPTOR UNITS SHALL BE APPROVED BY BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
5. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ALL DOCUMENTATION & TESTING TO CERTIFY THAT THE INTERCEPTORS AND WASTE STREAMS MEETS THE REQUIREMENTS OF ALL CURRENT REGULATIONS AND BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT REQUIREMENTS.
6. PRE-CAST INTERCEPTORS SHALL BE LABELED WITH THE MANUFACTURERS NAME, MODEL NUMBER AND SHALL HAVE AN I.A.P.M.O. CERTIFICATION MARK.
7. ALL CONCRETE FOR CAST-IN-PLACE INTERCEPTORS SHALL BE CLASS 2 CONCRETE IN ACCORDANCE WITH THE CITY OF REEDLEY STANDARD SPECIFICATIONS.
8. CAST IRON FRAMES MAY BE CAST INTO THE INTERCEPTOR LID.
9. ALL INTERCEPTORS SHALL BE ACCESSIBLE TO BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR TESTING AT ANY TIME.
10. DOCUMENTS MUST BE SUBMITTED ANNUALLY TO THE PUBLIC WORKS DEPARTMENT AT  
CITY OF REEDLEY  
PUBLIC WORKS DEPARTMENT  
REEDLEY, CA 93654  
559-637-4200
11. INTERCEPTOR FOR FATS, ORGANICS, AND GAS PERMIT IS REQUIRED BY PUBLIC WORKS DEPARTMENT.

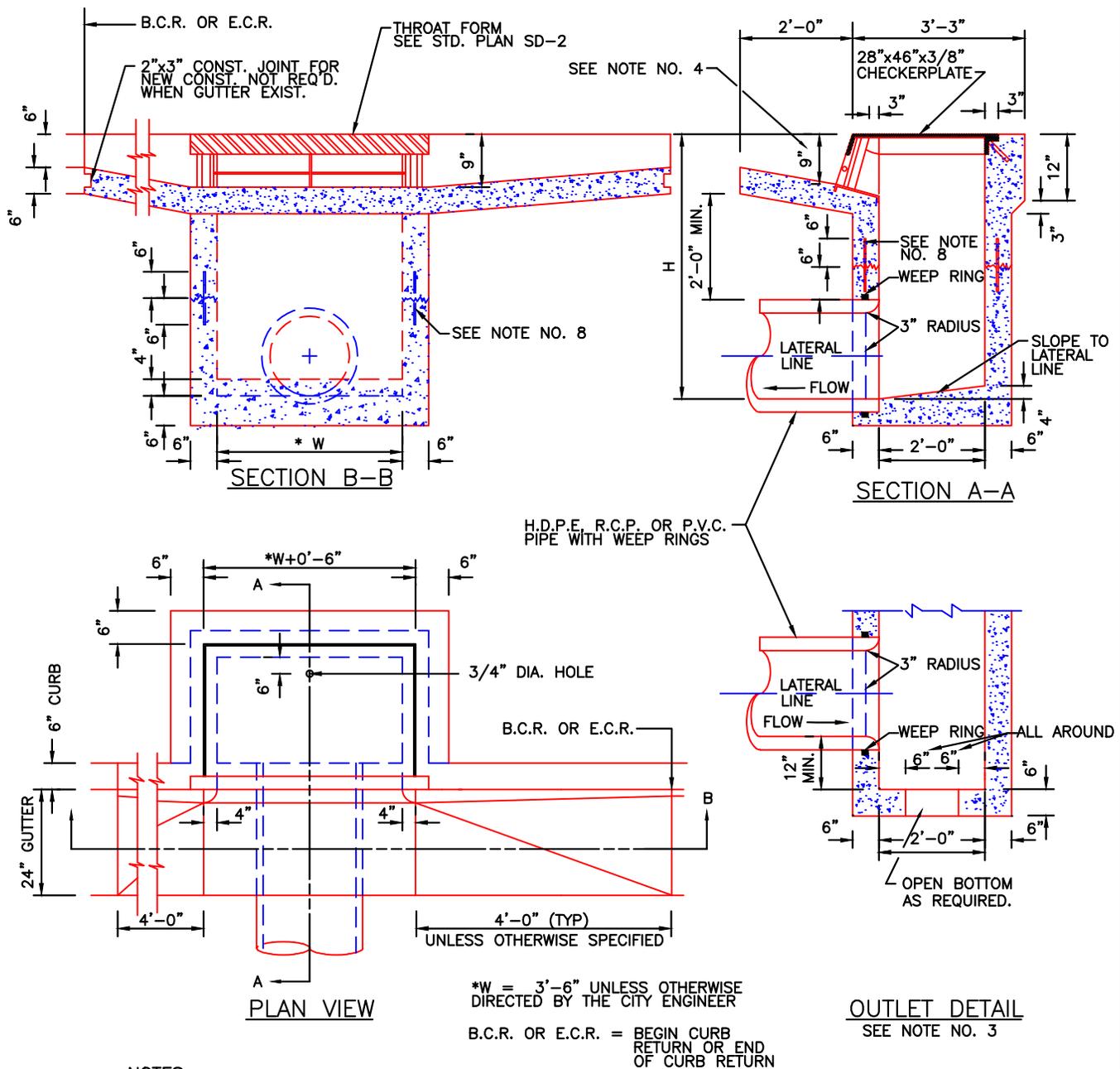


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OCT. 2019  
REF. STD. DWG.:

**OUTSIDE COMMERCIAL &  
INDUSTRIAL SAND, SILT,  
GREASE, OIL & GARBAGE  
INTERCEPTORS**

*CITY OF REEDLEY*

**S-10**



**NOTES:**

1. THE INLET MAY BE MODIFIED SLIGHTLY TO MATCH EXISTING IMPROVEMENTS, AS DIRECTED BY THE ENGINEER.
2. STRUCTURE SHALL BE CLASS "A" 4000 PSI CONCRETE, MAX.  $3-1/2"$  SLUMP. EXPOSED SURFACES SHALL BE BROOM FINISHED.
3. COST OF FRAME, GRATE, CURB AND GUTTER WITHIN LIMITS OF GUTTER DEPRESSION SHALL BE INCLUDED IN THE PRICE OF INLET OR OUTLET.
4. WHEN EMPLOYED AS OUTLET, CONSTRUCT OPEN BOTTOM, PLACE FRAME AND GRATE  $6"$  BELOW TOP OF CURB GRADE, AND ELIMINATE  $1/2"$  IRON ROD AND HANGERS.
5. CURB & GUTTER SHALL BE CONSTRUCTED OR RECONSTRUCTED FOR A DISTANCE OF  $8'-0"$  AND COST THEREOF SHALL BE INCLUDED IN PRICE OF INLET OR OUTLET.
6. FLOOR OF THE INLET SHALL SLOPE FROM ALL WALLS TO THE LATERAL LINE AND SHALL BE GIVEN A STEEL-TROWELED FINISH.
7. AT THE CONTACT POINT BETWEEN THE LATERAL LINE AND THE INLET WALL A SMOOTH  $3"$  RADIUS CURVE SHALL BE CONSTRUCTED.
8. IF INLET IS CONSTRUCTED IN A TWO STAGE POUR, PROVIDE A ROUGHENED CONSTRUCTION JOINT AND PLACE NO. 4 BARS  $24"$  LONG,  $12"$  O.C. IN EACH OF THE FOUR WALLS AS SHOWN.
9. NO. 4 REINFORCING BARS SHALL BE PLACED VERTICALLY AT  $12"$  O.C. MAX. WITH NO. 4 HORIZONTAL REINFORCING TIE BARS AT  $36"$  O.C. FOR  $H=6.5'$  OR MORE.



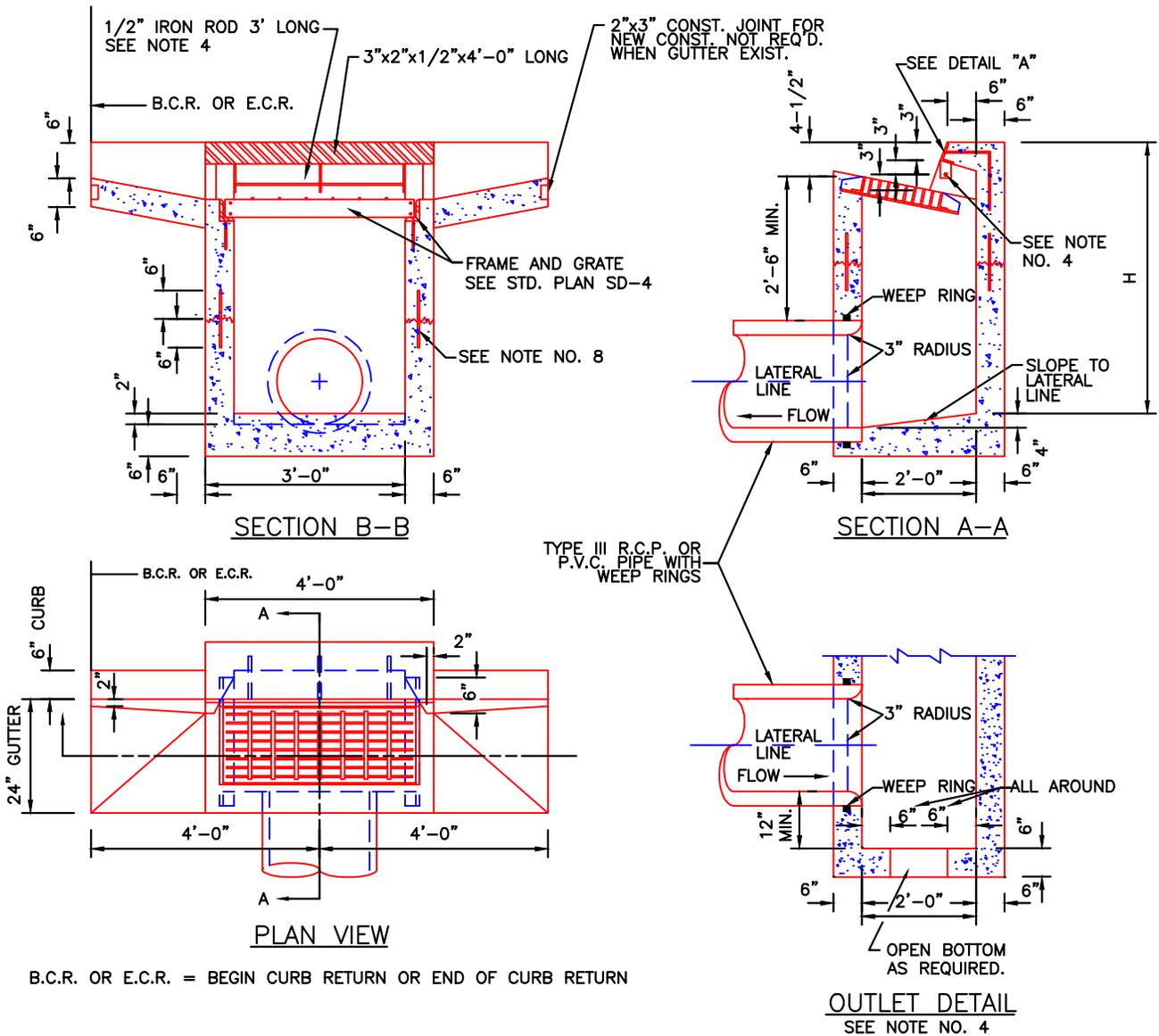
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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
SD-2

**TYPE "A"  
STORM DRAINAGE INLET**

*CITY OF REEDLEY*

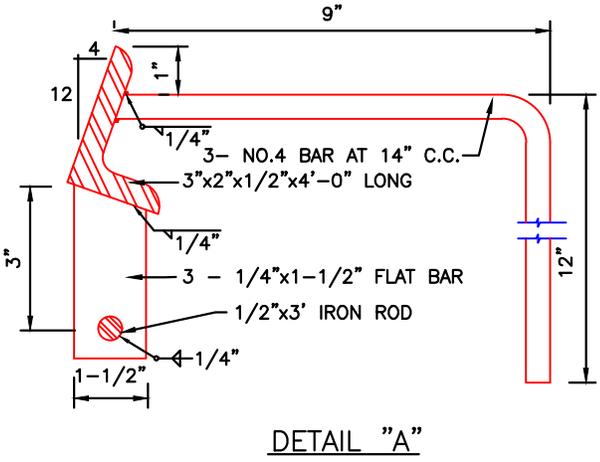
**SD-1**





B.C.R. OR E.C.R. = BEGIN CURB RETURN OR END OF CURB RETURN

**OUTLET DETAIL**  
SEE NOTE NO. 4



**DETAIL "A"**

**NOTES:**

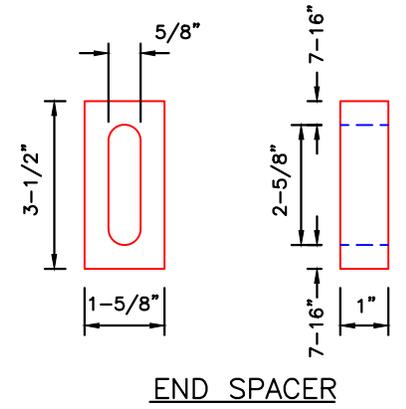
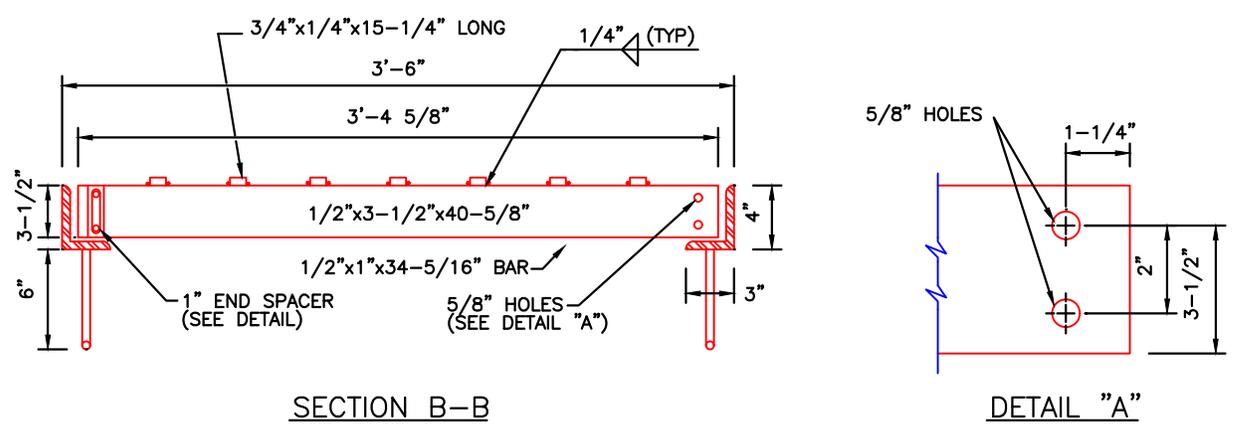
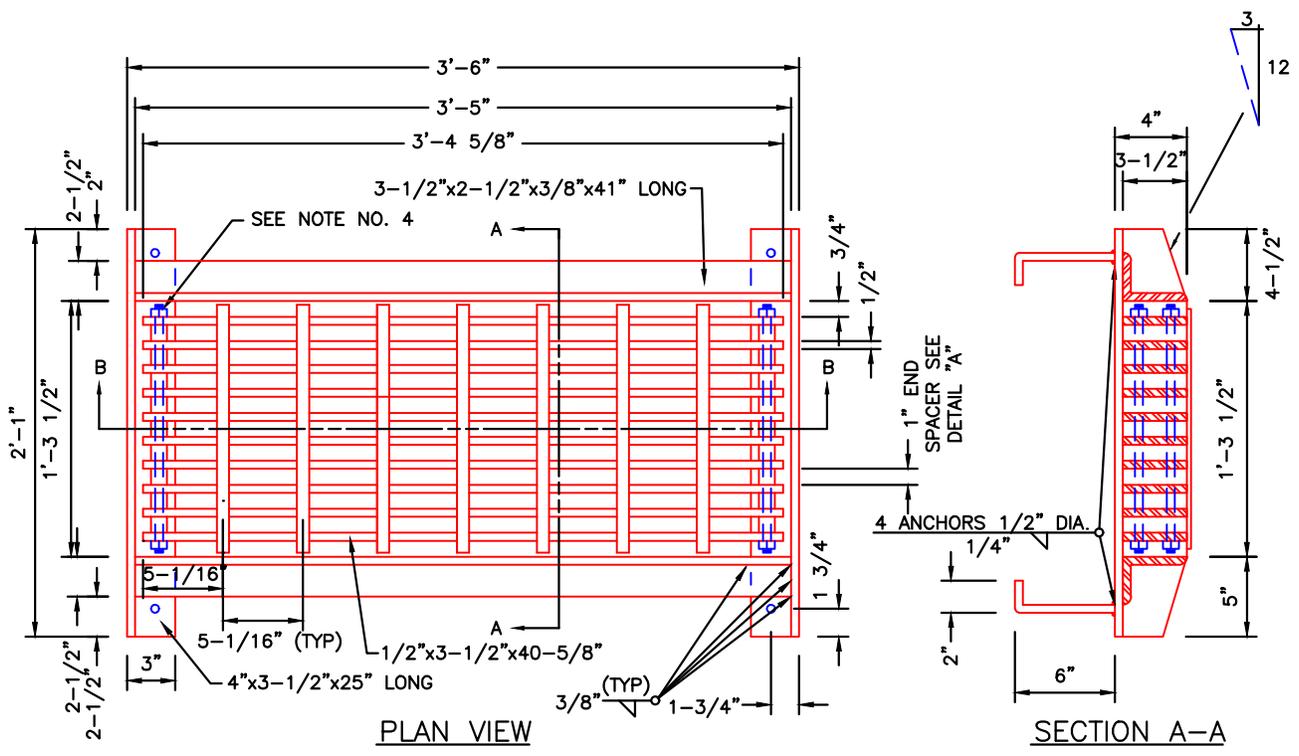
1. THE INLET MAY BE MODIFIED SLIGHTLY TO MATCH EXISTING IMPROVEMENTS, AS DIRECTED BY THE ENGINEER.
2. STRUCTURE SHALL BE CLASS "A" 4000 PSI CONCRETE. EXPOSED SURFACES SHALL BE FINISHED AS PER CURB SPECIFICATIONS.
3. COST OF FRAME, GRATE, CURB AND GUTTER WITHIN LIMITS OF GUTTER DEPRESSION SHALL BE INCLUDED IN THE PRICE OF INLET OR OUTLET.
4. WHEN EMPLOYED AS OUTLET, CONSTRUCT OPEN BOTTOM, PLACE FRAME AND GRATE 6" BELOW TOP OF CURB GRADE, AND ELIMINATE 1/2" IRON ROD AND HANGERS.
5. CURB & GUTTER SHALL BE CONSTRUCTED OR RECONSTRUCTED FOR A DISTANCE OF 8'-0" AND COST THEREOF SHALL BE INCLUDED IN PRICE OF INLET OR OUTLET.
6. FLOOR OF THE INLET SHALL SLOPE FROM ALL WALLS TO THE LATERAL LINE AND SHALL BE GIVEN A STEEL-TROWELED FINISH.
7. AT THE CONTACT POINT BETWEEN THE LATERAL LINE AND THE INLET WALL A SMOOTH 3" RADIUS CURVE SHALL BE CONSTRUCTED.
8. IF INLET IS CONSTRUCTED IN A TWO STAGE POUR, PROVIDE A ROUGHENED CONSTRUCTION JOINT AND PLACE ONE NO. 4 BAR 12" LONG IN EACH OF THE FOUR WALLS AS SHOWN.
9. NO. 4 REINFORCING BAR SHALL BE PLACED VERTICALLY AT 12" O.C. MAX. WITH NO. 4 HORIZONTAL REINFORCING TIE BARS AT 36" O.C. FOR H=6.5' OR MORE.



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
SD-4

**TYPE "B"  
STORM DRAINAGE INLET**

*CITY OF REEDLEY*  
**SD-3**



- NOTES:**
1. ALL DIMENSIONS ARE FINISHED DIMENSIONS.
  2. ALL PARTS SHALL BE STRUCTURAL GRADE STEEL.
  3. ALL EXPOSED METAL PARTS SHALL BE PAINTED OR DIPPED WITH ASPHALTUM PAINT.
  4. 2-1/2" X 15-3/8" STEEL RODS. ONE NUT ON EACH END. TACK WELD NUTS TO ADJACENT BARS AFTER ASSEMBLY, ON EACH SIDE.



SCALE:  
NOT TO SCALE

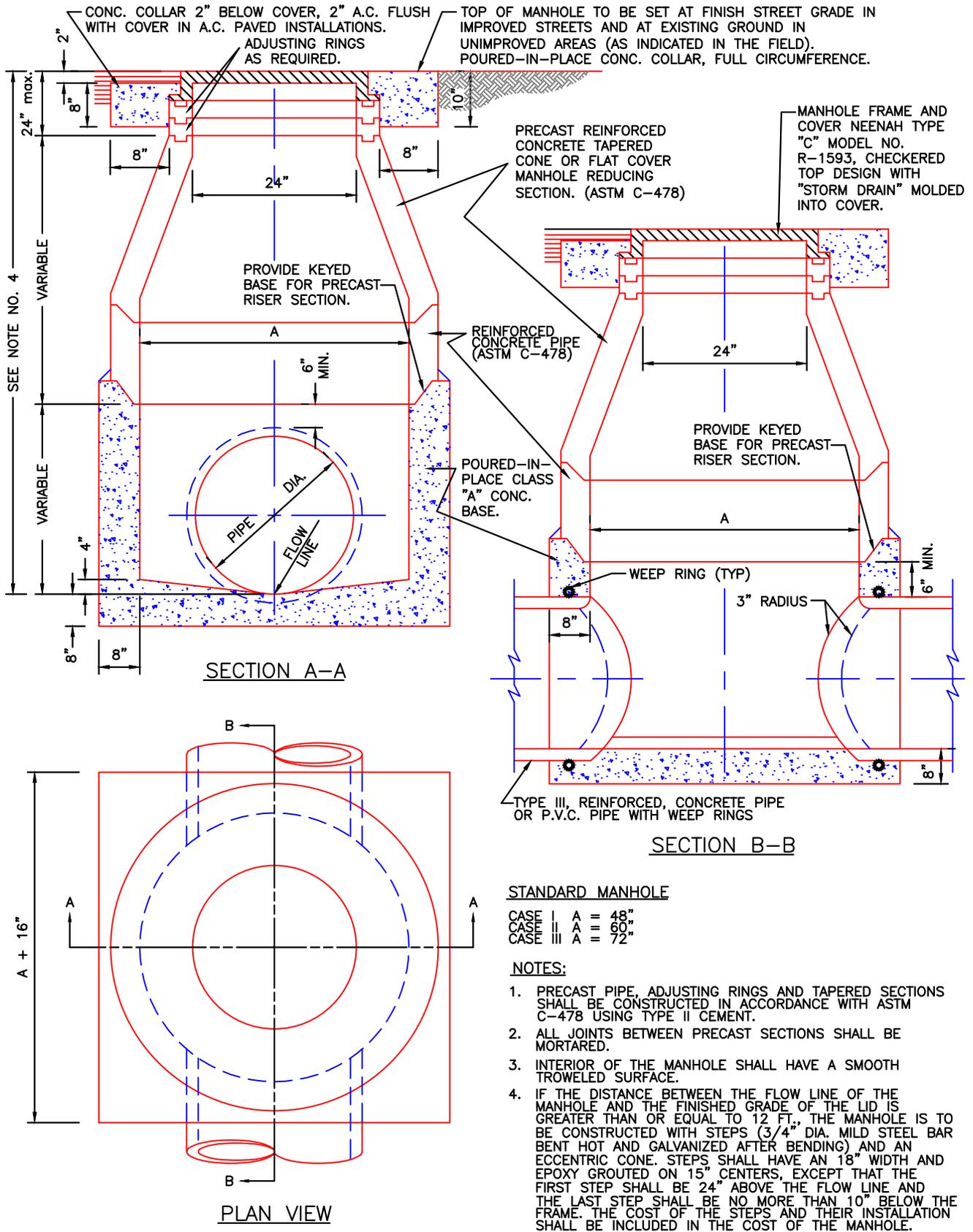
REVISED:  
OCT. 2019

REF. STD. DWG.:

**TYPE "B"  
FRAME AND GRATE**

*CITY OF REEDLEY*

**SD-4**



**STANDARD MANHOLE**

CASE I	A = 48"
CASE II	A = 60"
CASE III	A = 72"

**NOTES:**

1. PRECAST PIPE, ADJUSTING RINGS AND TAPERED SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 USING TYPE II CEMENT.
2. ALL JOINTS BETWEEN PRECAST SECTIONS SHALL BE MORTARED.
3. INTERIOR OF THE MANHOLE SHALL HAVE A SMOOTH TROWELED SURFACE.
4. IF THE DISTANCE BETWEEN THE FLOW LINE AND THE FINISHED GRADE OF THE LID IS GREATER THAN OR EQUAL TO 12 FT., THE MANHOLE IS TO BE CONSTRUCTED WITH STEPS (3/4" DIA. MILD STEEL BAR BENT HOT AND GALVANIZED AFTER BENDING) AND AN ECCENTRIC CONE. STEPS SHALL HAVE AN 18" WIDTH AND EPOXY GROUTED ON 15" CENTERS, EXCEPT THAT THE FIRST STEP SHALL BE 24" ABOVE THE FLOW LINE AND THE LAST STEP SHALL BE NO MORE THAN 10" BELOW THE FRAME. THE COST OF THE STEPS AND THEIR INSTALLATION SHALL BE INCLUDED IN THE COST OF THE MANHOLE.



SCALE:  
NOT TO SCALE

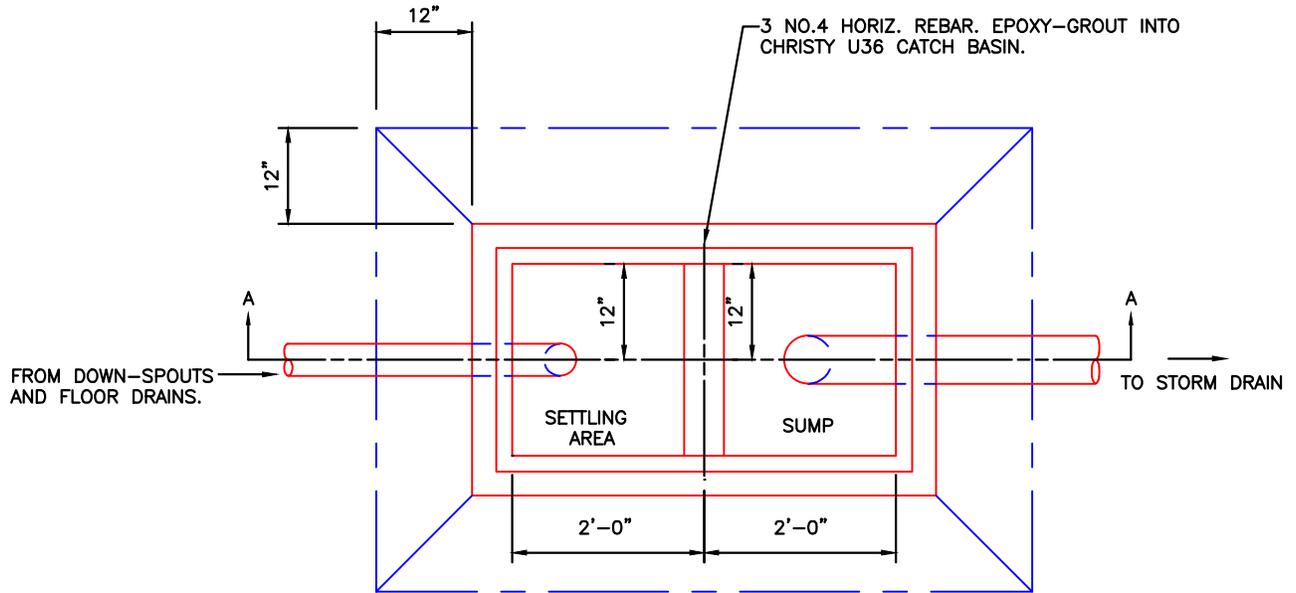
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OCT. 2019

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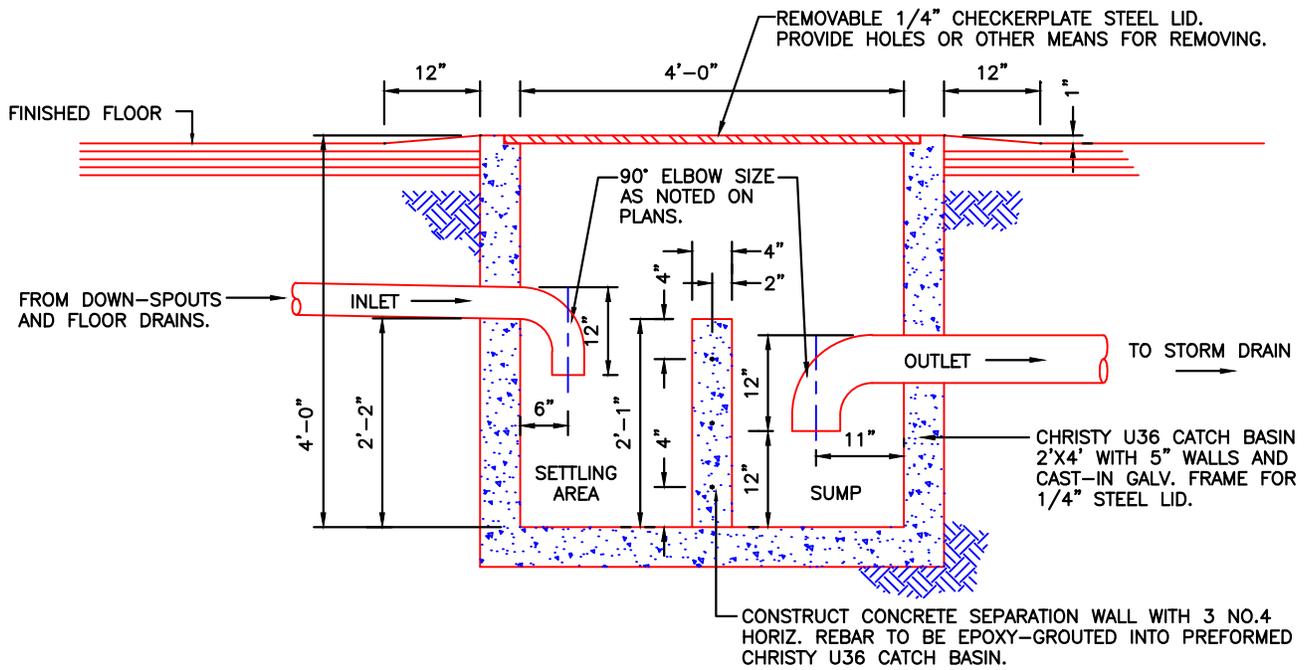
**STORM DRAIN MANHOLE**

*CITY OF REEDLEY*

**SD-5**



PLAN VIEW



SECTION A-A

NOTES:

1. CONCRETE SHALL BE CLASS "A".
2. ELEVATE INLET FULL PIPE DIAMETER ABOVE OUTLET.

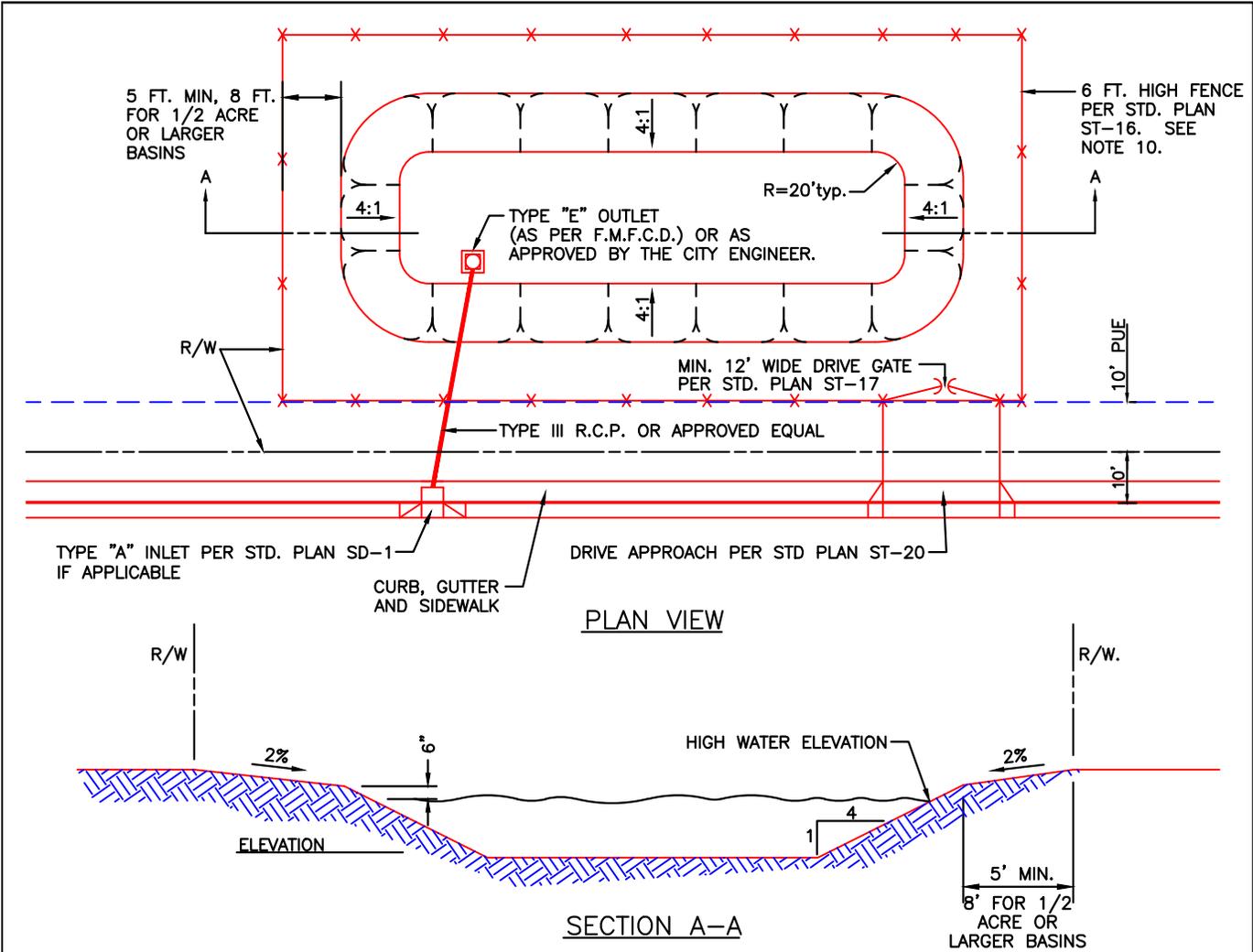


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OCT. 2019  
REF. STD. DWG.:

SAND TRAP

CITY OF REEDLEY

SD-6



**NOTES: DESIGN MINIMUMS**

1. OVERFLOW MUST BE TO THE STREET, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
2. DESIGN WATER SURFACE ELEVATION SHALL BE 6" INCHES BELOW THE LOWEST INLET FLOW LINE OR POND PERIPHERAL ELEVATION, WHICHEVER IS LOWER.
3. REQUIRED CAPACITY:  $V = C I A$  WHERE,
  - C = RUNOFF COEFFICIENT
  - V = REQUIRED BASIN CAPACITY IN CUBIC FEET
  - I = RAINFALL FROM A DESIGN STORM (0.28" / 5YR.- 10 DAY STORM MIN.)
  - A = TRIBUTARY AREA IN SQUARE FEET.
4. PROVIDE COMPOSITE "C" CALCULATIONS.
5. EIGHT (8') FOOT WIDE VEHICLE RAMP WITH A MAX. SLOPE OF 15% REQUIRED IN 1/2 ACRE OR LARGER BASINS.
6. TEMPORARY PONDING BASINS SHALL BE FENCED WITHIN SEVEN (7) DAYS TIME AFTER THEY BECOME OPERATIONAL.
7. BASIN SHALL BE SIZED TO HANDLE THE REQUIRED STORAGE VOLUME WITHOUT EXCEEDING AN EXCAVATION DEPTH OF TWELVE (12') FEET.
8. ADEQUATE AREA AT THE FLOOR OF THE BASIN SHALL BE PROVIDED FOR MANEUVERING MAINTENANCE EQUIPMENT.
9. LANDSCAPING OF THE BASIN MAY NOT BE NECESSARY IF SCREENED FENCING IS PROVIDED; HOWEVER, LANDSCAPING TREATMENT BETWEEN THE FENCE & THE STREET MAY BE REQUIRED.
10. FENCING IS NOT REQUIRED ON BASINS WHERE THE MAX. POSSIBLE WATER DEPTH DOES NOT EXCEED 18" & THE SIDE SLOPES ARE 6 TO 1 OR FLATTER.
11. A SOIL BORING LOG TO A DEPTH OF NOT LESS THAN 30 FEET SHALL BE SUBMITTED TO THE CITY ENGINEER.



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OCT. 2019

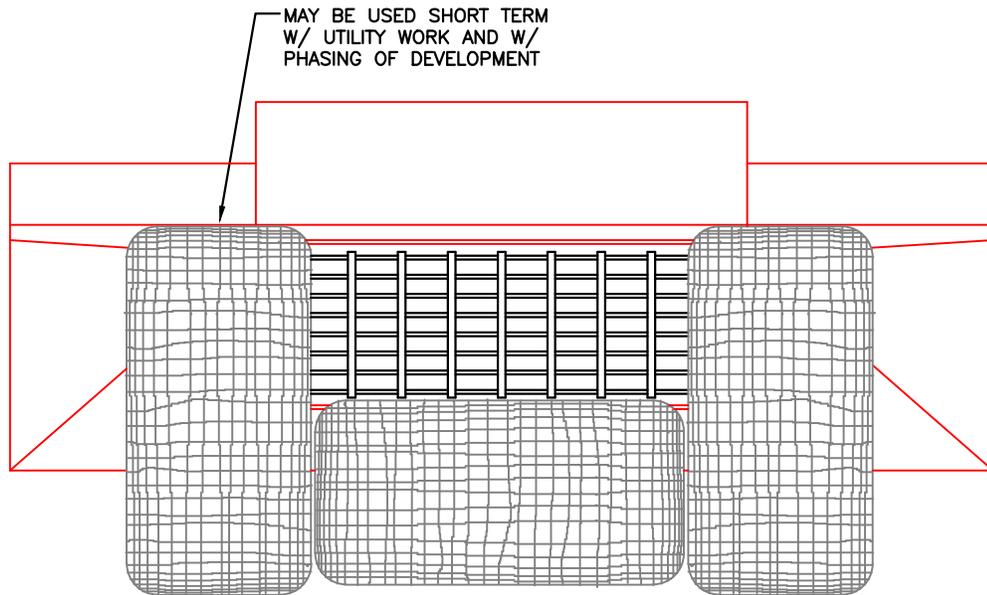
REF. STD. DWG.:  
ST-21, 54 & 55, SD-1

**TEMPORARY PONDING  
BASIN**

*CITY OF REEDLEY*

**SD-7**

THE DEVELOPER SHALL INCORPORATE DUST AND EROSION CONTROL MEASURES INTO THE CONSTRUCTION PHASE OF THE PROJECT. THE CITY ENGINEER SHALL REVIEW AND APPROVE SAID MEASURES PRIOR TO THE ISSUANCE OF BUILDING OR ENCROACHMENT PERMITS. THE APPLICANT'S CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT SILT AND OTHER SEDIMENTATION FROM ENTERING THE CITY OF REEDLEY'S STORM DRAINAGE & SEWER SYSTEMS. SUCH PRECAUTIONS SHOULD GENERALLY CONFORM TO THE STATE WATER RESOURCES CONTROL BOARD - CONSTRUCTION GENERAL PERMIT, THE LATEST EDITION OF THE CALTRANS STORMWATER QUALITY HANDBOOK & SECTION 14 OF 2015 CALTRANS STANDARD SPECIFICATIONS. SUCH PRECAUTIONS AND DETAILS SHALL BE NOTED OR SHOWN ON THE GRADING AND DRAINAGE IMPROVEMENT PLANS AND ARE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.



BIOFILTER BAGS  
TEMPORARY

CATCH BASIN

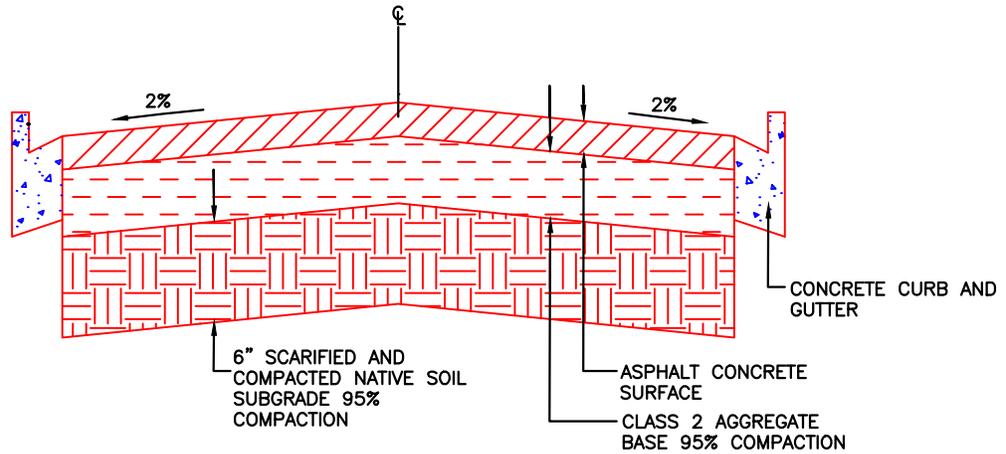


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

EROSION CONTROL

*CITY OF REEDLEY*

SD-8



TYPICAL STREET STRUCTURAL CROSS SECTION

TRAFFIC INDICES AND MINIMUM PAVEMENT SECTIONS

CLASS OF STREET	TRAFFIC INDEX "R" VALUE	MIN. AC	MIN. AB
MAJOR ARTERIAL	9	5.5"	6"
ARTERIAL	8	5"	6"
INDUSTRIAL OR COMMERCIAL COLLECTOR	7	4.5"	6"
LOCAL COLLECTOR OR BOULEVARD	6	3"	6"
LOCAL	5	2.5"	4"
ALLEY	4	2"	4"

NOTES:

1. ALL STREET STRUCTURAL PAVEMENT SECTIONS SHALL BE BASED ON "R" VALUE TESTS & CHAPTER 600 OF THE HIGHWAY DESIGN MANUAL.
2. STREET STRUCTURAL PAVEMENT SECTION CALCULATIONS SHALL BE SUBMITTED TO & APPROVED BY CITY ENGINEER.
3. A SAFETY FACTOR OF 0.2 SHALL BE APPLIED IN PAVEMENT CALCULATIONS.
4. SOIL TEST DATA USED IN THE DESIGN CALCULATIONS SHALL BE FURNISHED BY A SOILS TESTING LABORATORY REPORT TO BE SIGNED AND SEALED BY A CA REGISTERED CIVIL ENGINEER.

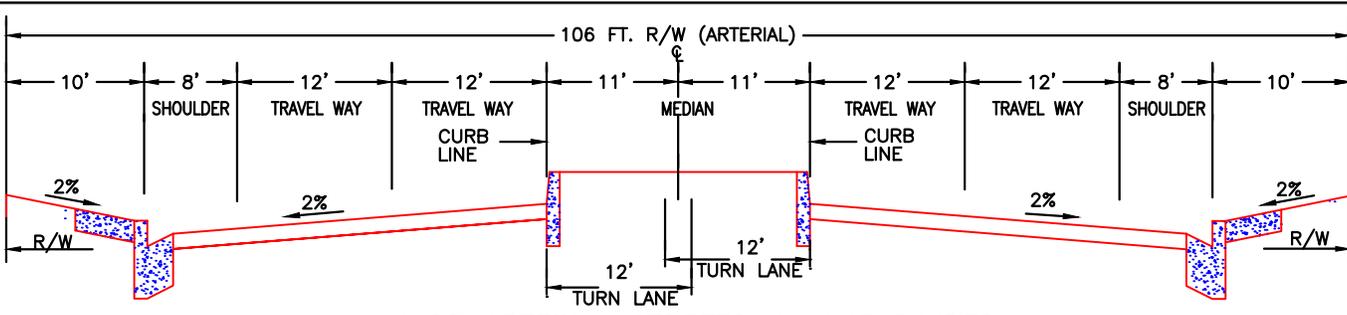


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OCT. 2019  
REF. STD. DWG.:  
N/A

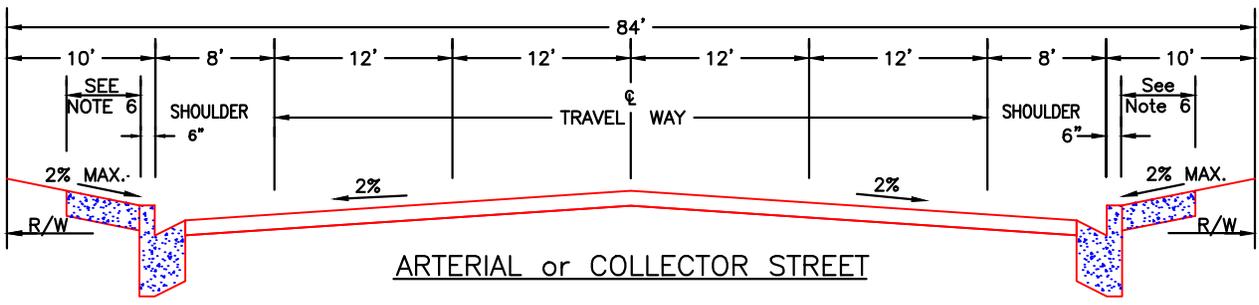
STREET STRUCTURAL SECTIONS

CITY OF REEDLEY

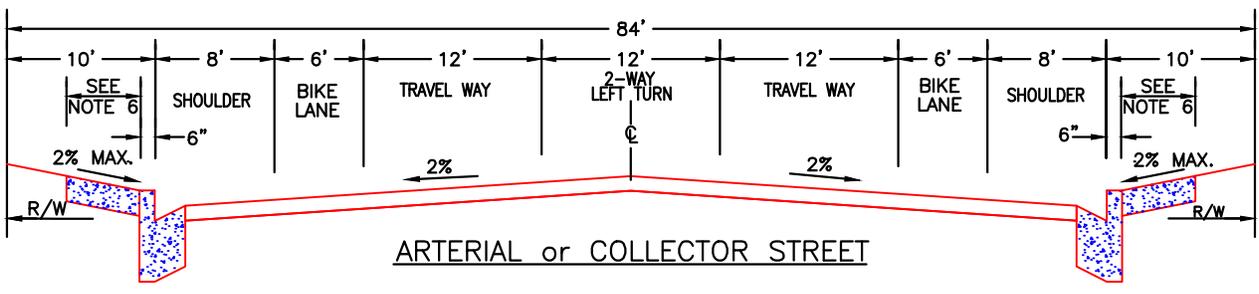
ST-1



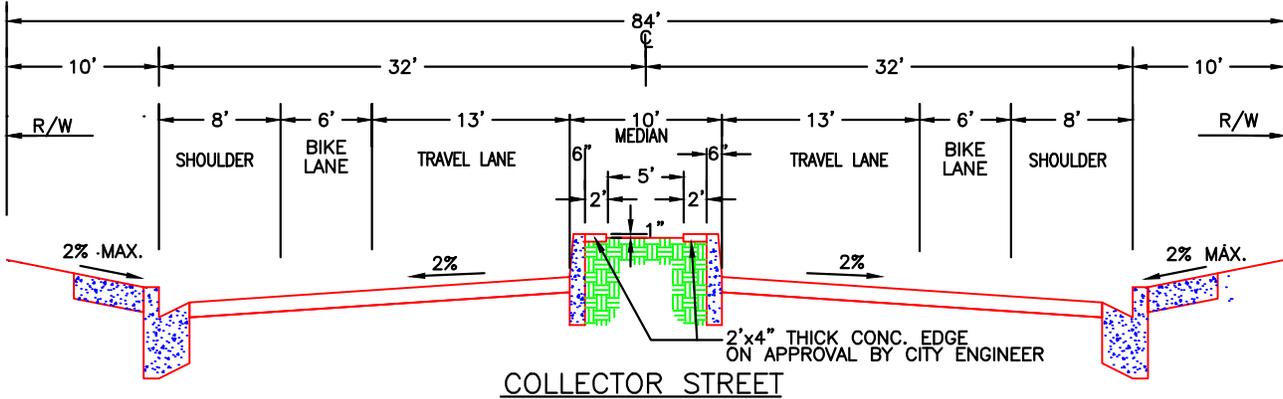
MAJOR ARTERIAL STREETS 4 LANE DIVIDED



ARTERIAL or COLLECTOR STREET



ARTERIAL or COLLECTOR STREET



COLLECTOR STREET

**NOTES:**

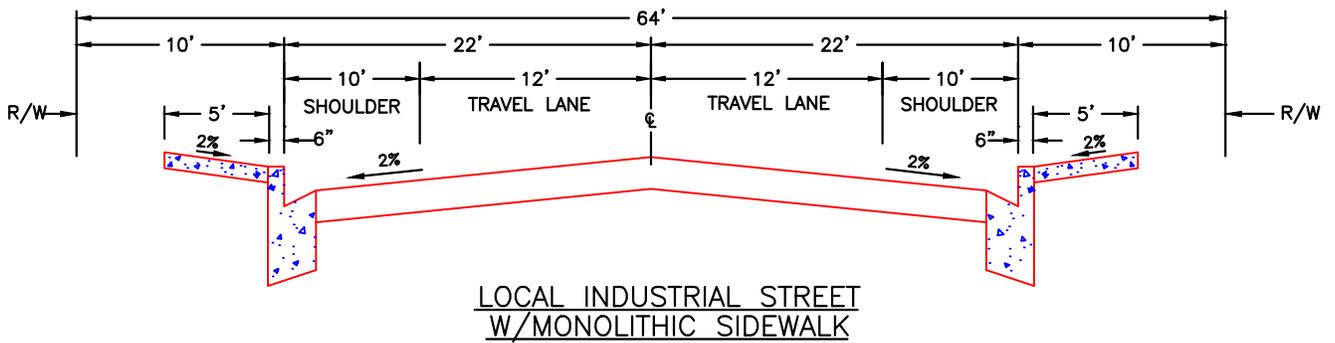
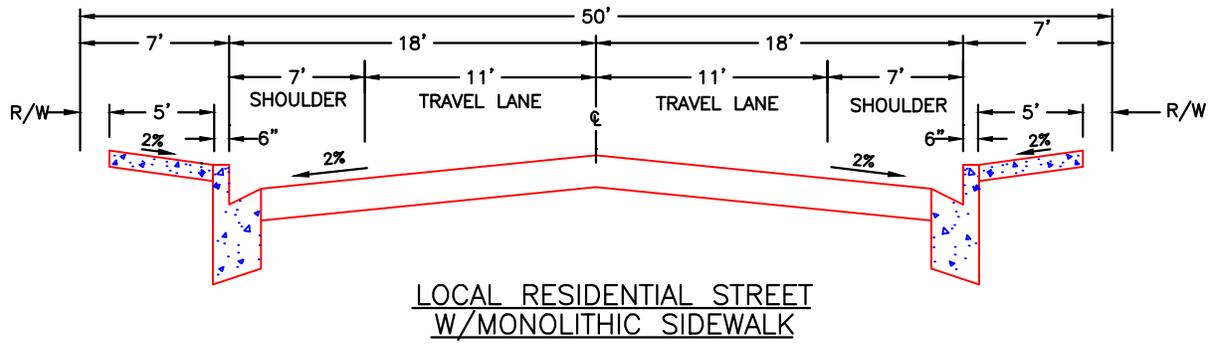
1. 2" x 6" REDWOOD HEADERBOARD MAY BE REQUIRED WHERE FRACTIONAL PORTION OF STREET IS IMPROVED.
2. STREET STRUCTURAL SECTIONS SHALL BE BASED ON "R" VALUE TEST AND STANDARD PLAN ST-1.
3. A MINIMUM CENTER LINE RADIUS OF CURVATURE FOR MAJOR ARTERIAL AND ARTERIAL IS 1,000 FEET, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
4. MEDIAN SHALL BE LANDSCAPED AND IRRIGATION IMPROVEMENTS INSTALLED.
5. THE INTERSECTION AREAS SHALL RECEIVE SPECIAL CONSIDERATION AS TO "STREET RIGHT OF WAY AND IMPROVEMENT STANDARDS" (ORD. 2000-05, 4-25-2000).
6. SIDEWALK WIDTH: RESIDENTIAL = 5', INDUSTRIAL = 5' AND COMMERCIAL = 9'-6".



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-1

**COLLECTOR & ARTERIAL  
CROSS-SECTIONS**

*CITY OF REEDLEY*  
**ST-2**



**NOTES:**

1. A MINIMUM CENTER LINE RADIUS OF CURVATURE FOR LOCAL RESIDENTIAL STREETS IS 175 FEET, FOR LOCAL INDUSTRIAL STREET IS 500 FEET, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER
2. MAXIMUM BLOCK LENGTH FOR A LOCAL RESIDENTIAL STREET IS 660 FEET.
3. 2" x 6" REDWOOD HEADERBOARDS AND 6" HIGH A.C. DIKE MAY BE REQUIRED WHERE FRACTIONAL PORTION OF STREET IS IMPROVED.
4. STREET STRUCTURAL SECTION SHALL BE BASED ON "R" VALUE TESTS AND STANDARD PLAN ST-1.

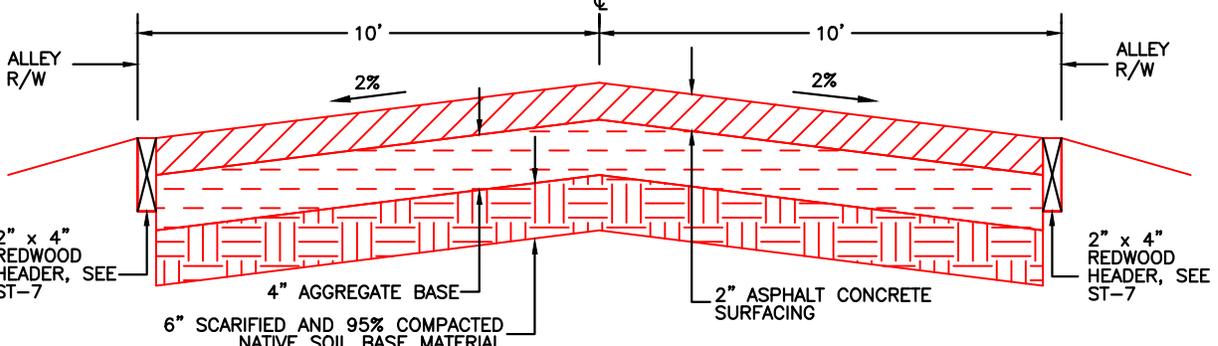
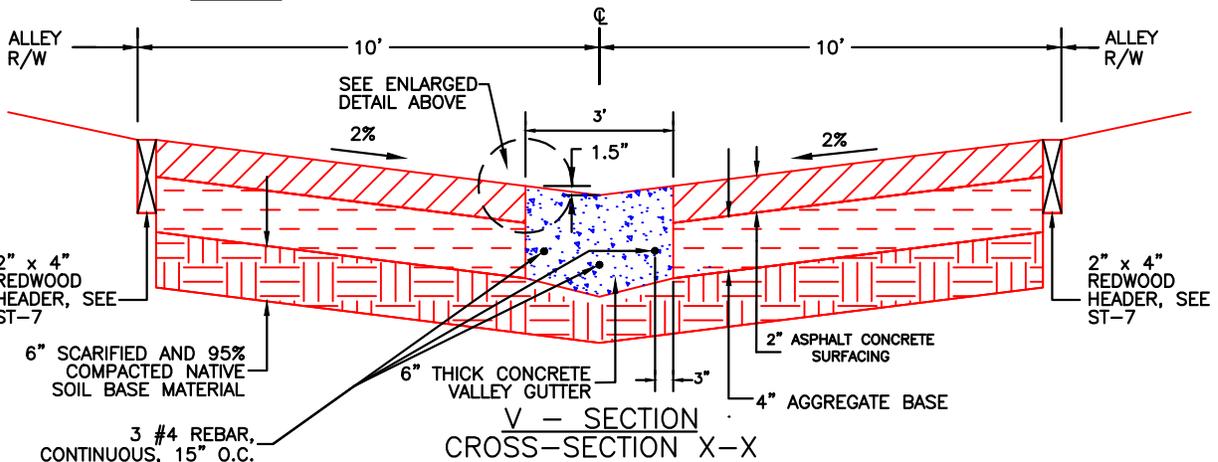
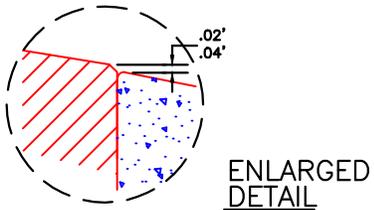
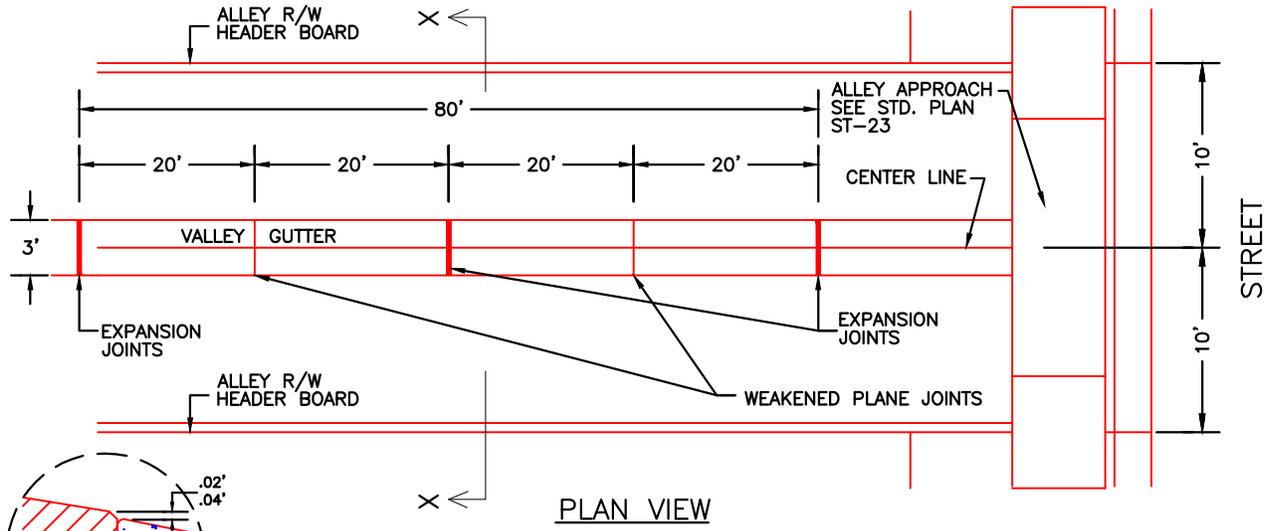


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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-1

**LOCAL STREET  
CROSS-SECTIONS**

*CITY OF REEDLEY*

**ST-3**



- NOTES:**
1. ALLEY STRUCTURAL SECTIONS SHOWN ARE MINIMUM, MAY VARY DEPENDING ON "R" VALUE TESTS & STD. PLAN ST-1.
  2. CROWN SECTION ALLOWED ONLY WITH SPECIAL APPROVAL FROM THE CITY ENGINEER.
  3. ALL CONCRETE USED IN VALLEY GUTTER SHALL BE 4000 PSI.
  4. REBAR SHALL HAVE A MINIMUM OF 2" CLEAR COVERAGE.
  5. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADED 40 MINIMUM, FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.



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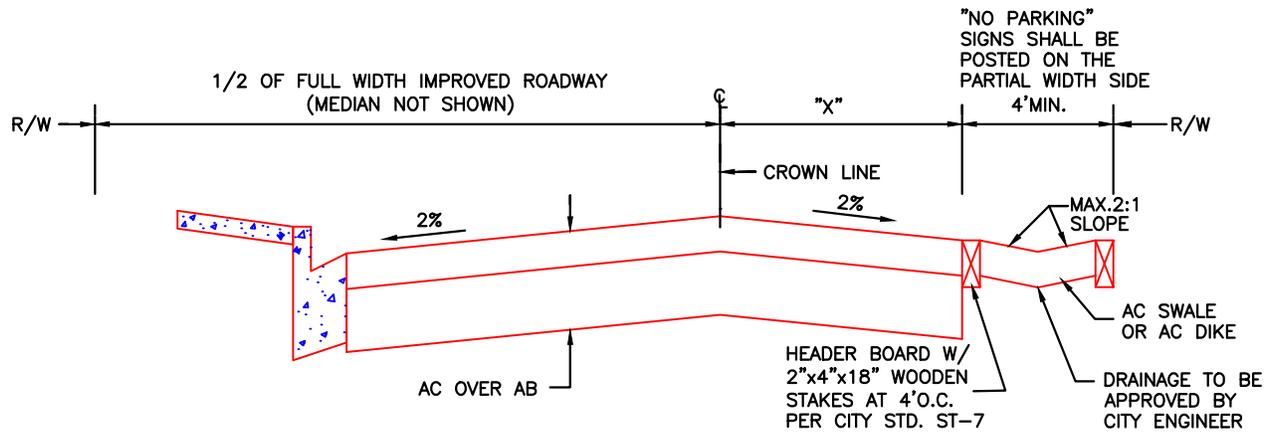
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-1 & 23

## ALLEY CROSS SECTIONS & PLAN

CITY OF REEDLEY

ST-4



**SECTION VIEW**

STREET	"X"
LOCAL	11.5'
COLLECTOR	14'
ARTERIAL	16'

**NOTES:**

1. THE PARTIAL WIDTH STREET IS ONLY PERMITTED ON A FRONTAGE WHERE THE DEVELOPER DOES NOT HAVE OWNERSHIP OR CONTROL OF THE RIGHT-OF-WAY FOR A FULL WIDTH STREET IMPROVEMENT.
2. SHOULDER PAVEMENT TREATMENT PM10 AS REQUIRED PER SJVAPCD, RULE 8061.
3. STREET STRUCTURAL SECTION SHALL BE BASED ON "R" VALUE TESTS AND STANDARD PLAN ST-1.

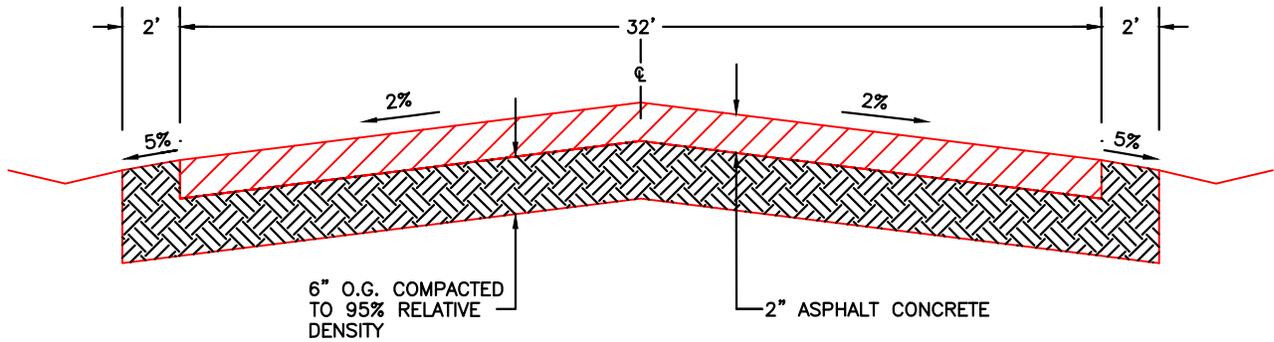


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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-1 & 7

**PARTIAL WIDTH  
STREET**

*CITY OF REEDLEY*

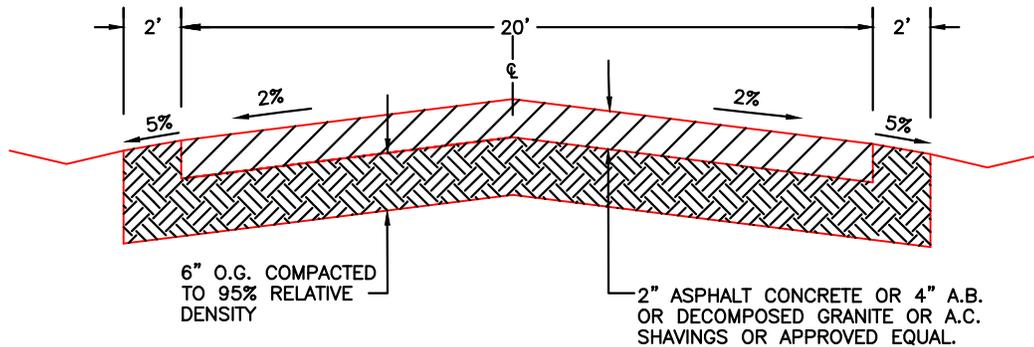
**ST-5**



**NOTES:**

1. AS REQUIRED BY THE CITY ENGINEER FOR CIRCULATION.
2. PAVEMENT SECTION MAY BE REQUIRED TO BE FULL DEPTH DESIGNED SECTION IF IN ALIGNMENT WITH A FUTURE STREET.
3. A SECONDARY ACCESS EASEMENT OR STREET RIGHT-OF-WAY DEDICATION IS REQUIRED.
4. SHOULDER PAVEMENT TREATMENT PM10 AS REQUIRED PER SJVAPCD RULE 8061.

SECONDARY ACCESS ROAD



**NOTES:**

1. AS REQUIRED BY THE CITY OF REEDLEY FIRE DEPARTMENT & CITY ENGINEER FOR SECONDARY ACCESSSES.
2. FOR EMERGENCY ACCESS, BARRICADES MAY BE REQUIRED TO RESTRICT ACCESS PER CITY STD PLAN ST-79.
3. AN EMERGENCY/MAINTENANCE ACCESS EASEMENT DEDICATION IS REQUIRED.

MAINTENANCE & EMERGENCY ACCESS ROAD



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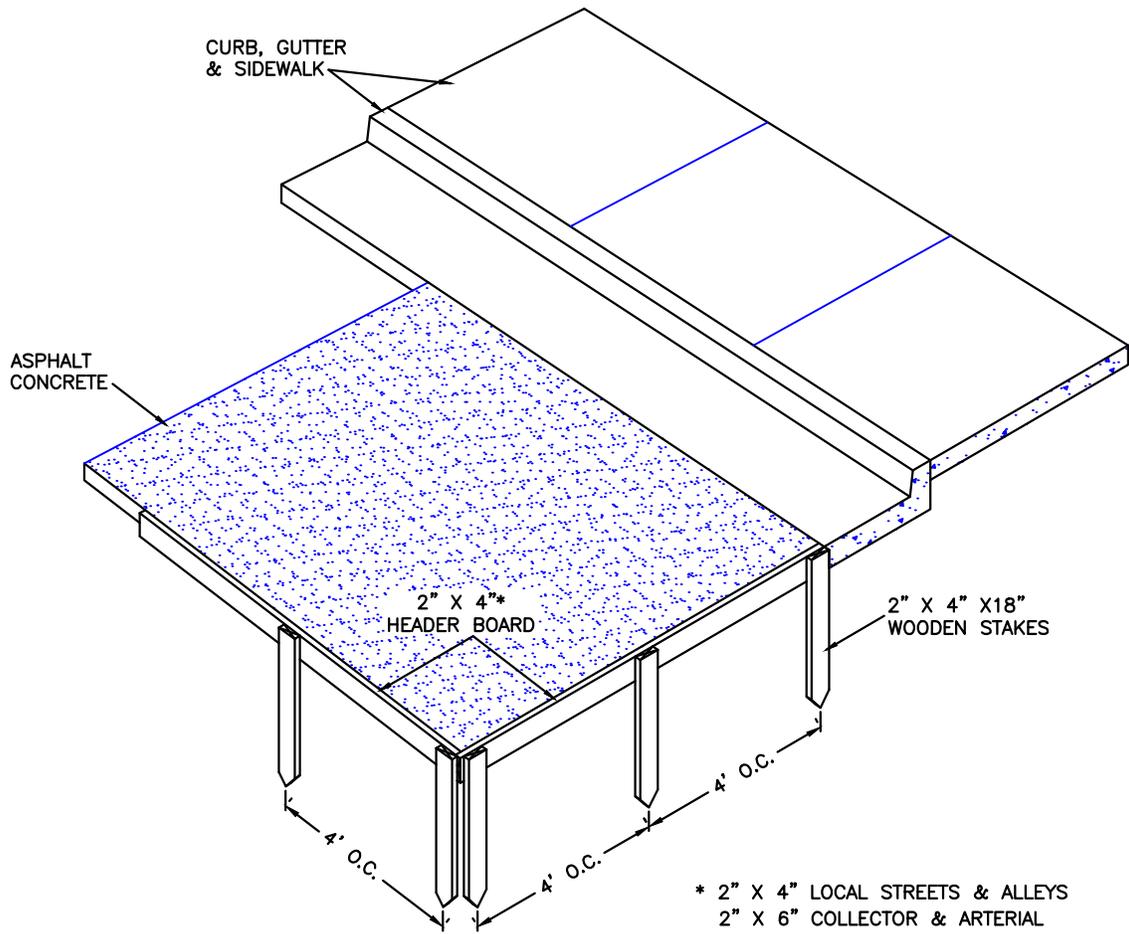
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-79

**SECONDARY &  
EMERGENCY  
MAINTENANCE ACCESS  
ROADS**

*CITY OF REEDLEY*

**ST-6**



\* 2" X 4" LOCAL STREETS & ALLEYS  
 2" X 6" COLLECTOR & ARTERIAL

**NOTES:**

1. HEADER BOARD TO BE INSTALLED AT EDGES OF PAVEMENT EXCEPT WHERE JOINING EXISTING PAVEMENT.
2. HEADER BOARD TO BE INSTALLED TO FINISHED GRADE PRIOR TO PAVING.
3. BACKFILL BEHIND HEADER BOARD PRIOR TO STREET CONSTRUCTION.
4. HEADER BOARD SHALL BE REDWOOD OR PRESSURE-TREATED DOUGLAS FIR.
5. 2" X 4" X 18" STAKES SHALL BE REDWOOD OR PRESSURE-TREATED DOUGLAS FIR.

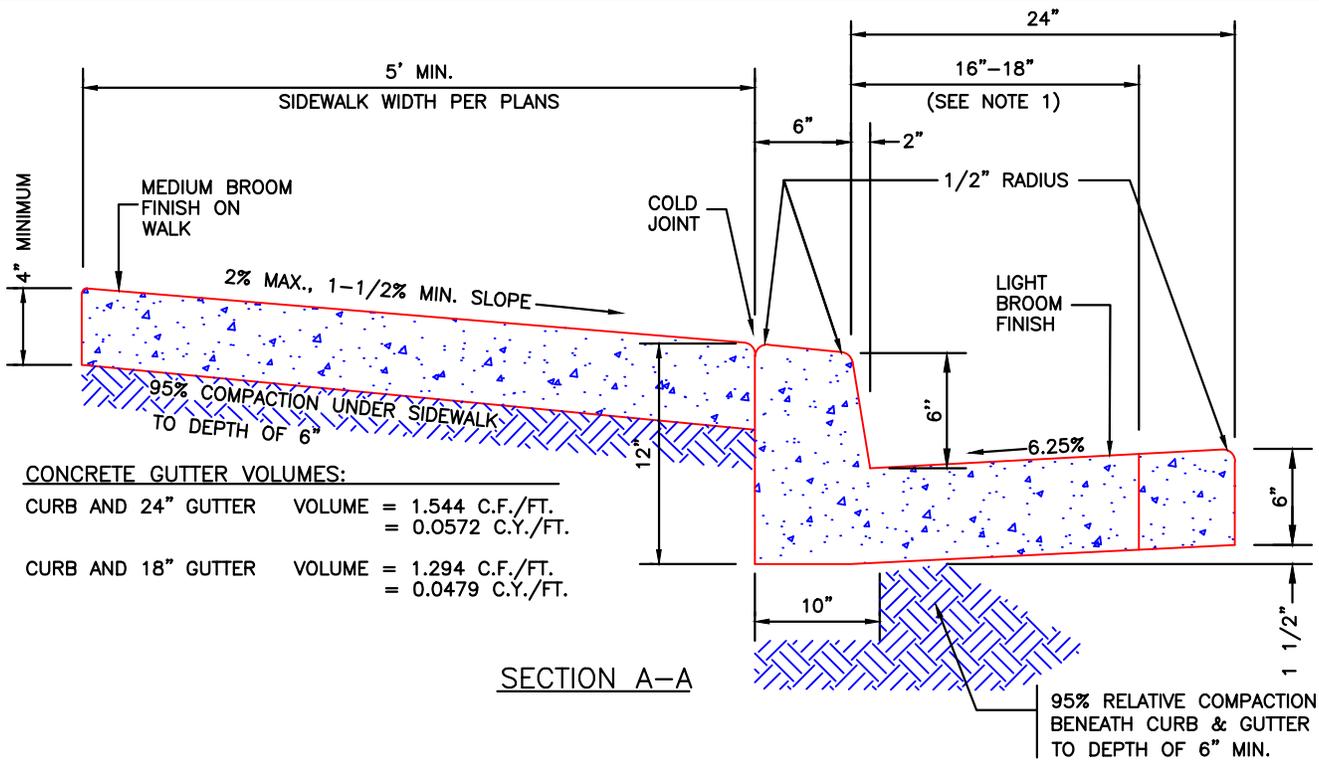


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**STREET HEADER  
 BOARD**

*CITY OF REEDLEY*

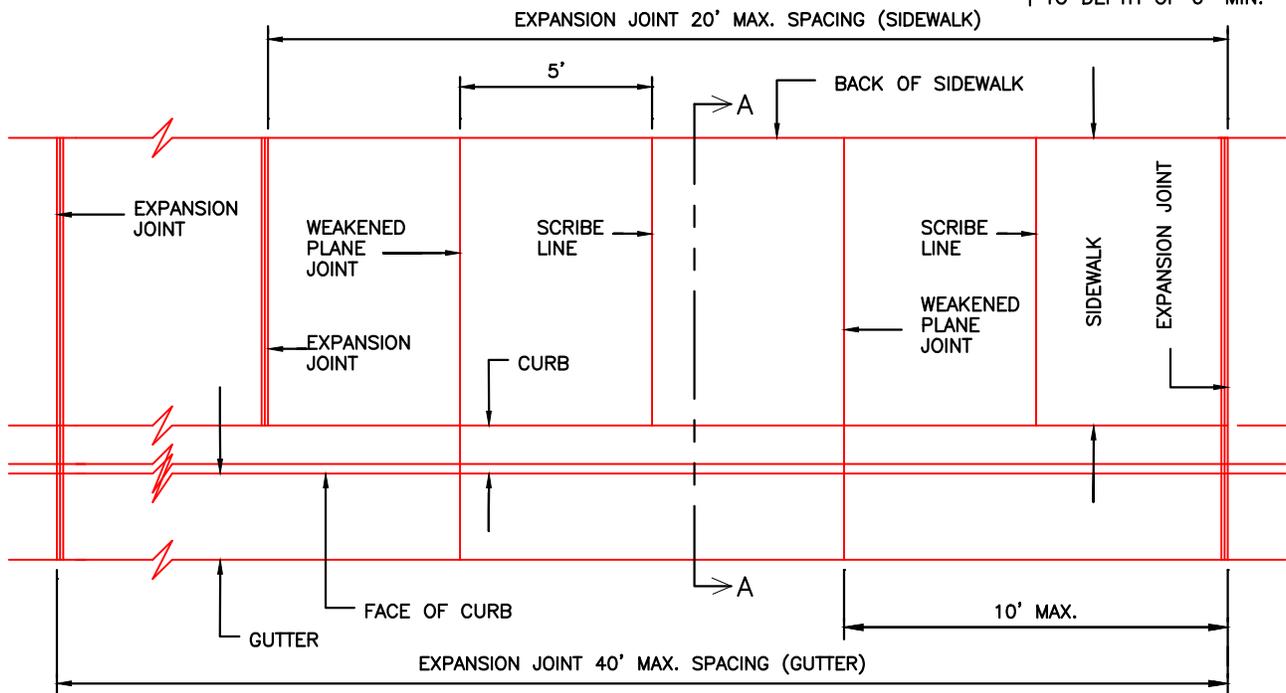
**ST-7**



CONCRETE GUTTER VOLUMES:

CURB AND 24" GUTTER VOLUME = 1.544 C.F./FT.  
= 0.0572 C.Y./FT.

CURB AND 18" GUTTER VOLUME = 1.294 C.F./FT.  
= 0.0479 C.Y./FT.



PLAN

NOTES:

1. 16"-18" GUTTER TO BE INSTALLED WHERE SIMILAR EXISTS OR AS DIRECTED BY THE CITY ENGINEER.
2. THE MAXIMUM SPACING FOR EXPANSION JOINTS FOR CURB AND GUTTER IS 40 FT.
3. WEAKENED PLANE JOINTS SHALL BE PLACED AT A SPACING OF 10 FT. FOR CURB, GUTTER & SIDEWALK.
4. THE MAXIMUM SPACING FOR EXPANSION JOINTS IN SIDEWALK IS 20 FT.
5. ALL CONCRETE USED IN SIDEWALK, CURB & GUTTER SHALL BE 4000 PSI.
6. GUTTER FLOW SLOPE 0.2% MIN.
7. SIDEWALK WIDTH: RESIDENTIAL = 5', INDUSTRIAL = 5' AND COMMERCIAL = 9'-6".
8. STAMP CURB FACE AT SEWER & WATER LATERAL HOUSE BRANCH LOCATIONS PER CITY SPECIFICATIONS.



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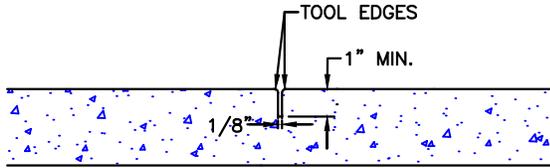
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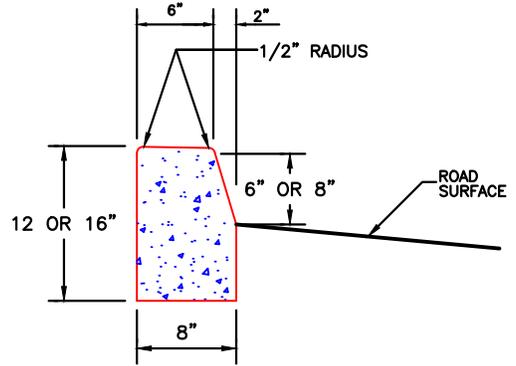
CURB, GUTTER  
AND  
SIDEWALK

CITY OF REEDLEY

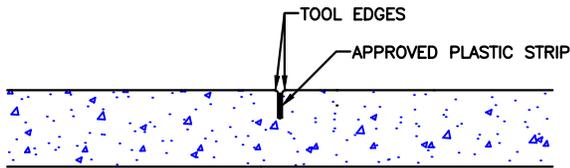
ST-8



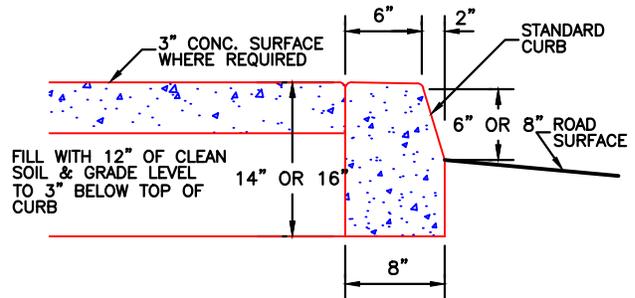
WEAKENED PLANE JOINT



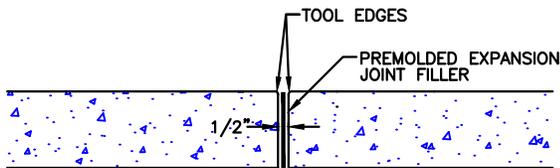
CROSS-SECTION OF CURB



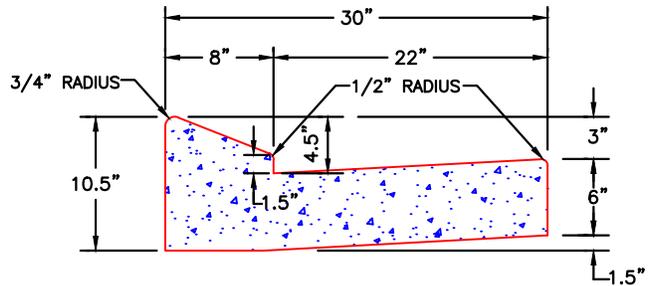
ALTERNATE DESIGN WEAKENED PLANE JOINT



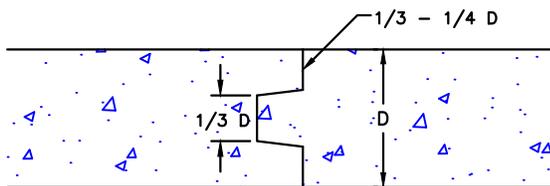
MEDIAN ISLAND CURB



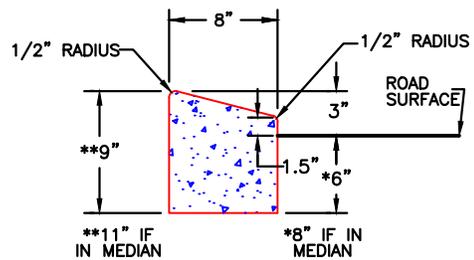
EXPANSION JOINT



WEDGE CURB AND GUTTER



CONSTRUCTION JOINT



MOUNTABLE CURB

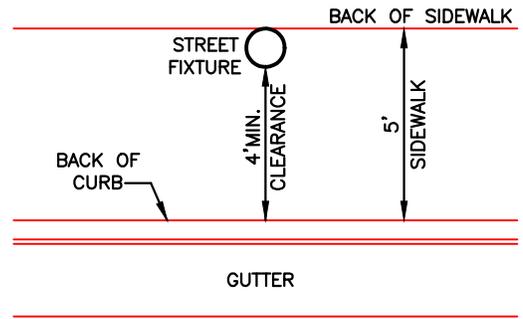
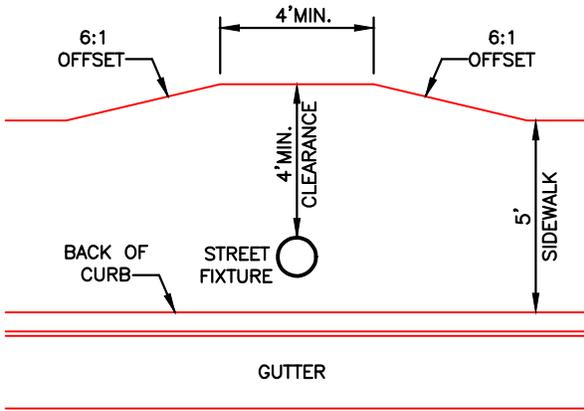


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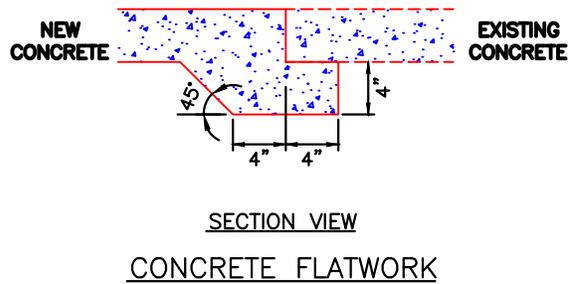
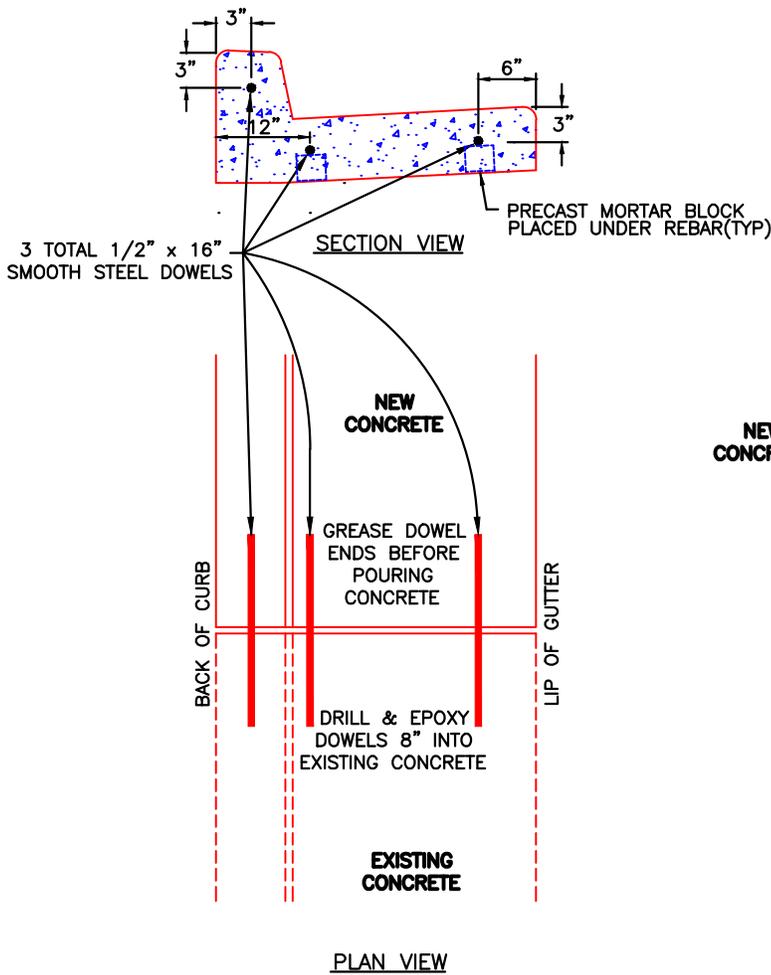
**CONCRETE  
CONSTRUCTION DETAILS**

*CITY OF REEDLEY*

**ST-10**



SIDEWALK PLAN WITH OBSTRUCTION/STREET FIXTURE



CONCRETE CURB & GUTTER



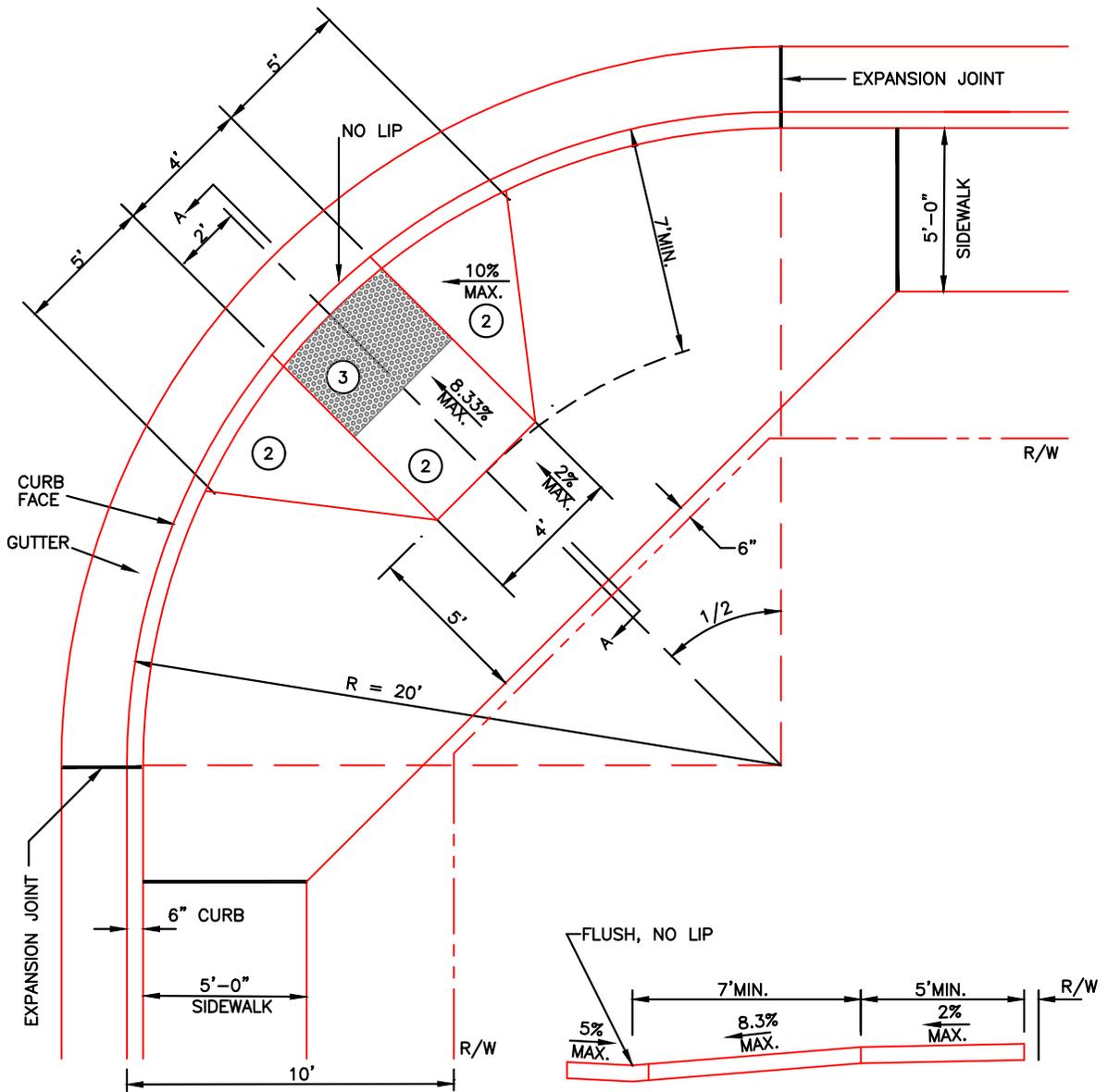
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**SIDEWALK  
OBSTRUCTIONS AND  
CONCRETE COLD JOINTS**

*CITY OF REEDLEY*

**ST-11**





SECTION A-A

**NOTES:**

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CURRENT ADA GUIDELINES.
2. MEDIUM BROOM-FINISH WITHIN RAMP AREA.
3. DETECTABLE WARNING SURFACE REQUIRED FULL WIDTH & 3' DEPTH OF RAMP PER ST-17.
4. RAMP THICKNESS SHALL BE 6".
5. GUTTER PAN TO BE FLATTENED TO 5% IN FRONT OF RAMP.
6. CONCRETE SHALL BE 4000 PSI.
7. 6" O.G. COMPACTED TO 95% RELATIVE COMPACTION.
8. MEASUREMENT: RAMP INCLUDES LANDING AREA OUT TO EXPANSION JOINTS-SF, CURB & GUTTER-LF, SIDEWALK-SF
9. INTERSECTIONS INVOLVING RESIDENTIAL STREETS OTHER THAN KNUCKLE CURVES.

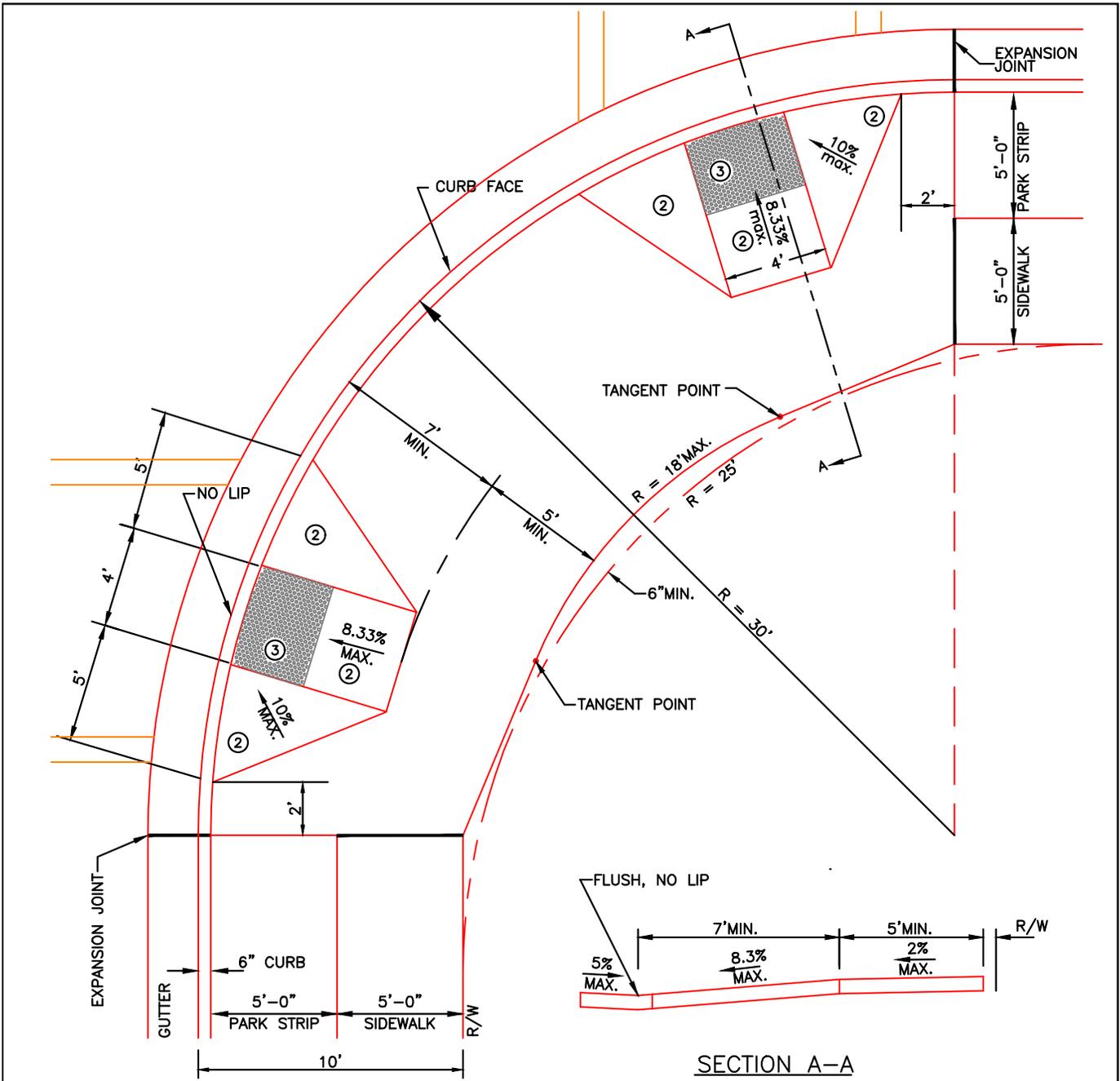


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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-17

**20 FT. RADIUS CURB  
RETURN WITH  
ACCESSIBLE RAMP**

*CITY OF REEDLEY*

**ST-13**



SECTION A-A

**NOTES:**

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CURRENT ADA GUIDELINES.
2. MEDIUM BROOM-FINISH WITHIN RAMP AREA.
3. DETECTABLE WARNING SURFACE REQUIRED FULL WIDTH & 3' DEPTH OF RAMP PER ST-17.
4. RAMP THICKNESS SHALL BE 6".
5. GUTTER PAN TO BE FLATTENED TO 5% IN FRONT OF RAMP.
6. CONCRETE SHALL BE 4000 PSI.
7. 6" O.G. COMPACTED TO 95% RELATIVE COMPACTION.
8. MEASUREMENT: RAMP INCLUDES LANDING AREA OUT TO EXPANSION JOINTS-SF, CURB & GUTTER-LF, SIDEWALK-SF



SCALE:  
NOT TO SCALE

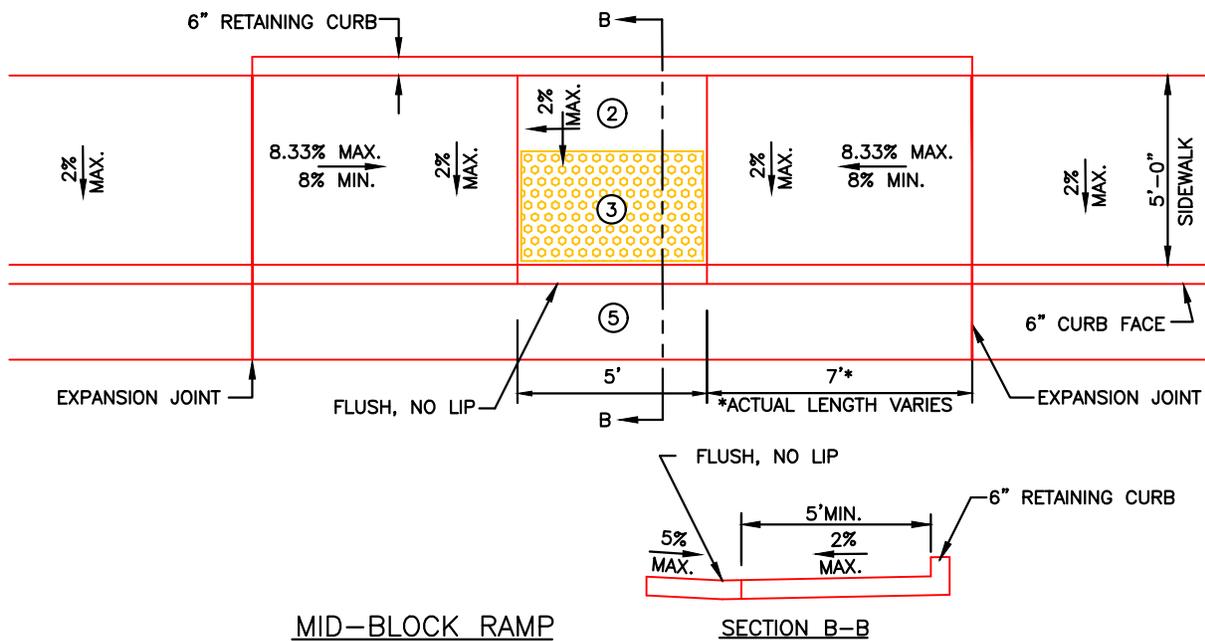
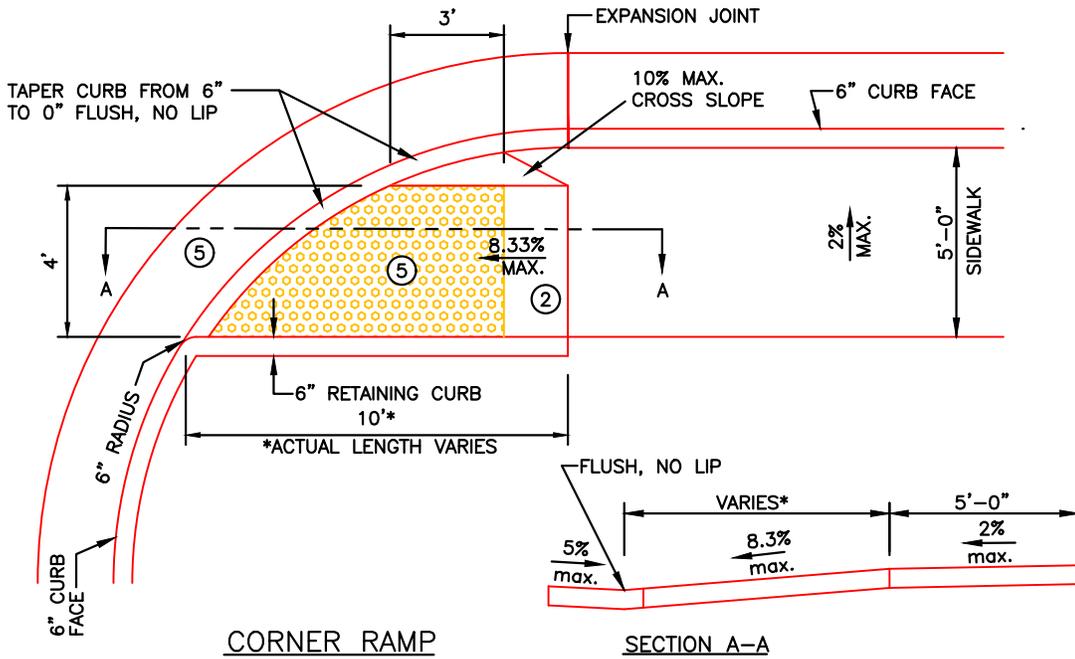
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-17

**30 FT. RADIUS CURB  
RETURN WITH  
ACCESSIBLE RAMP**

*CITY OF REEDLEY*

**ST-14**



**NOTES:**

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CURRENT ADA GUIDELINES.
2. MEDIUM BROOM-FINISH WITHIN RAMP AREA.
3. DETECTABLE WARNING SURFACE REQUIRED FULL WIDTH & 3' DEPTH OF RAMP PER ST-17.
4. RAMP THICKNESS SHALL BE 6".
5. GUTTER PAN TO BE FLATTENED TO 5% IN FRONT OF RAMP.
6. CONCRETE SHALL BE 4000 PSI.
7. 6" O.G. COMPACTED TO 95% RELATIVE COMPACTION.
8. MEASUREMENT: RAMP INCLUDES LANDING AREA OUT TO EXPANSION JOINTS-SF, CURB & GUTTER-LF, SIDEWALK-SF

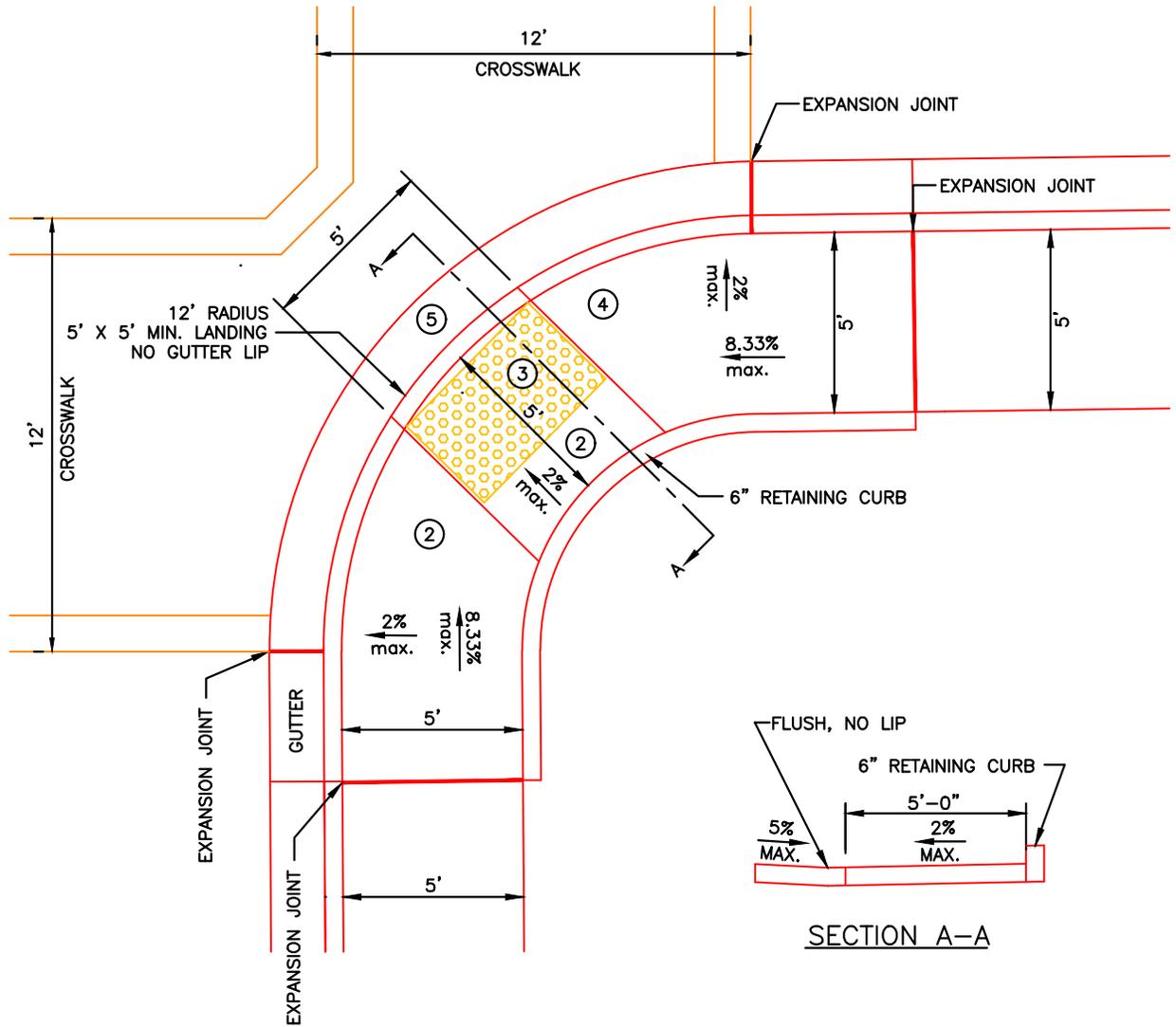


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-17

**MODIFIED CURB RAMP  
ONE- WAY CROSSING**

*CITY OF REEDLEY*

**ST-15**



**NOTES:**

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CURRENT ADA GUIDELINES.
2. MEDIUM BROOM-FINISH WITHIN RAMP AREA.
3. DETECTABLE WARNING SURFACE REQUIRED FULL WIDTH & 3' DEPTH OF RAMP PER ST-17.
4. RAMP THICKNESS SHALL BE 6".
5. GUTTER PAN TO BE FLATTENED TO 5% IN FRONT OF RAMP.
6. CONCRETE SHALL BE 4000 PSI.
7. 6" O.G. COMPACTED TO 95% RELATIVE COMPACTION.
8. MEASUREMENT: RAMP INCLUDES LANDING AREA OUT TO EXPANSION JOINTS-SF, CURB & GUTTER-LF, SIDEWALK-SF

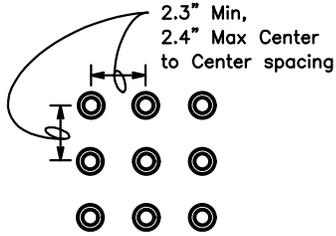


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NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-17

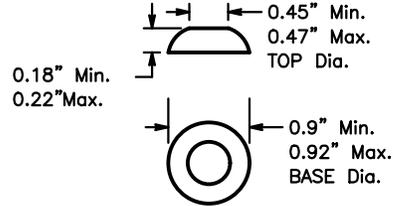
**MODIFIED CURB RAMP  
TWO- WAY CROSSING**

*CITY OF REEDLEY*

**ST-16**



RAISED TRUNCATED  
DOME PATTERN (IN-LINE)



RAISED TRUNCATED DOME

NOTES:

- 1) THE DETECTABLE WARNING SHALL VISUALLY CONTRAST PER THE 2013 CALIFORNIA BUILDING CODE. THE MATERIAL USED SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. THE COLOR SHALL BE YELLOW.
- 2) THE DOMES MAY BE CONSTRUCTED IN A VARIETY OF METHODS, INCLUDING CAST-IN-PLACE OR STAMPED OR IT MAY BE PART OF A PREFABRICATED SURFACE TREATMENT.
- 3) ONLY APPROVED DSA/AC DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES SHALL BE INSTALLED AS PROVIDED IN THE CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 1, ARTICLES 2, 3 AND 4. REFER TO CCR TITLE 24, PART 12, CHAPTER 12-11A AND B FOR BUILDING FACILITY ACCESS SPECIFICATIONS FOR PRODUCT APPROVAL FOR DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES.
- 4) DETECTABLE WARNING PRODUCTS AND DETECTABLE SURFACES SHALL BE EVALUATED BY AN INDEPENDENT ENTITY, SELECTED BY THE DEPARTMENT OF GENERAL SERVICES, DIVISION OF THE STATE ARCHITECT-ACCESS COMPLIANCE FOR ALL OCCUPANCIES, INCLUDING TRANSPORTATION AND OTHER OUTDOOR ENVIRONMENTS. SEE GOVERNMENT CODE SECTION 4460.
- 5) CURB RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH AND 3'-0" DEPTH OF THE RAMP.

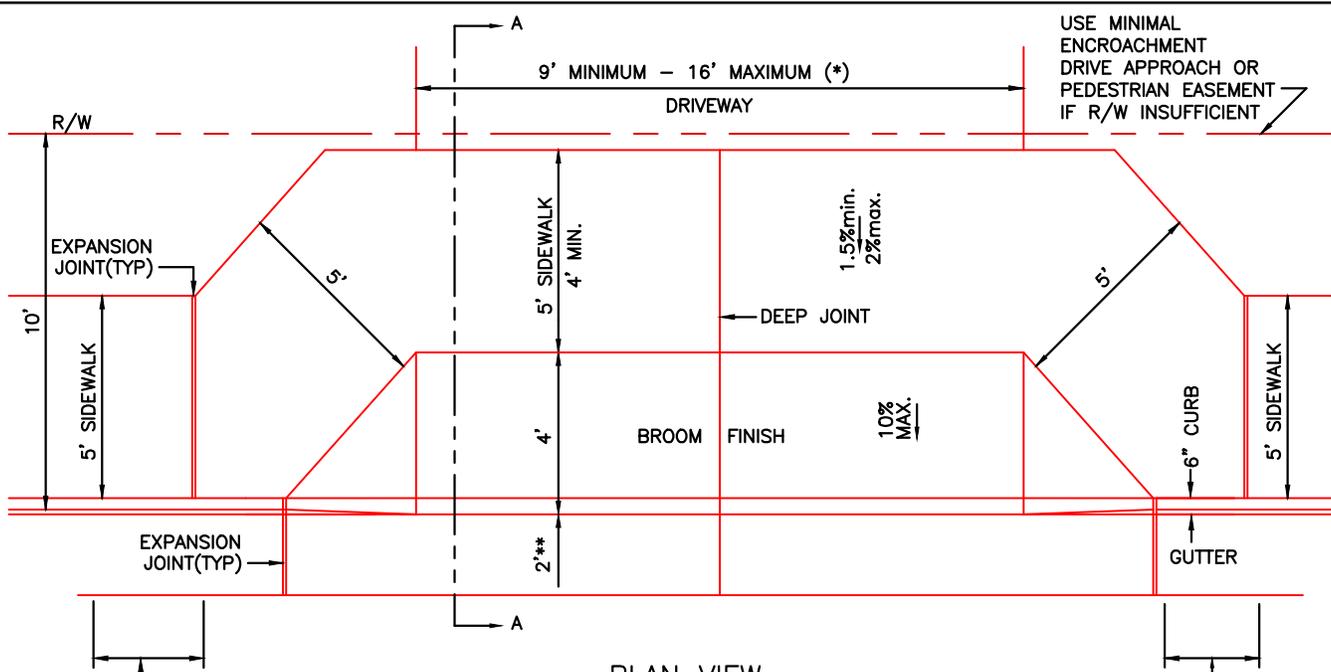


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

**DETECTABLE WARNING  
SURFACE**

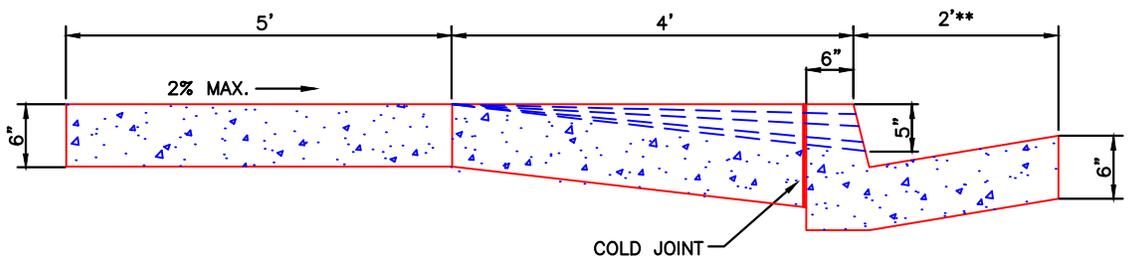
*CITY OF REEDLEY*

**ST-17**



PLAN VIEW

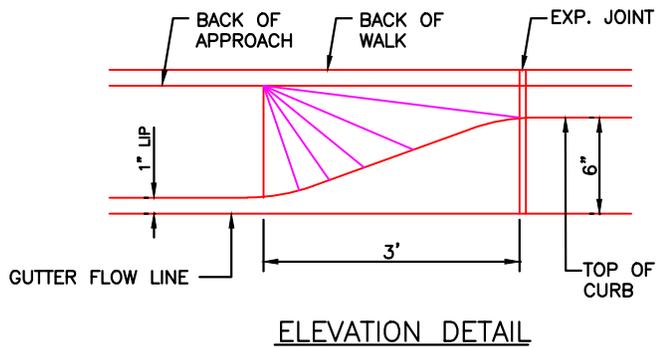
- \* WIDTHS ARE FOR DRIVEWAY THROAT OPENING  
THROAT OPENING FOR 3 OR MORE CAR GARAGE REQUIRES APPROVAL FROM CITY ENGINEER
- \*\* GUTTER WIDTH PER CONSTRUCTION PLANS OR ON-SITE CONDITIONS IF NOT 2'.



SECTION A-A

NOTES:

1. MUST REMOVE ENTIRE CURB AND GUTTER WHEN RECONSTRUCTION IS REQUIRED.
2. NOT MORE THAN 60% OF LOT FRONTAGE MEASURED AT STREET SIDE (TOP OF CURB BETWEEN LOT LINES EXTENDED) MAY BE USED FOR DRIVEWAY OPENING.
3. ALL MULTIPLE RESIDENTIAL PROPERTIES TO HAVE ON-SITE REFUSE PICKUP SHALL INSTALL COMMERCIAL DRIVEWAY APPROACHES PER CITY OF REEDLEY STD. PLAN ST-21.
4. CONCRETE FOR DRIVEWAY APPROACH SHALL BE CLASS A, 4000 PSI 6" THICK MIN.
5. DEEP JOINT REQUIRED IN CENTER OF DRIVE APPROACH.
6. APPROACH, CURB AND GUTTER SUBGRADE COMPACTED TO 95% A MINIMUM OF 6".
7. BROOM SWEEP FINISH ON DRIVEWAY APPROACH.
8. E.C.R. = END OF CURB RETURN.
9. MEASUREMENT: DRIVE APPROACH FROM BACK OF CURB TO BACK OF WALK, WING TO WING-SF, CURB & GUTTER-LF.



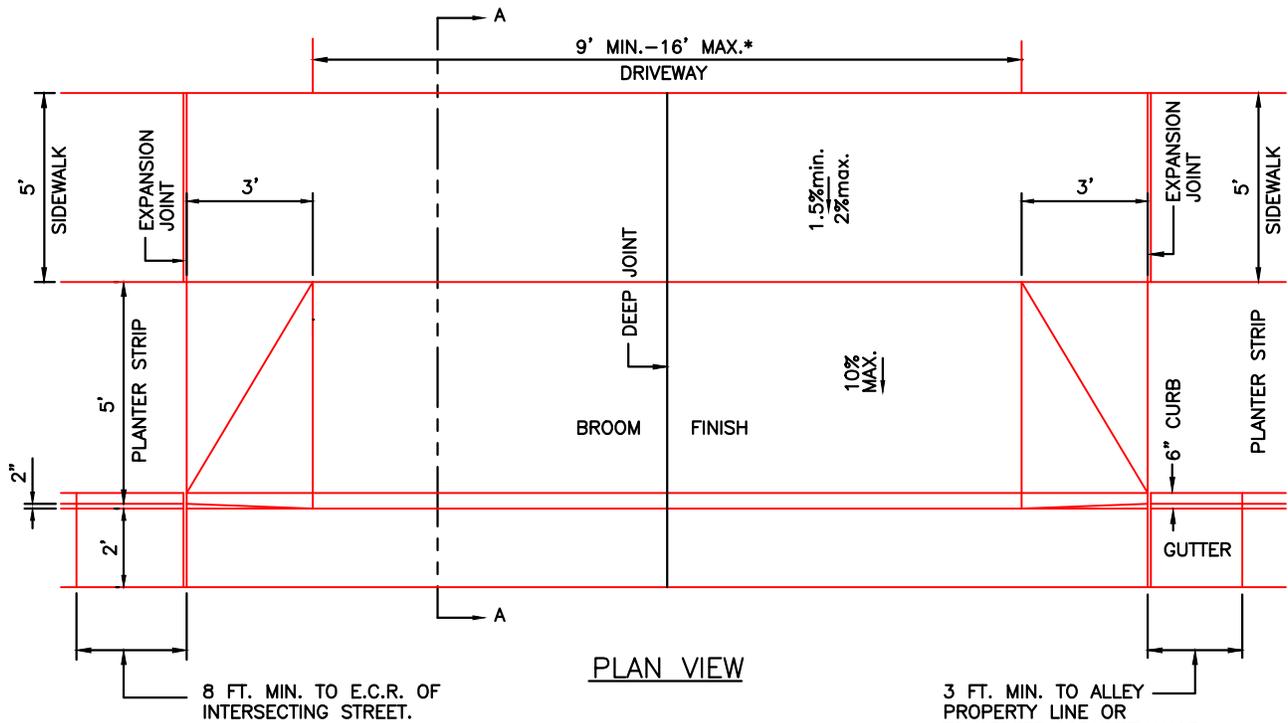
ELEVATION DETAIL



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-21

RESIDENTIAL DRIVEWAY  
APPROACH

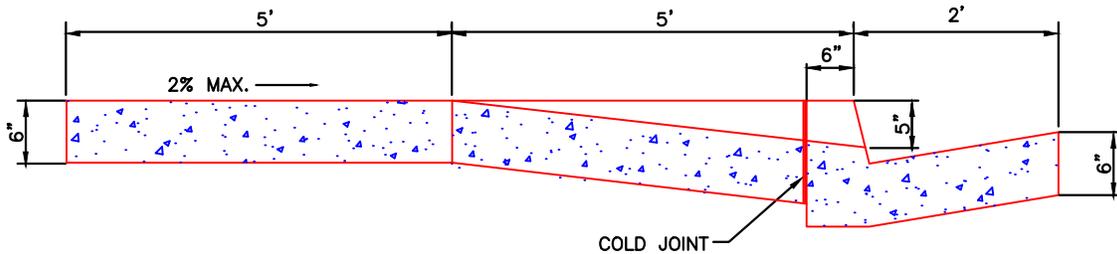
CITY OF REEDLEY  
ST-18



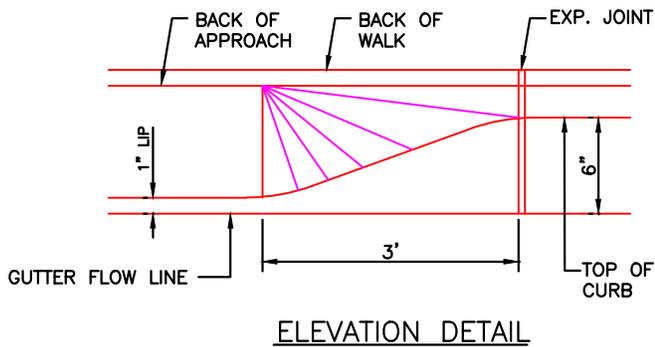
PLAN VIEW

\* WIDTHS ARE FOR DRIVEWAY THROAT OPENING.  
THROAT OPENING FOR 3 OR MORE CAR GARAGE REQUIRES  
APPROVAL FROM CITY ENGINEER.

3 FT. MIN. TO ALLEY  
PROPERTY LINE OR  
TO STREET APPURTENANCE



SECTION A-A



ELEVATION DETAIL

NOTES:

1. MUST REMOVE ENTIRE CURB AND GUTTER WHEN RECONSTRUCTION IS REQUIRED.
2. NOT MORE THAN 60% OF LOT FRONTAGE MEASURED AT STREET SIDE (TOP OF CURB BETWEEN LOT LINES EXTENDED) MAY BE USED FOR DRIVEWAY OPENING.
3. ALL MULTIPLE RESIDENTIAL PROPERTIES TO HAVE ON-SITE REFUSE PICKUP SHALL INSTALL COMMERCIAL DRIVEWAY APPROACHES PER CITY OF REEDLEY STD. PLAN ST-21.
4. CONCRETE FOR DRIVEWAY APPROACH SHALL BE CLASS A, 4000 PSI 6" THICK MIN.
5. DEEP JOINT REQUIRED IN CENTER OF DRIVE APPROACH.
6. APPROACH, CURB AND GUTTER SUBGRADE COMPACTED TO 95% A MINIMUM OF 6".
7. BROOM SWEEP FINISH ON DRIVEWAY APPROACH.
8. E.C.R. = END OF CURB RETURN.
9. MEASUREMENT: DRIVE APPROACH FROM BACK OF CURB TO BACK OF WALK, WING TO WING-SF, CURB & GUTTER-LF.

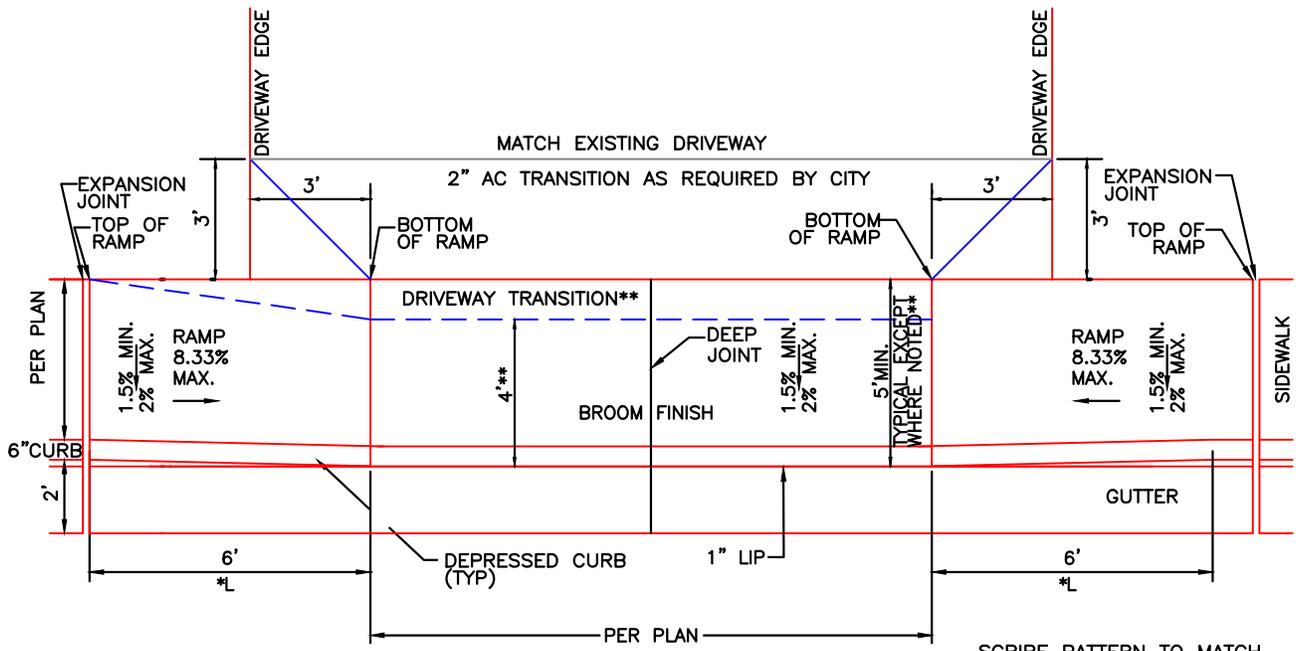


SCALE:  
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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-21

RESIDENTIAL DRIVEWAY  
APPROACH WITH  
PLANTER STRIP

CITY OF REEDLEY

ST-19

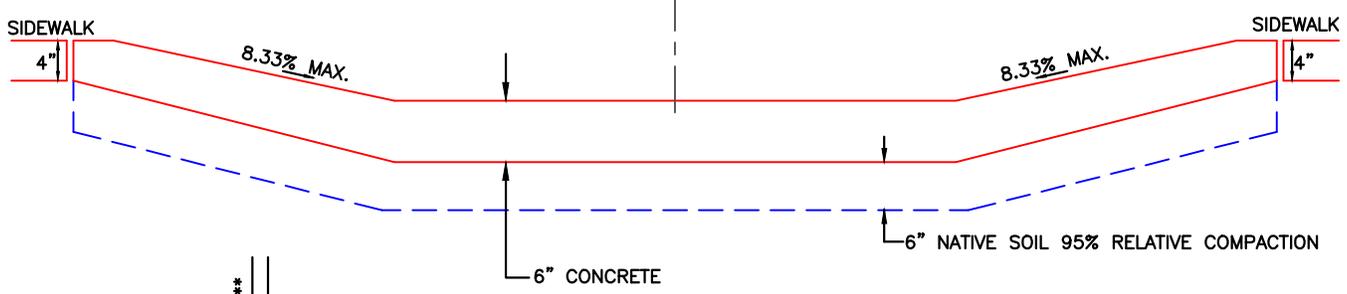


PLAN VIEW

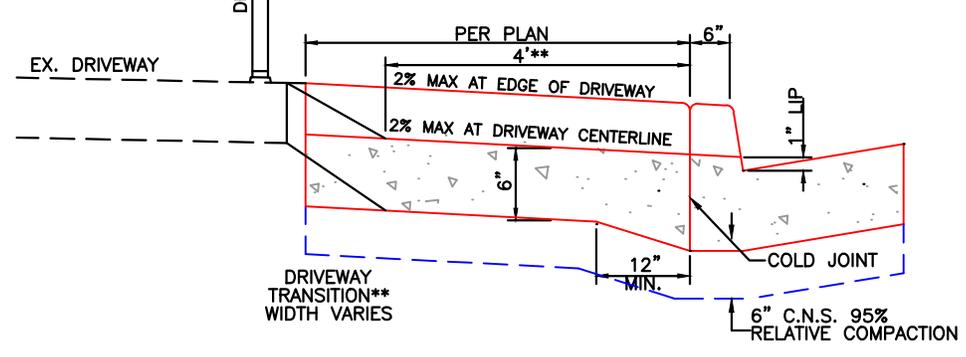
SCRIBE PATTERN TO MATCH SIDEWALK PATTERN.

\*L SHALL BE ADJUSTED BASED ON THE HEIGHT OF THE MATCHING CURB FACE. RAMP NOT TO EXCEED 8.33% SLOPE (1:12).

\*\*IN LOCATIONS WHERE THERE IS A SLIDING GATE, TAPER RAMP FROM 5' WIDE TO 4' WIDE AT APPROACH



SECTION AT BACK OF APPROACH



CROSS SECTION



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

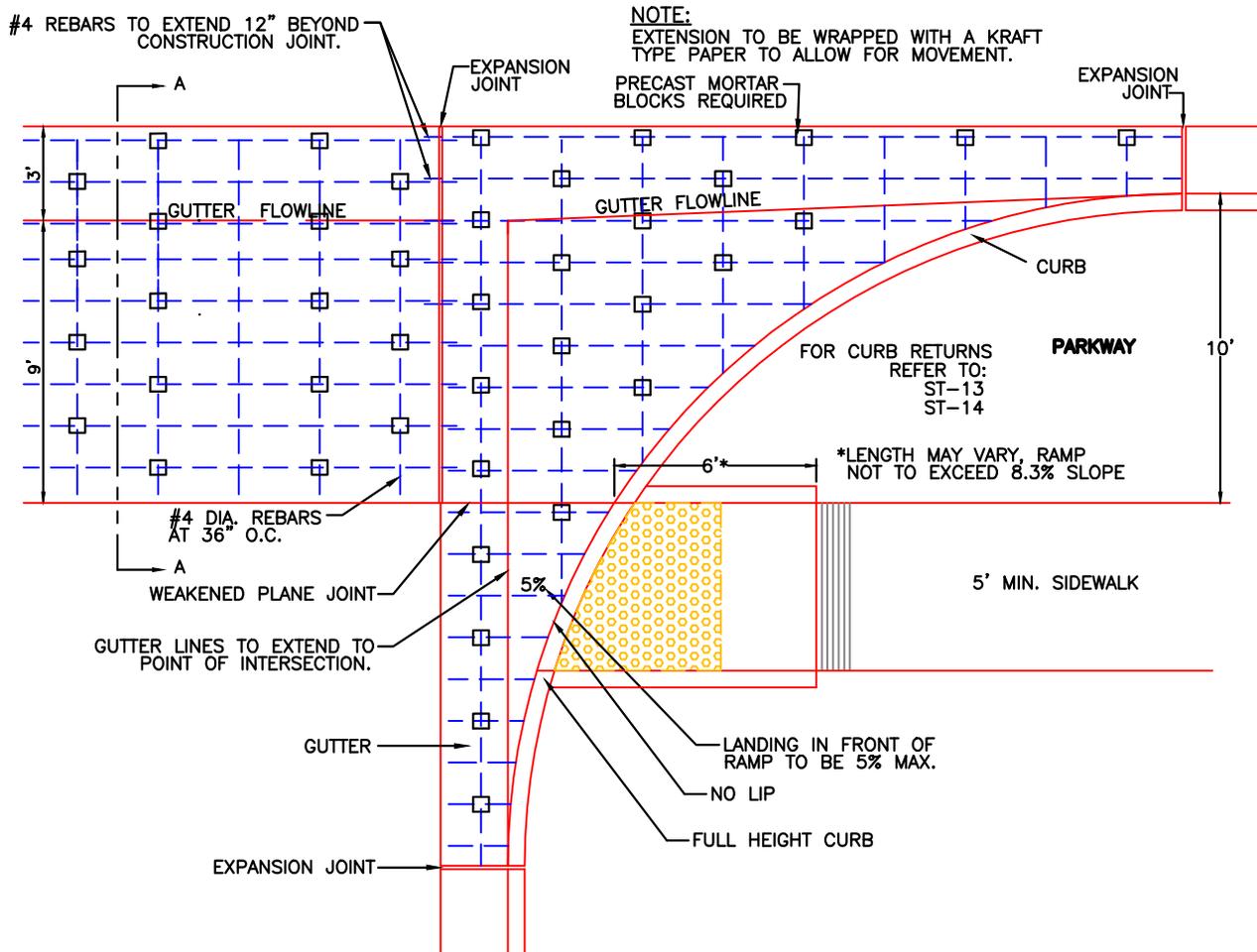
REF. STD. DWG.:

MINIMAL ENCROACHMENT  
RESIDENTIAL DRIVE  
APPROACH

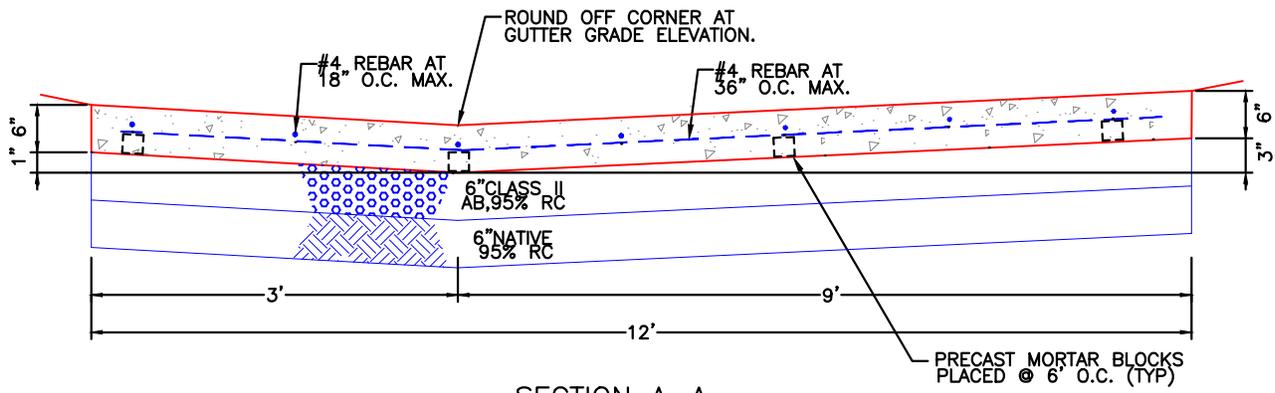
CITY OF REEDLEY

ST-20





**PLAN VIEW**



**SECTION A-A**

**NOTES:**

1. MUST REPLACE EX. CURB & GUTTER WHEN RECONSTRUCTION IS REQUIRED.
2. CONCRETE SHALL BE CLASS 'A' 4000 PSI, MAX. 5" SLUMP.
3. STEEL REINFORCEMENT TO BE FREE OF RUST & PLACED AS SHOWN.
4. AB & NATIVE SUBGRADE TO BE COMPACTED TO A MIN. OF 95%. COMPACTION TESTS REQUIRED.
5. BROOM FINISH.
6. DETECTABLE WARNING SURFACE REQUIRED FULL WIDTH & 3' DEPTH OF RAMP.



SCALE:  
NOT TO SCALE

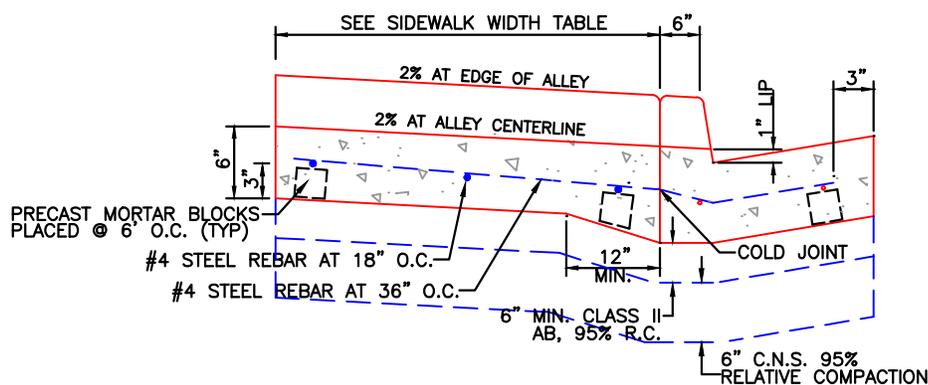
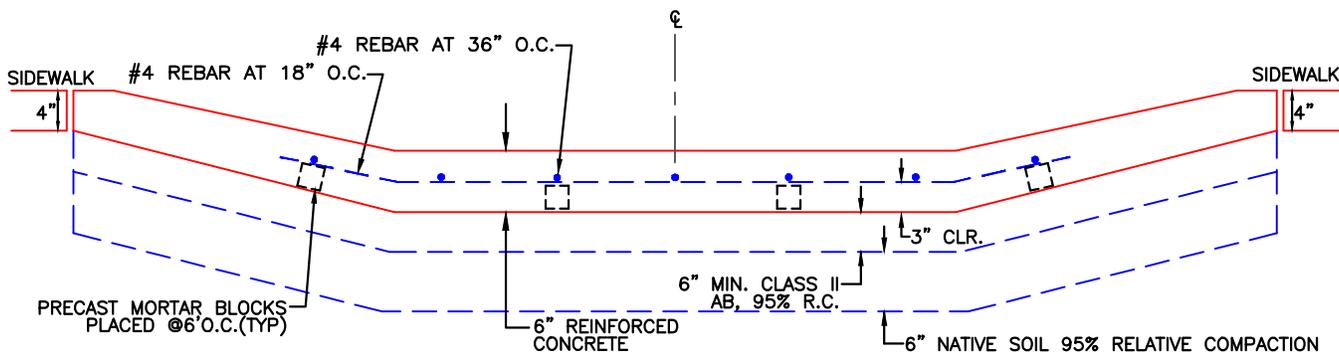
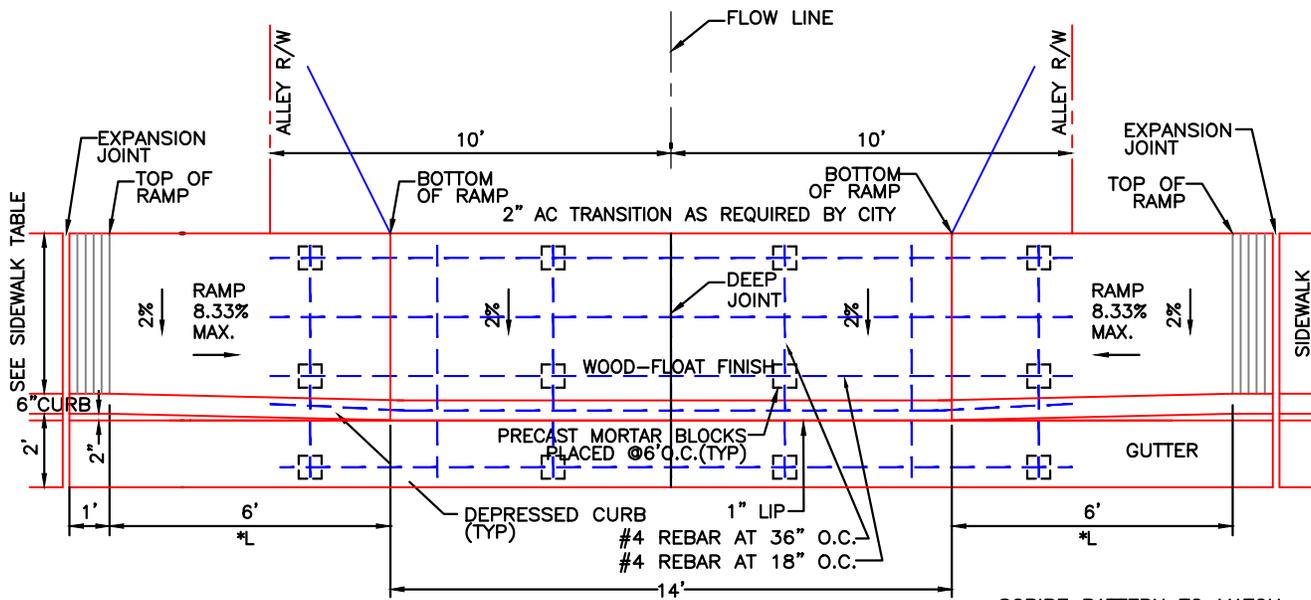
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-13 & 14

**MAJOR COMMERCIAL  
DRIVE APPROACH**

*CITY OF REEDLEY*

**ST-22**



SIDEWALK WIDTH TABLE

RESIDENTIAL	5'-0"
INDUSTRIAL	5'-0"
COMMERCIAL	9'-6"

NOTE:  
 CONCRETE FOR ALLEY APPROACH SHALL BE CLASS 'A' 4000 PSI OVER 6" MIN. CLASS II AB 95% RELATIVE COMPACTION OVER 6" MIN. NATIVE SOIL 95% RELATIVE COMPACTION.



SCALE:  
 NOT TO SCALE

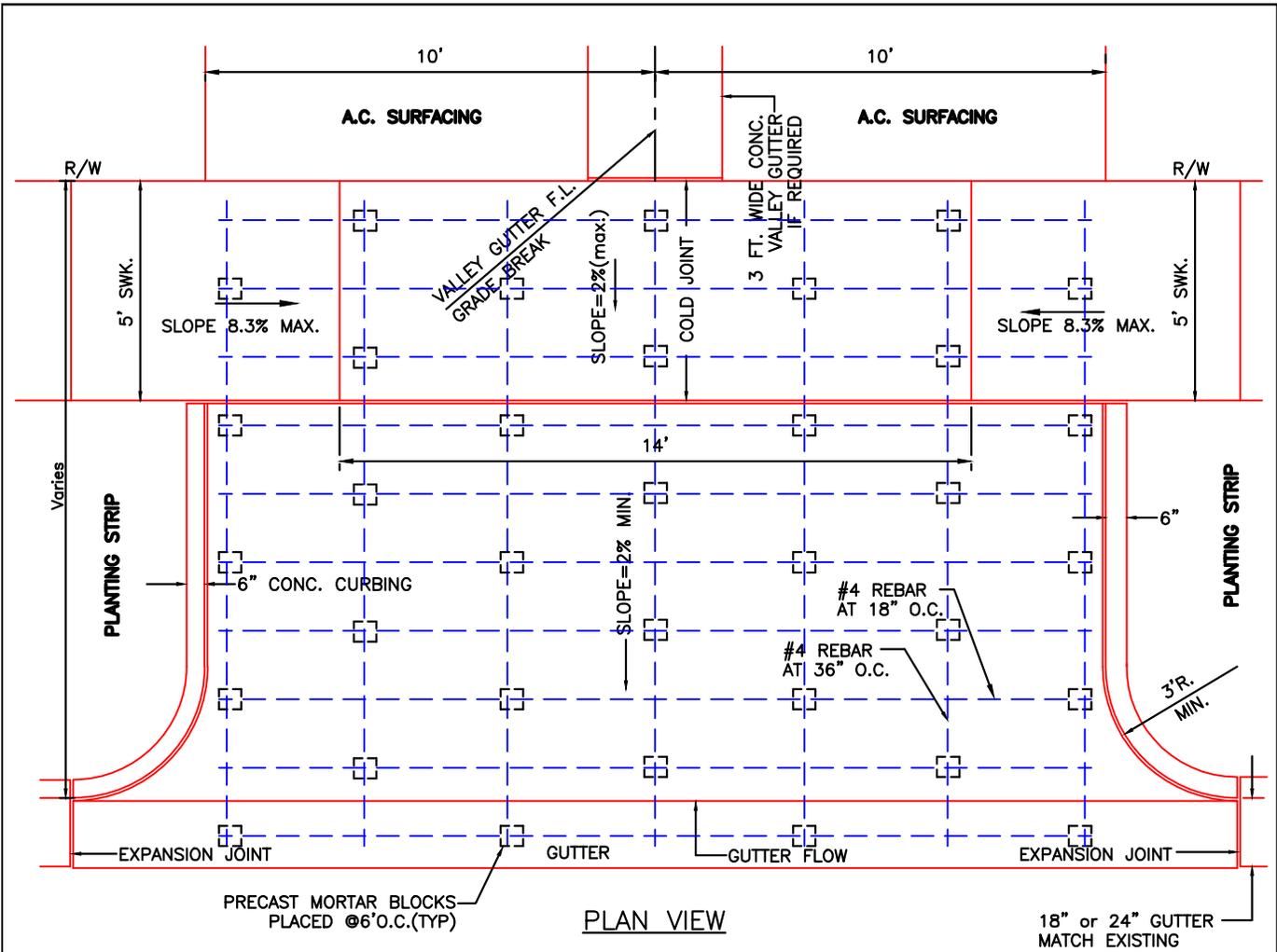
REVISED:  
 OCT. 2019

REF. STD. DWG.:

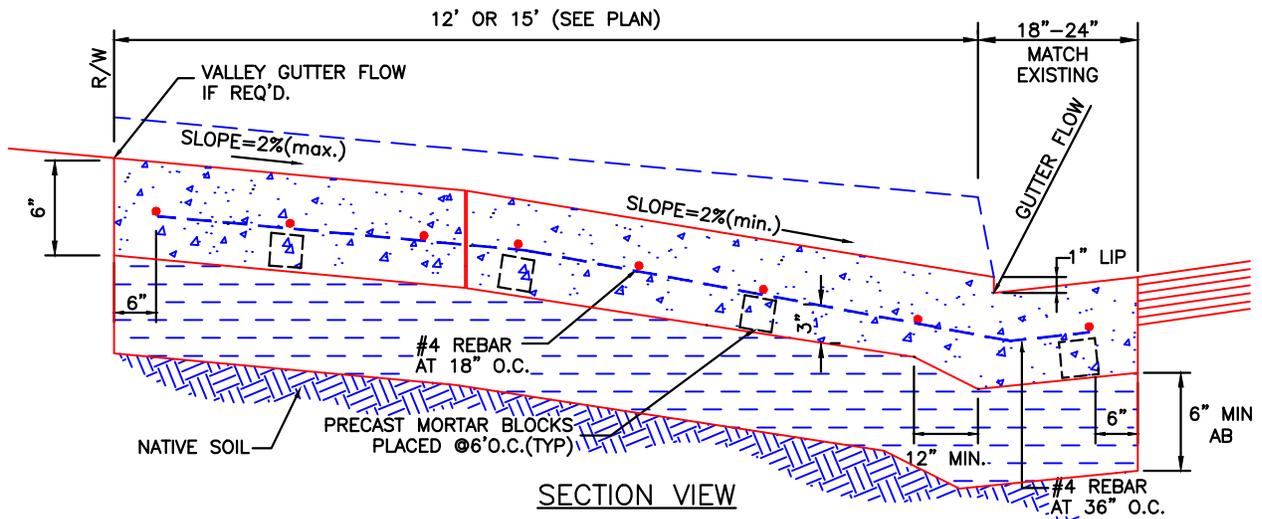
ALLEY APPROACH

CITY OF REEDLEY

ST-23



PLAN VIEW



SECTION VIEW

NOTES:

1. CONCRETE FOR ALLEY APPROACH SHALL BE CLASS 'A' 4000 PSI OVER 6" MIN. CLASS II AB 95% RELATIVE COMPACTION OVER 6" MIN. NATIVE SOIL 95% RELATIVE COMPACTION.
2. O.C. = ON CENTER

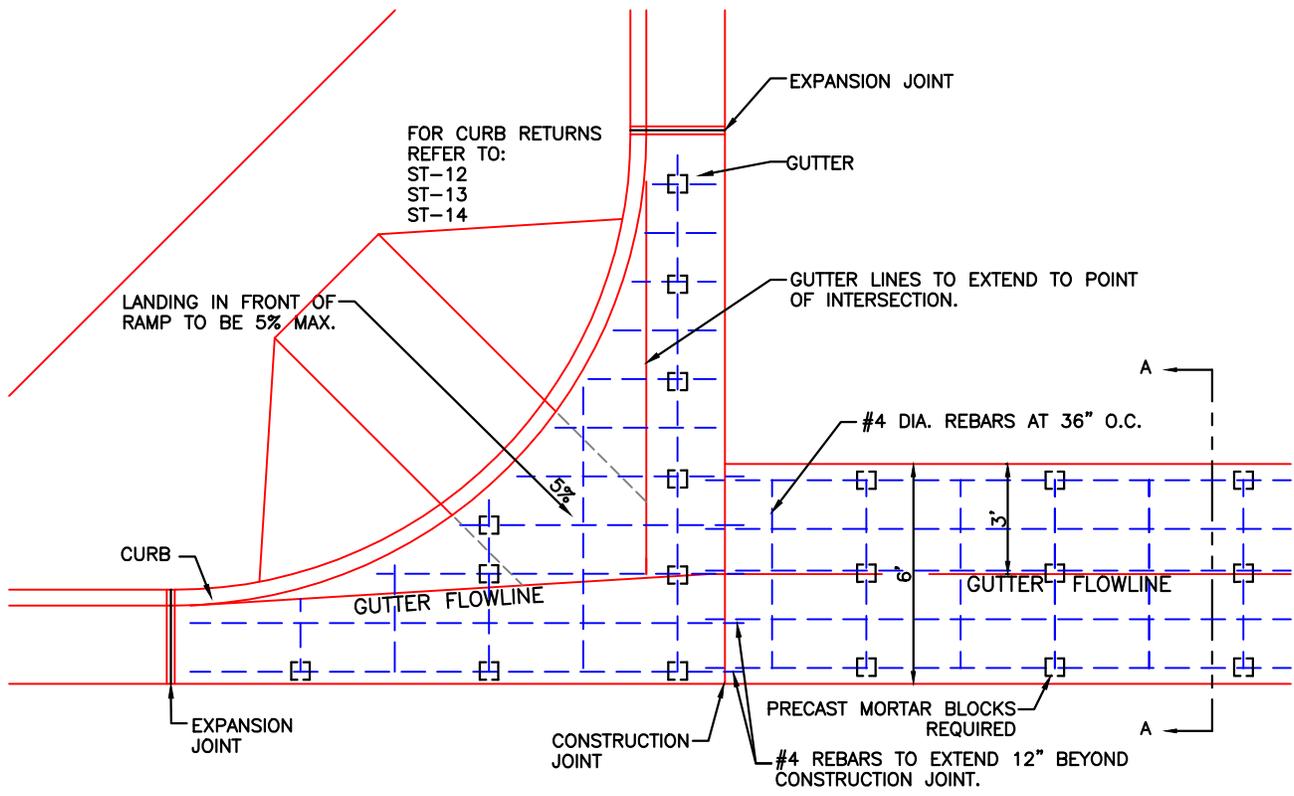


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NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

ALLEY APPROACH AREAS  
WITH PLANTING STRIPS

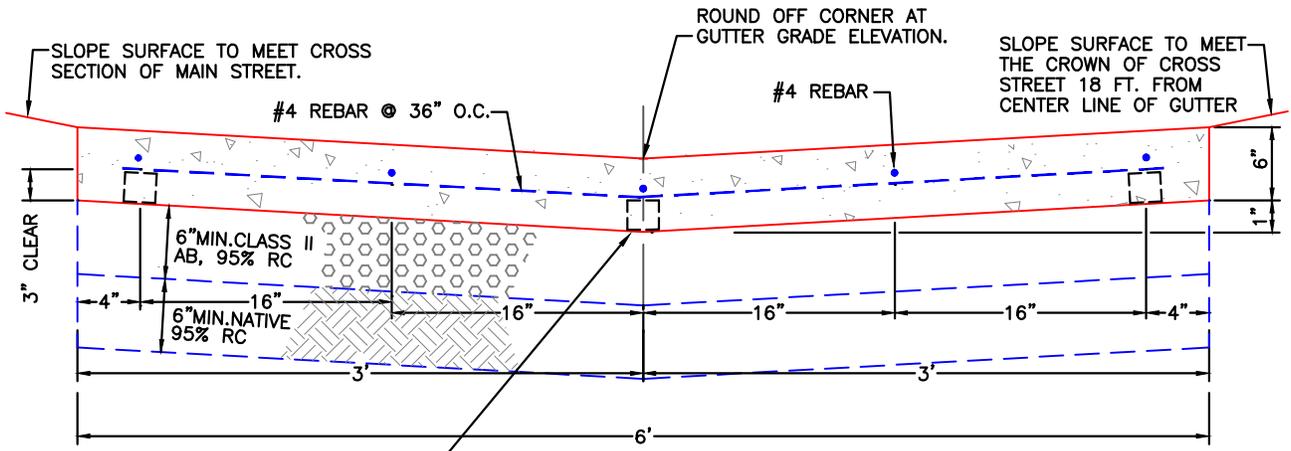
CITY OF REEDLEY

ST-24



PLAN VIEW

NOTE:  
EXTENSION TO BE WRAPPED WITH A KRAFT  
TYPE PAPER TO ALLOW FOR MOVEMENT.



SECTION A-A

NOTES:

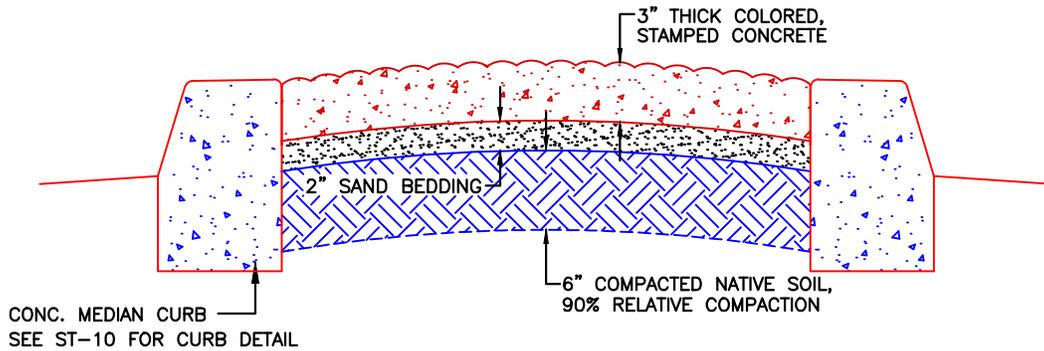
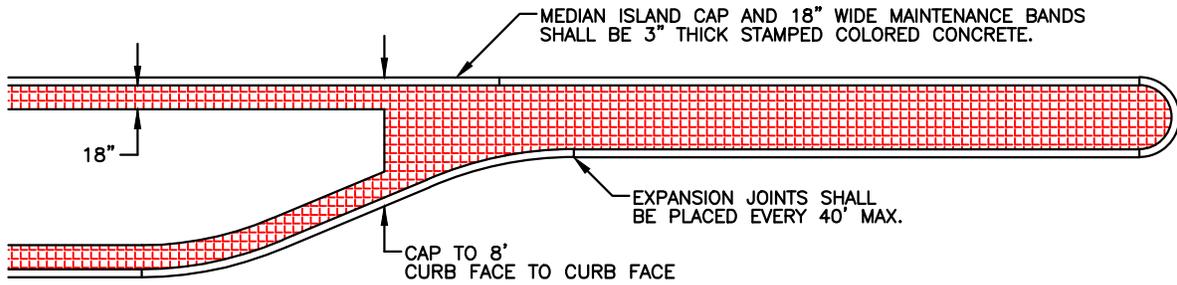
1. MUST REPLACE EX. CURB & GUTTER WHEN RECONSTRUCTION IS REQUIRED.
2. CONCRETE SHALL BE CLASS 'A' 4000 PSI, MAX. 5" SLUMP.
3. STEEL REINFORCEMENT TO BE FREE OF RUST & PLACED AS SHOWN.
4. AB & NATIVE SUBGRADE TO BE COMPACTED TO A MIN. OF 95%. COMPACTION TESTS REQUIRED.
5. LIGHT BROOM FINISH.
6. GUTTER FLOW LINE SHALL BE WATER TESTED FOR FLOW.
7. O.C. = ON CENTER



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-12, 13 & 14

CONCRETE CROSS  
VALLEY GUTTER

CITY OF REEDLEY  
ST-25



**NOTES:**

STAMPED CONCRETE SHALL BE CLASS 'A' 4,000 PSI MIN. COLORED, CONCRETE 'FRANCISCAN RED' STAMPED IN A BRICK PATTERN SIMILAR TO EXISTING MEDIANS ON I STREET AND REINFORCED WITH #4 REBAR 12" O.C.

A LIQUID RELEASE AGENT SHALL BE USED. A CURE AND SEAL PRODUCT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IMMEDIATELY AFTER COMPLETING THE IMPRINTING PROCESS.



SCALE:  
NOT TO SCALE

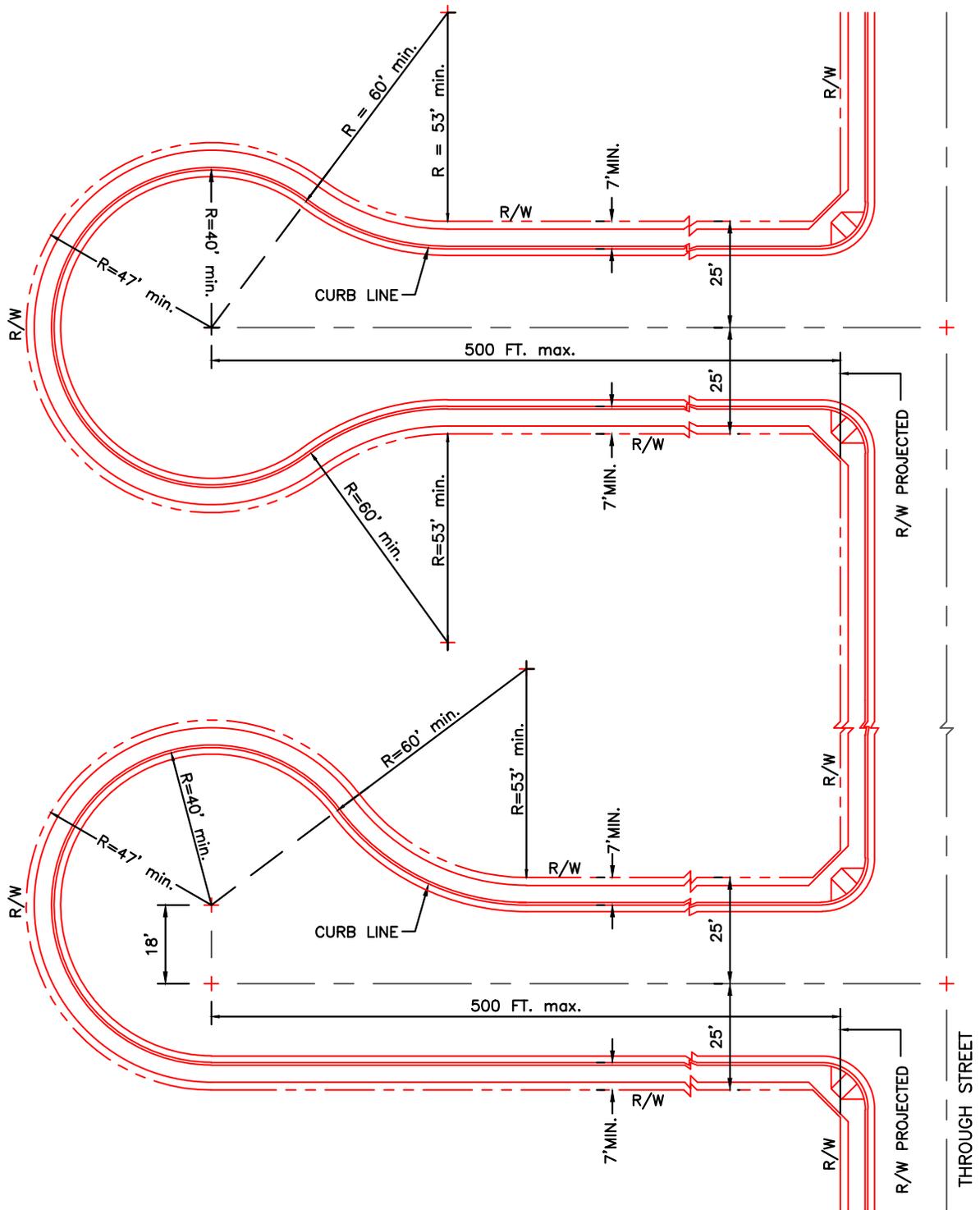
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-10

**STAMPED CONCRETE  
MEDIAN**

*CITY OF REEDLEY*

**ST-26**



**NOTES:**

1. STREET STRUCTURAL SECTION SHALL CONFORM TO CITY OF REEDLEY STD. PLAN ST-1.
2. MAXIMUM RADIUS OF CURVATURE OF CENTERLINE SHALL BE 175 FEET.
3. MINIMUM STREET WIDTH (CURB-FACE TO CURB-FACE) SHALL BE 36 FEET.

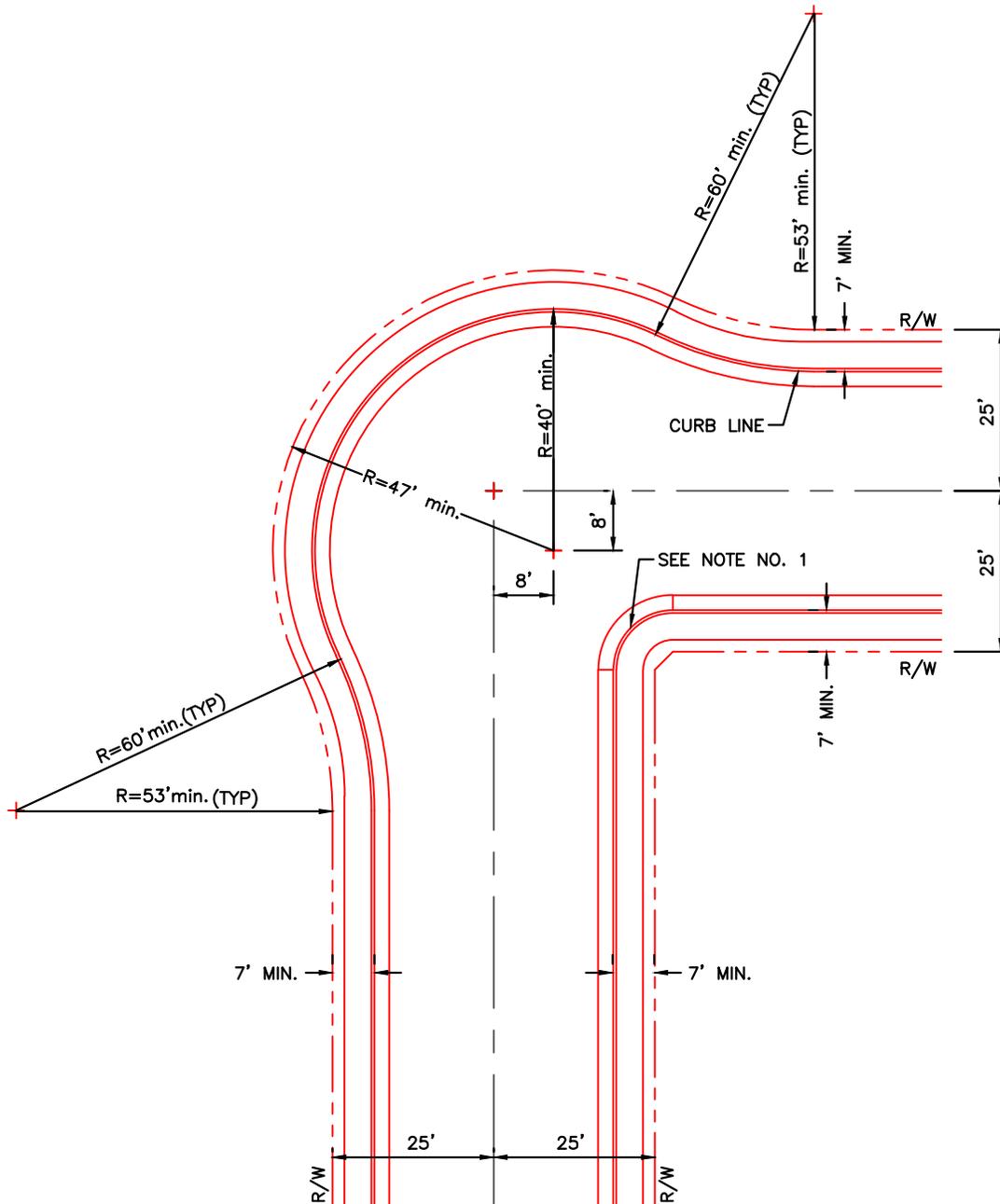


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NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-1

**STANDARD CUL-DE-SAC**

*CITY OF REEDLEY*

**ST-27**



**NOTES:**

1. 12 FT. RADIUS CURB RETURN WITH SIDEWALK.
2. STREET STRUCTURAL SECTION SHALL CONFORM TO CITY OF REEDLEY STD. PLANS ST-1.
3. MINIMUM STREET WIDTH (CURB-FACE TO CURB-FACE) SHALL BE 36 FT.



SCALE:  
NOT TO SCALE

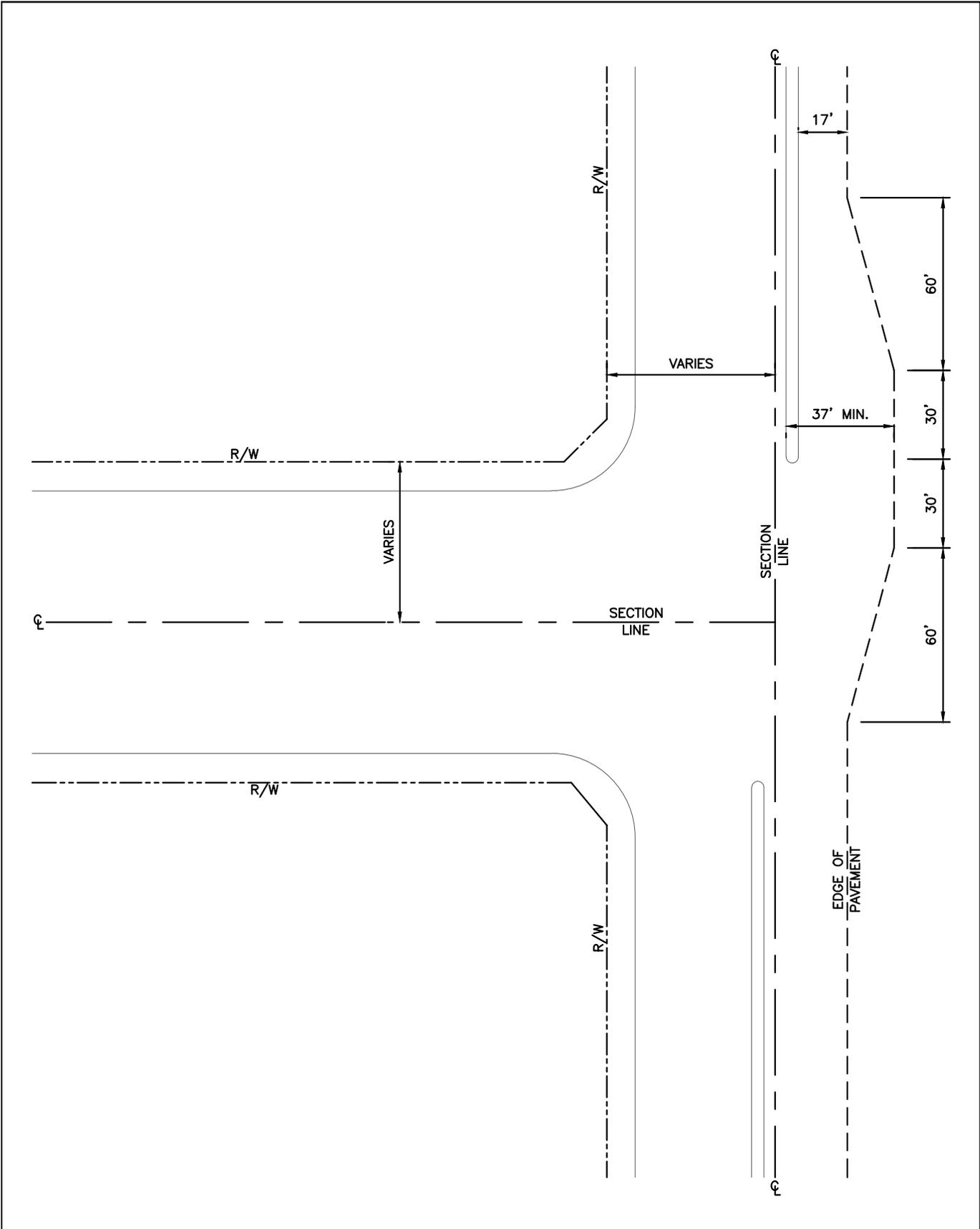
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-1

**KNUCKLE CURVE**

*CITY OF REEDLEY*

**ST-28**

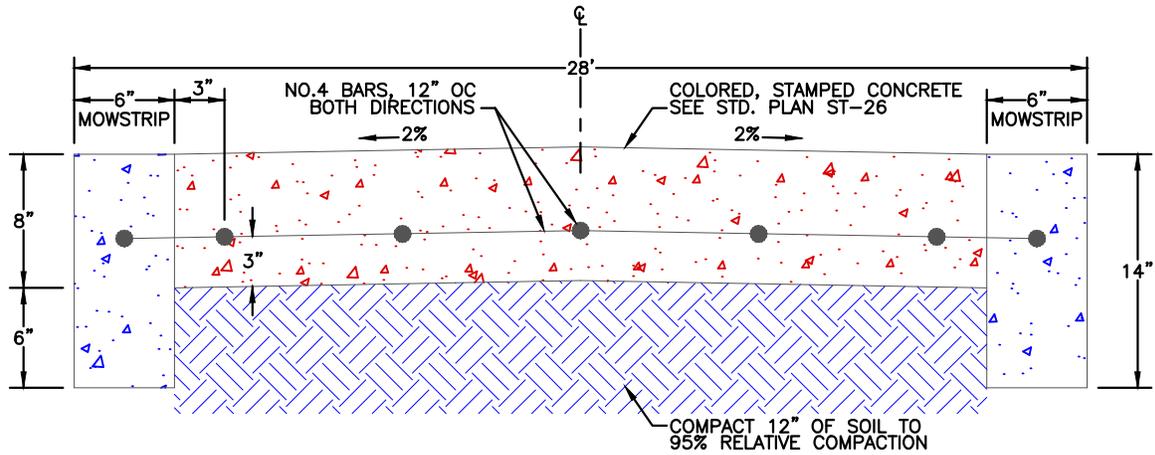


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OCT. 2019  
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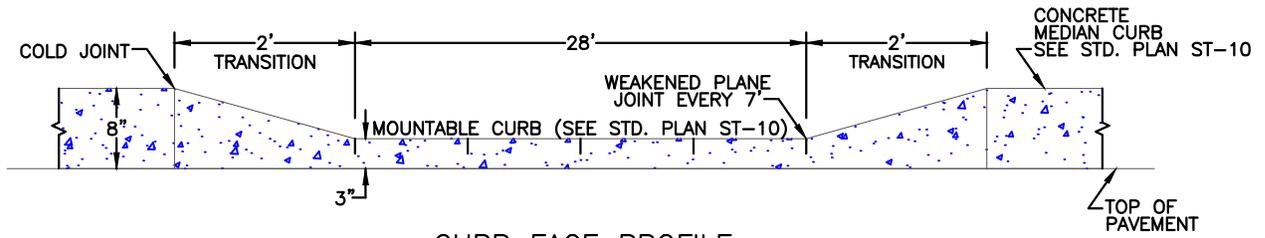
## U-TURN MINIMUM CLEARANCE

*CITY OF REEDLEY*

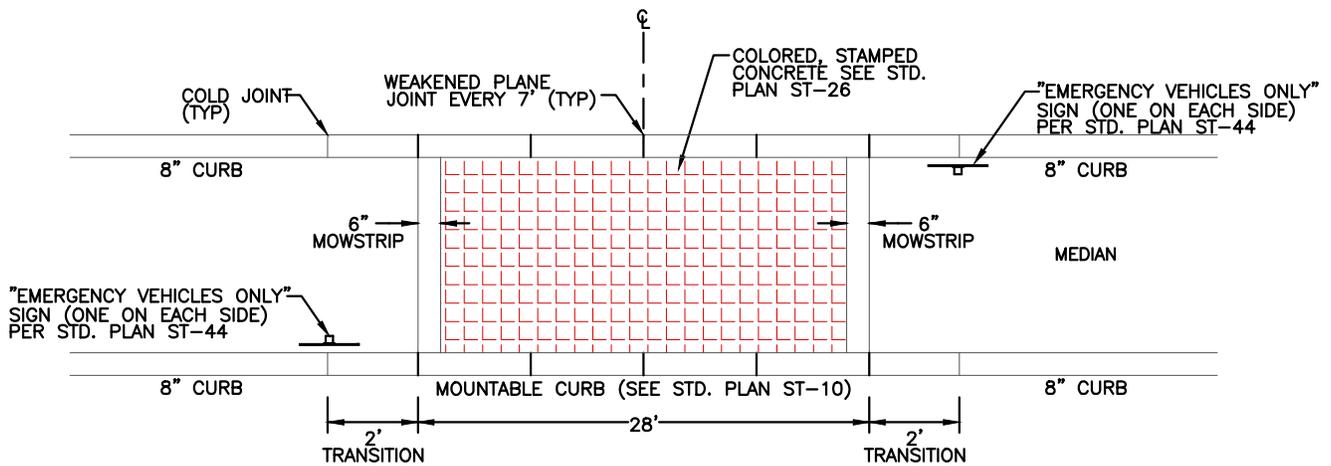
**ST-29**



REINFORCED CONCRETE APRON



CURB FACE PROFILE



MEDIAN OPENING PLAN VIEW



SCALE:  
NOT TO SCALE

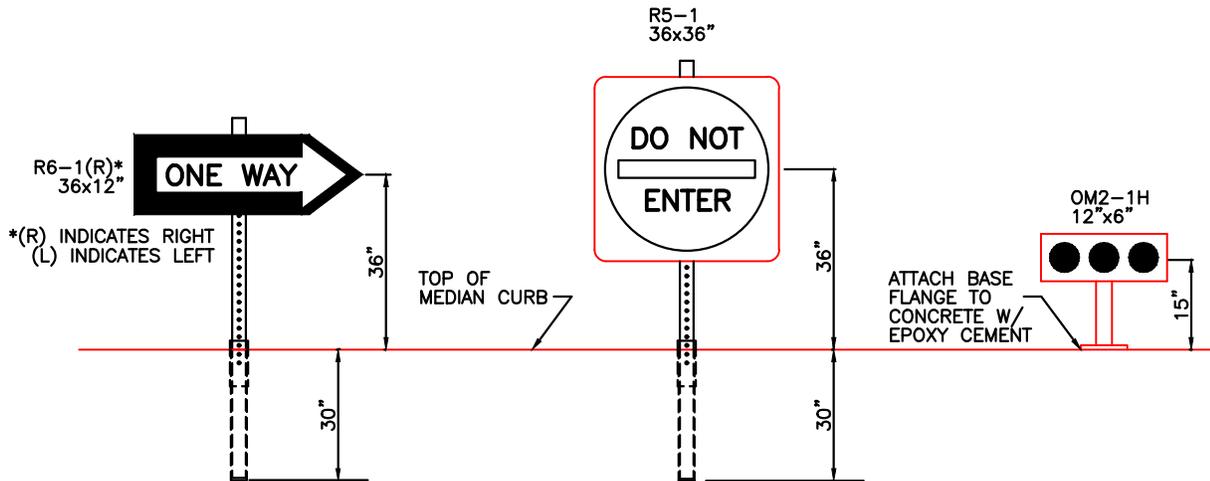
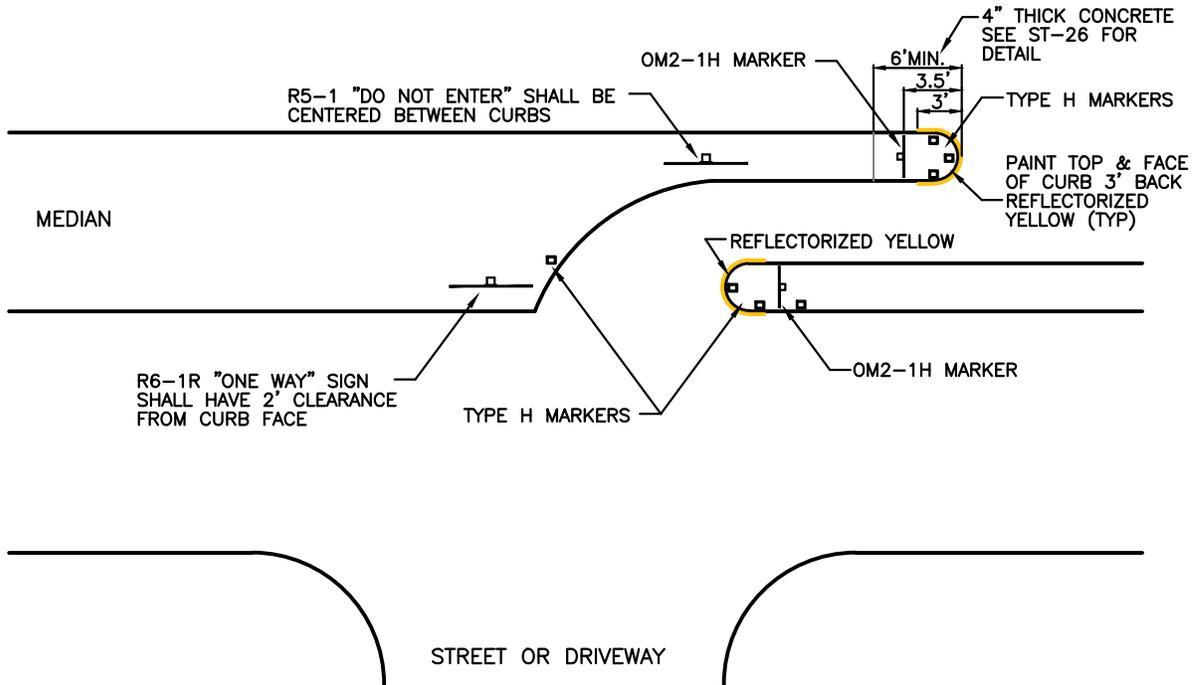
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-10 & 44

**MEDIAN OPENING FOR  
EMERGENCY VEHICLES**

*CITY OF REEDLEY*

**ST-30**



**NOTES:**

1. POST AND FLANGE FOR OM2-1H MARKER SHALL BE SCH.80 PVC, 2-1/4" MIN. YELLOW REFLECTORS ON WHITE.
2. TYPE H MARKERS SHALL BE ONE WAY YELLOW RETROREFLECTIVE AND SHALL BE CEMENTED TO THE TOP CURB WITH A RAPID SET TYPE EPOXY ADHESIVE IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
3. POSTS FOR STREET SIGNS SHALL BE 12 GAUGE 2" X 2" SQUARE, GALVANIZED & PERFORATED. SEE DETAIL ON STD PLAN ST-44.



SCALE:  
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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-26 & 44

**MEDIAN ISLAND OPENING  
SIGNING**

*CITY OF REEDLEY*

**ST-31**



SCALE:  
NOT TO SCALE

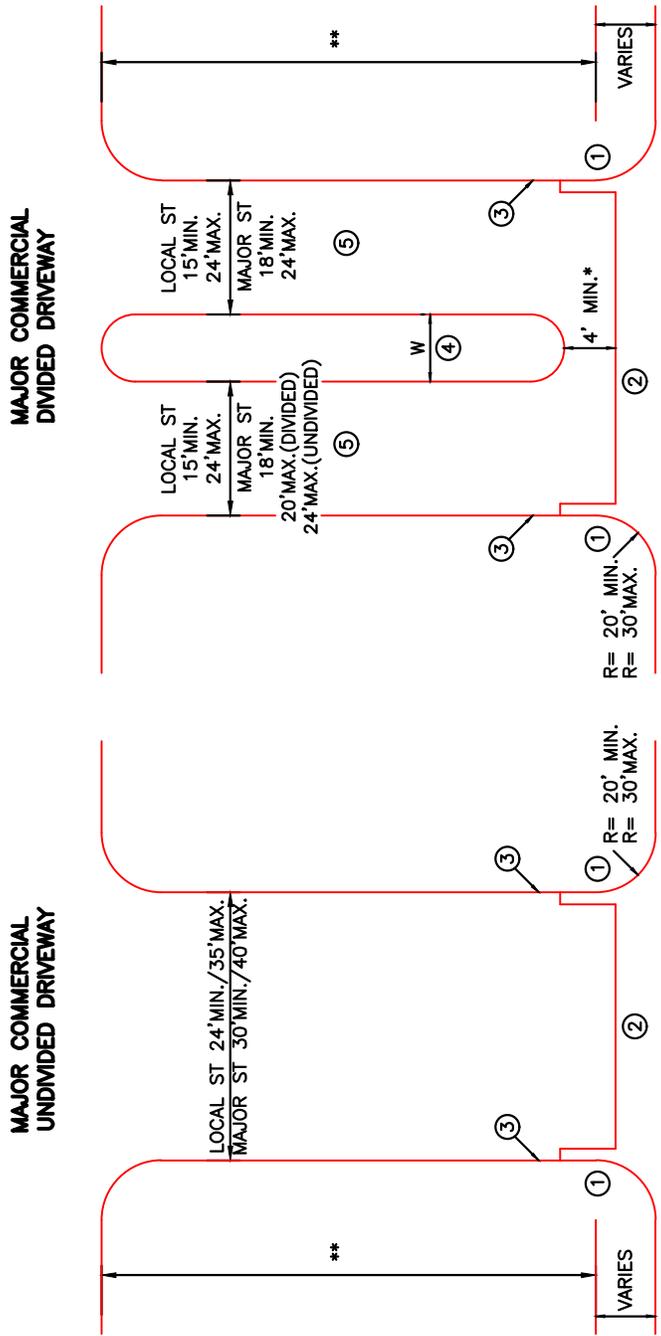
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-22 & 34

## STREET TYPE APPROACH FOR DIVIDED AND UNDIVIDED DRIVEWAY

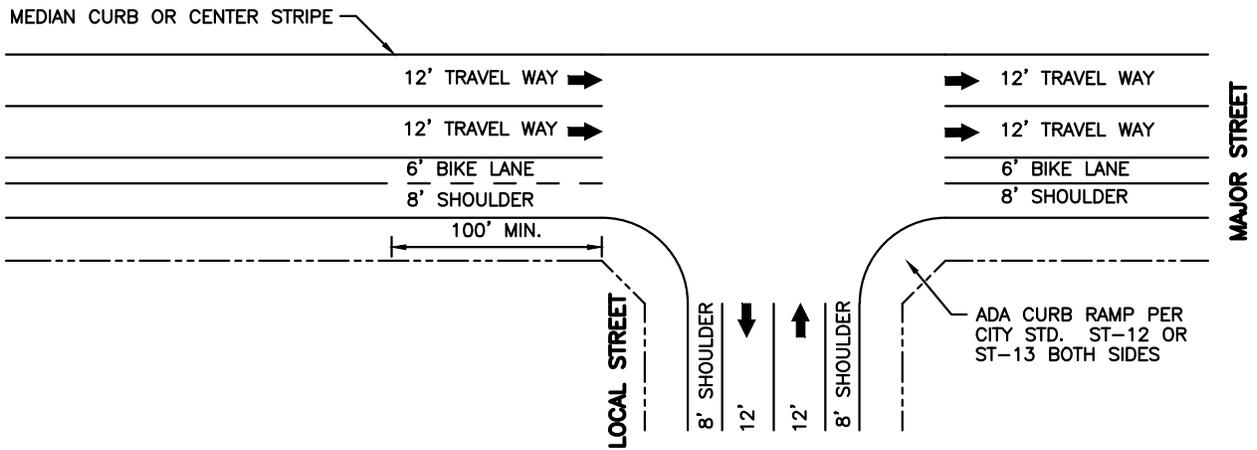
*CITY OF REEDLEY*

# ST-32

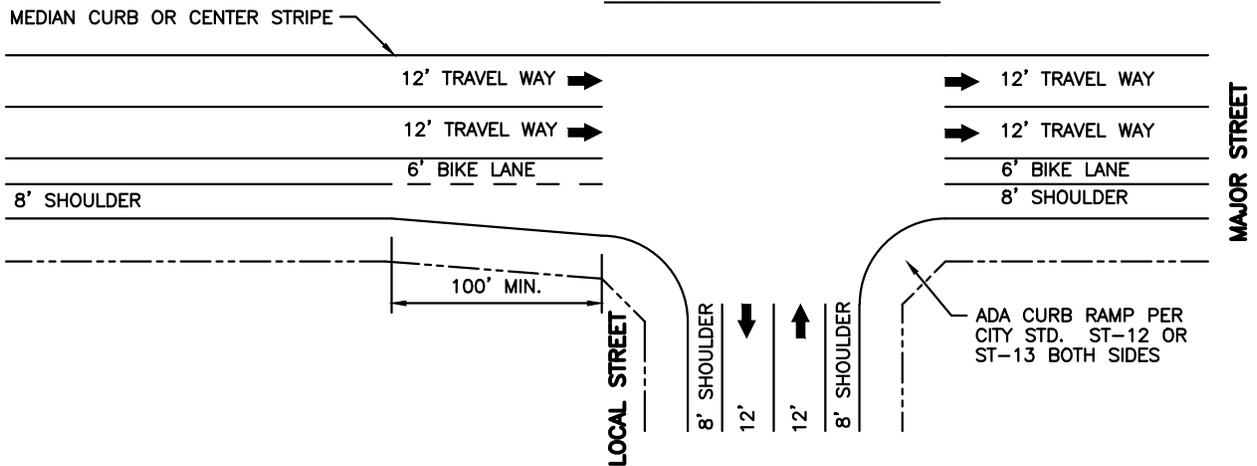


**NOTES:**

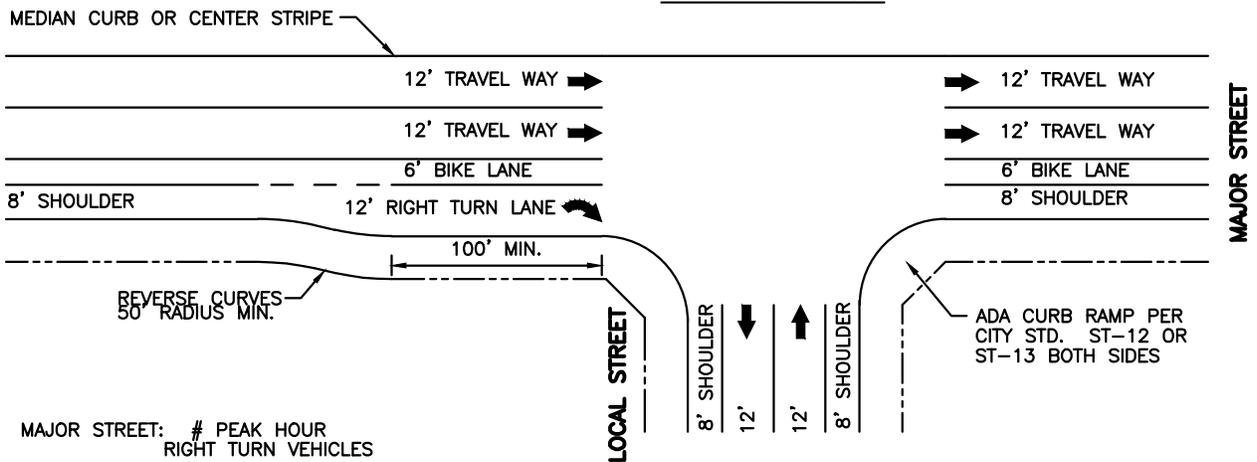
1. ADA CURB RAMP REQUIRED.
  2. VALLEY GUTTER PER CITY STD. ST-22.
  3. 6 INCH HIGH CONCRETE CURB FOR LENGTH OF REQUIRED THROAT.
  4. W=5' MIN, 10' MAX. FOR MAJOR STREET, 20' MAX. FOR LOCAL STREET.
  5. 20' MIN. FOR ENTRANCE AND EXIT IF DRIVEWAY IS SOLE ACCESS.
  6. ON DIVIDED MAJOR STREET, DESIGN ONE-WAY LEFT TURN POCKET PER CITY STD. ST-34, WHERE APPROVED BY CITY ENGINEER.
- \* FOR ADA ACCESSIBILITY ACROSS DRIVEWAY TO BE MEASURED FROM PUBLIC EASEMENT, (STREET, PEDESTRIAN OR TRAIL) WHICHEVER PROVIDES FOR MORE STACKING
- \*\* LOCAL ST (W/O LEFT TURN ACCESS) 20' MIN.  
MAJOR ST (W/O LEFT TURN ACCESS) 40' MIN.  
MAJOR ST (W/ LEFT TURN ACCESS) 90' MIN.



CASE 1: SHARED LANE



CASE 2: TAPER



CASE 3: RIGHT TURN POCKET

MAJOR STREET: # PEAK HOUR  
RIGHT TURN VEHICLES

		CASE 1	CASE 2	CASE 3
SPEED (MPH)	35	<50	<50-<100	≤100
	40	<40	<40-<90	≤90
	45	<30	<30-<80	≤80
	>50	<20	<20-<75	≤75

NOTES:

CASE 2: NOT ALLOWED WHEN AT A SIGNALIZED INTERSECTION.

CASE 3: \*\*EXCEPTIONS NEED TO BE APPROVED BY CITY ENGINEER.



SCALE:  
NOT TO SCALE

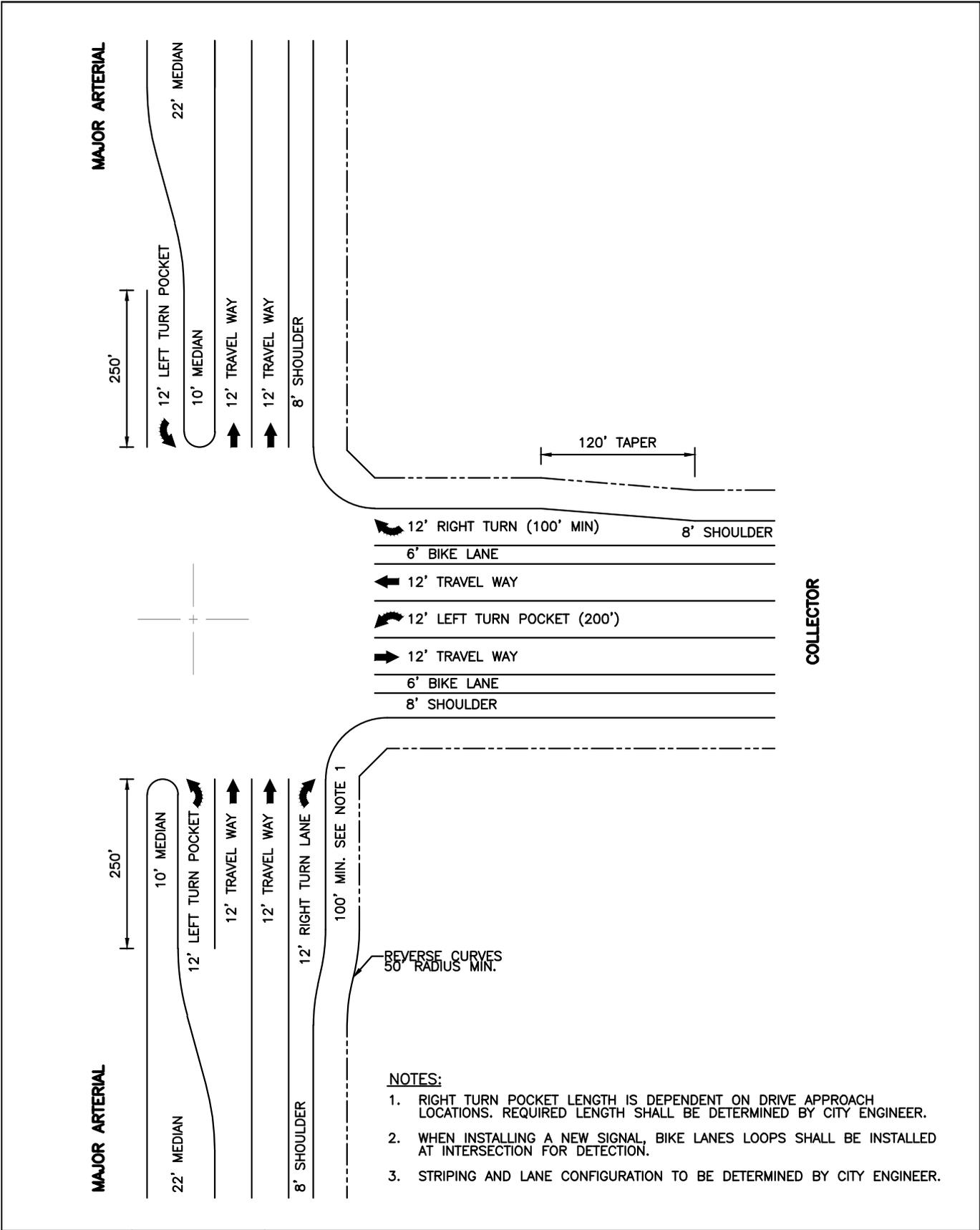
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-12 & 13

STREET CONNECTIONS

CITY OF REEDLEY

ST-33



**NOTES:**

1. RIGHT TURN POCKET LENGTH IS DEPENDENT ON DRIVE APPROACH LOCATIONS. REQUIRED LENGTH SHALL BE DETERMINED BY CITY ENGINEER.
2. WHEN INSTALLING A NEW SIGNAL, BIKE LANES LOOPS SHALL BE INSTALLED AT INTERSECTION FOR DETECTION.
3. STRIPING AND LANE CONFIGURATION TO BE DETERMINED BY CITY ENGINEER.



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NOT TO SCALE

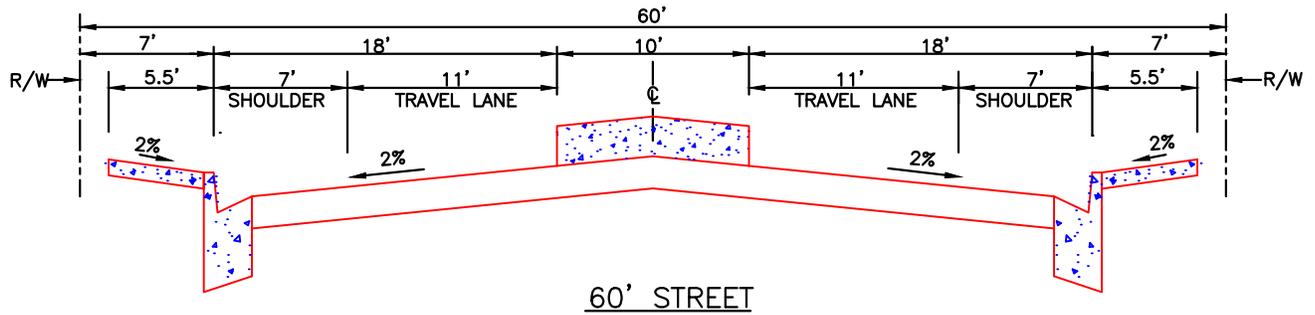
REVISED:  
OCT. 2019

REF. STD. DWG.:

**MAJOR STREET  
INTERSECTION DETAIL**

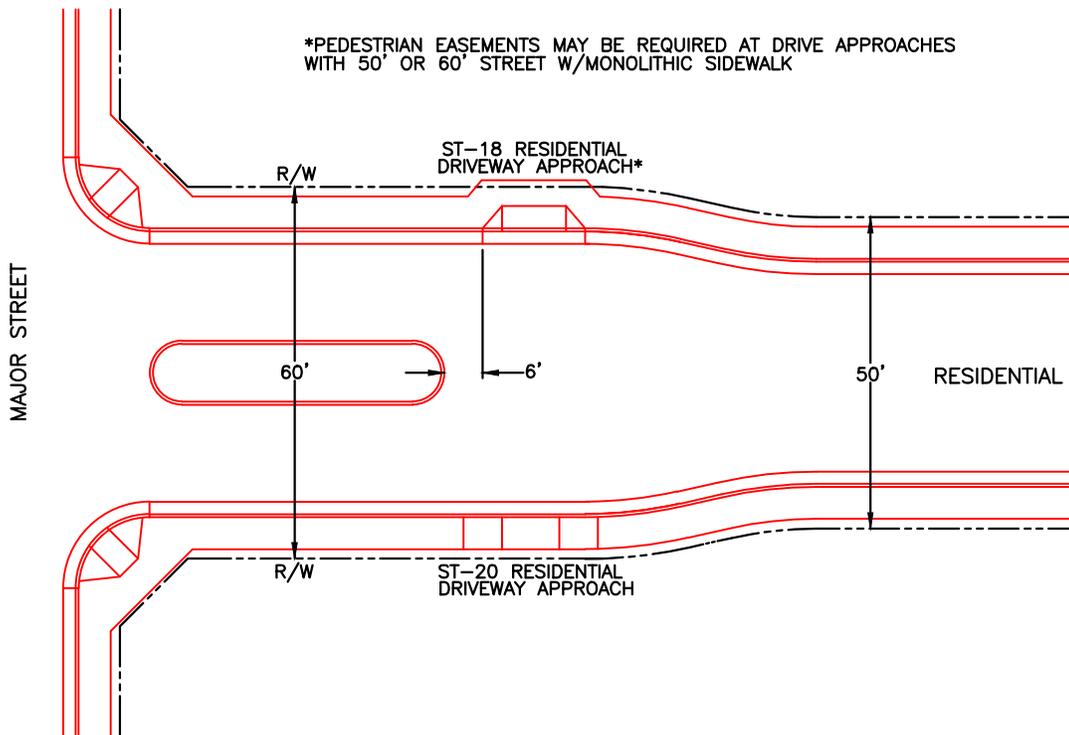
*CITY OF REEDLEY*

**ST-34**



60' STREET

\*PEDESTRIAN EASEMENTS MAY BE REQUIRED AT DRIVE APPROACHES WITH 50' OR 60' STREET W/MONOLITHIC SIDEWALK



**NOTES:**

1. GREATER RIGHT-OF-WAY MAY BE APPROVED IN SUCH CASE AS FOR A SIDEWALK W/PARKSTRIP OR FOR A MEANDERING SIDEWALK.
2. THE MEDIAN ISLAND SHALL EXTEND FROM THE MAJOR STREET UNTIL THE CLOSEST SIDE OF THE FIRST DRIVEWAY.
3. A 20' MINIMUM SETBACK FROM BACK OF SIDEWALK TO GARAGE WHEN THE GARAGE DOOR FRONTS ON THE STREET SHALL BE REQUIRED. THE ACTUAL SETBACK SHALL NOT BE LESS THAN REQUIRED BY THE ZONING ORDINANCE.



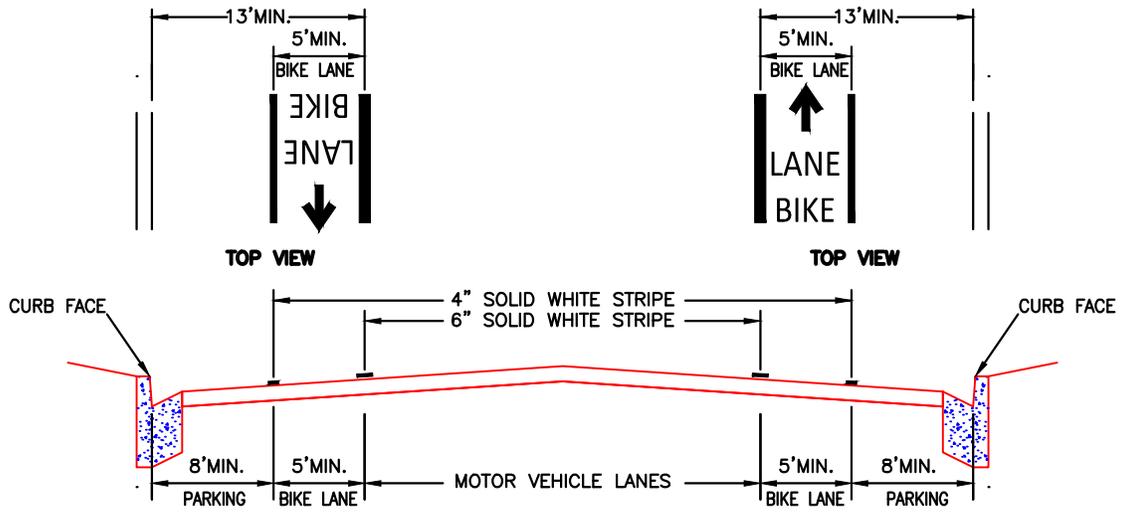
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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-18 & 20

**RESIDENTIAL ENTRY  
TREATMENT**

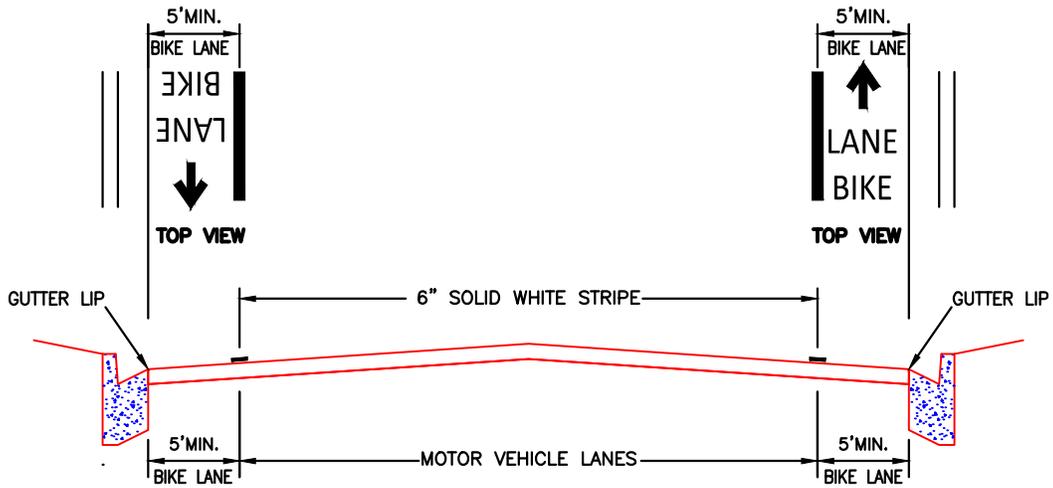
*CITY OF REEDLEY*

**ST-35**





CASE I



CASE II

**NOTE:**  
 SIGNS R26(S)CA "NO STOPPING AT ANY TIME" SHALL INSTALLED AT 200 FOOT INTERVALS. (OR AT INTERVALS DETERMINED BY EXISTING STREETLIGHT POLES) WHEN STRIPING A CASE II BIKE LANE.

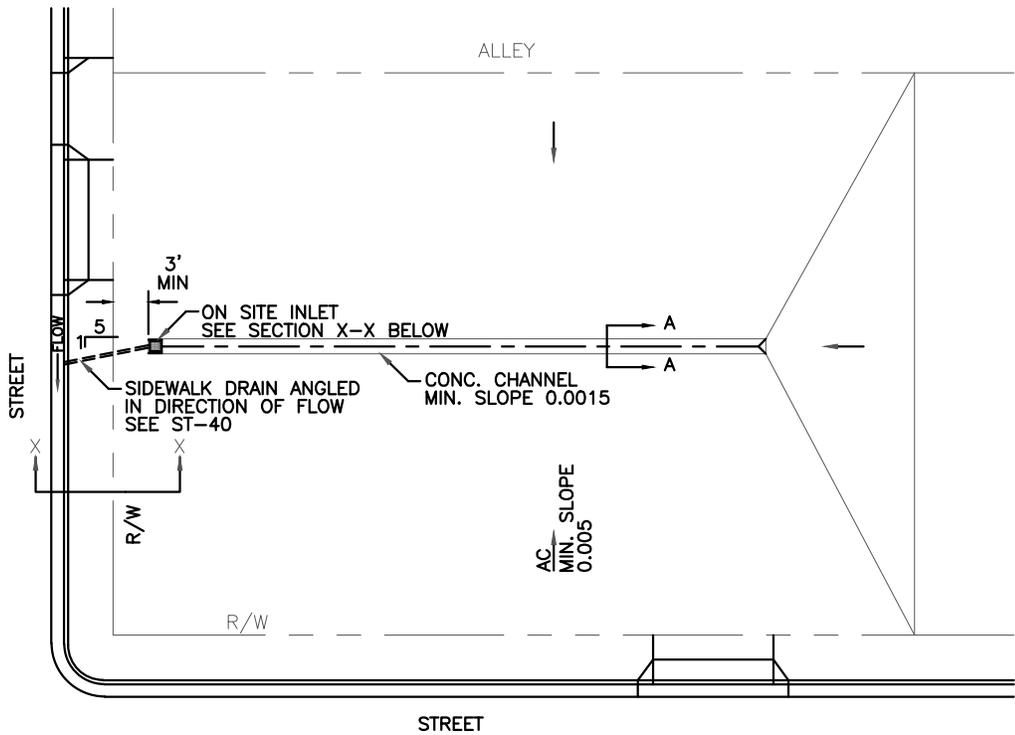


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 REVISED:  
 OCT. 2019  
 REF. STD. DWG.:

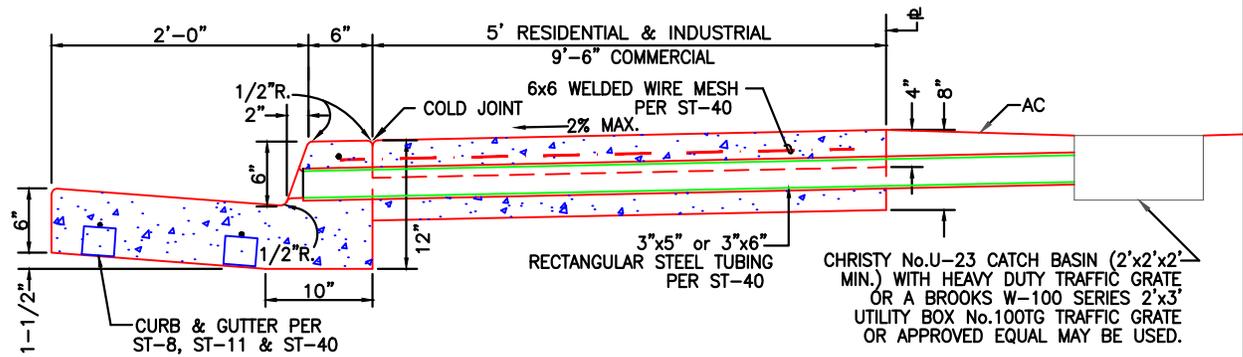
**TYPICAL BIKE LANE**

*CITY OF REEDLEY*

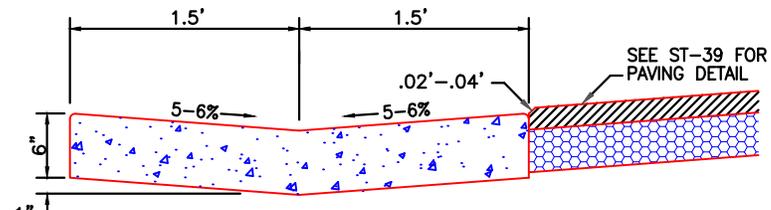
**ST-37**



PLAN VIEW



SECTION X-X  
SIDEWALK DRAIN



SECTION A-A  
CONCRETE CHANNEL

NOTES:

1. CONCRETE CHANNEL TO HAVE WEAKENED PLANE JOINTS AT 20' O.C. AND EXPANSION JOINTS AT 40' O.C.
2. SURFACE DRAINAGE TO ALLEY ONLY BY WRITTEN APPROVAL OF THE CITY ENGINEER.
3. SURFACE DRAINAGE OVER DRIVEWAYS AND SIDEWALKS IS NOT PERMITTED WHEN THE AREA TO BE DRAINED EXCEEDS 1/4 ACRE (10,890 SF).

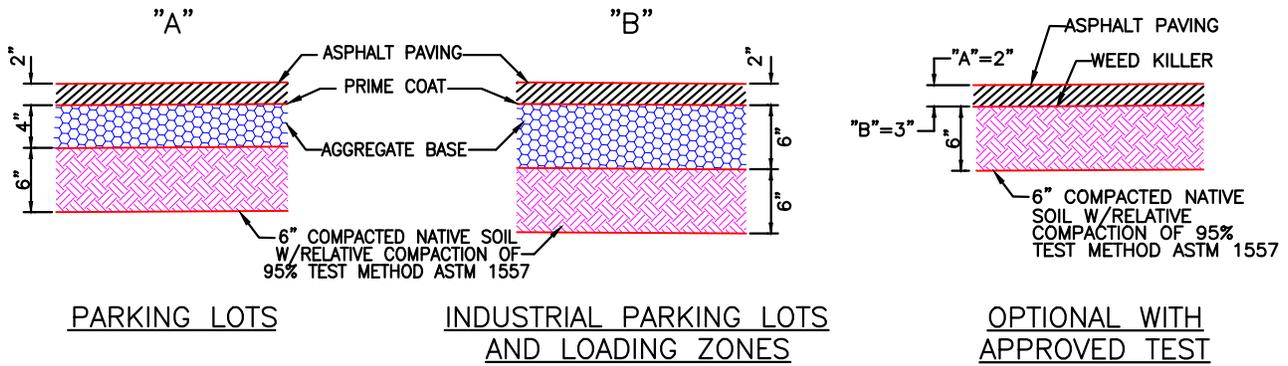
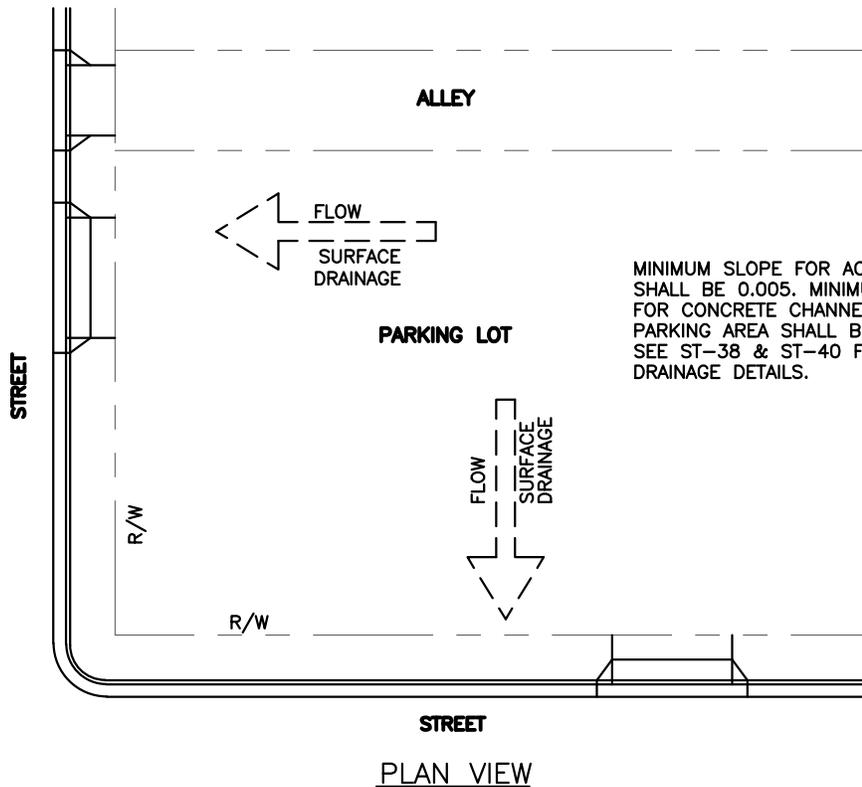


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ST-8, 11 & 40

PARKING LOT  
DRAINAGE DETAILS

CITY OF REEDLEY

ST-38



**NOTES:**

1. SURFACE DRAINAGE SHALL BE TO STREET ONLY BY WRITTEN APPROVAL OF THE CITY ENGINEER.
2. PARKING BUMPERS TO BE PLACED SO THAT PARKED CARS WILL NOT OVERHANG ON SIDEWALKS OR STREETS.
3. THE OPTIONAL CROSS-SECTION MAY BE USED UPON SUBMISSION OF "R" VALUE TESTS TAKEN BY AN APPROVED LABORATORY SUBSTANTIATING THE USE OF EXISTING SOIL FOR THE BASE. A MINIMUM VALUE OF 65 WILL BE REQUIRED.
4. WHERE ASPHALT CONCRETE IS APPLIED TO THE NATIVE SOIL, SOIL STERILANT AS PER MANUFACTURERS SPECIFICATIONS WILL BE REQUIRED BEFORE THE SURFACE MATERIAL IS PLACED. WEED KILLER TO BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
5. SURFACE DRAINAGE TO ALLEY ONLY BY WRITTEN APPROVAL OF THE CITY ENGINEER.
6. TEMPORARY PARKING LOTS (USE NOT TO EXCEED 60 DAYS) SHALL BE GRADED AND ROLLED SMOOTH. THE TOP 6" OF NATIVE SOIL SHALL BE COMPACTED TO 85% RELATIVE COMPACTION USING TEST METHOD ASTM 1557. A DUST PALLIATIVE PER STATE STANDARD SPECIFICATIONS AT THE RATE OF 1 GAL./SQ. YD. TO OBTAIN A MINIMUM PENETRATION OF 1". THE MIXING RATIO SHALL BE 4:1 PER STATE STANDARD SPECIFICATIONS. THE DEVELOPER SHALL POST A BOND TO GUARANTEE REMOVAL OF ALL IMPROVEMENTS FOR A TEMPORARY PARKING LOT.



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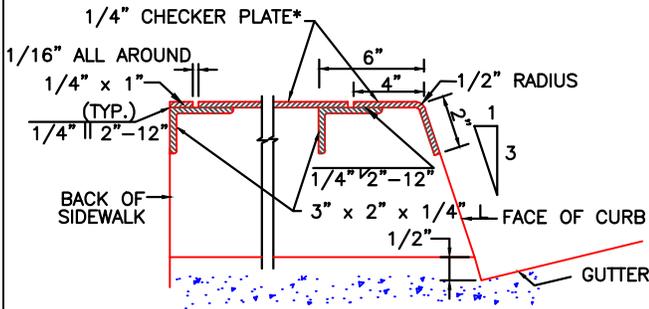
REF. STD. DWG.:  
ST-38 & 40

**PARKING LOT  
PAVING DETAILS**

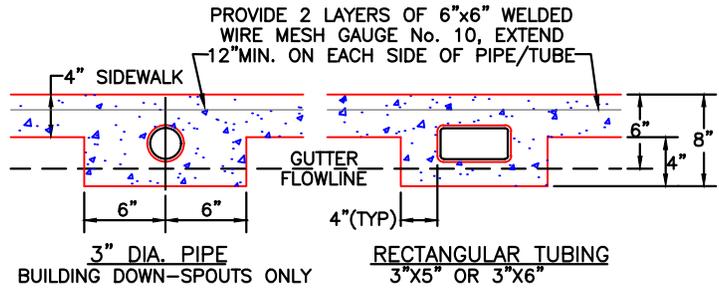
*CITY OF REEDLEY*

**ST-39**

\*ONE SECTION OF 1/4" CHECKER PLATE SHALL NOT EXCEED 5' IN LENGTH. PROVIDE 1"x1"x1/4" ANGLE IRON WELDED ON THE UNDERSIDE OF PLATES IF CHANNEL EXCEEDS 5 FEET.



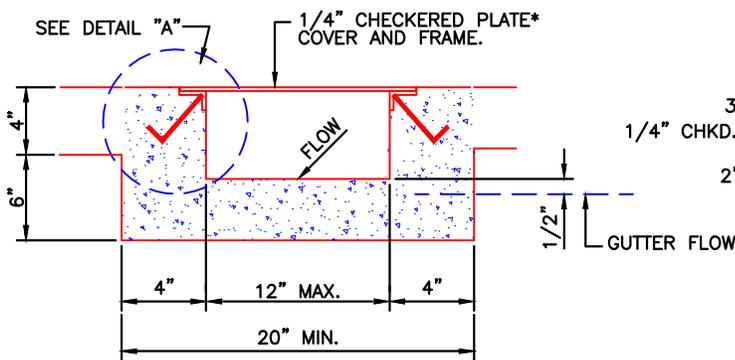
CURB SIDE VIEW OF TROUGH



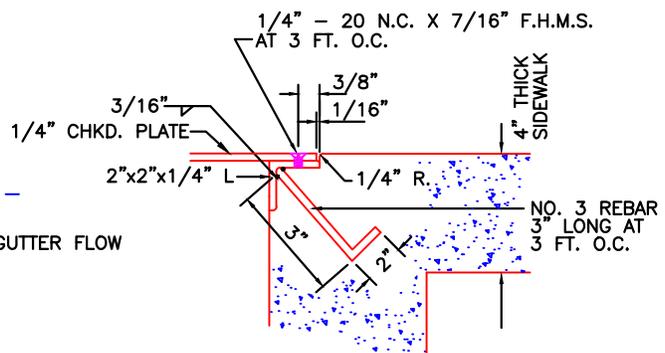
SIDEWALK DRAIN TUBE/PIPE

ROLL CONCRETE TO FORM MOUTH OF PIPE/TUBE

GUTTER FLOW DETAIL



CHANNEL THROUGH WALK



DETAIL "A"

**NOTES:**

1. SIDEWALK DRAIN PIPE ONLY TO BE USED WITH THE APPROVAL OF THE CITY ENGINEER.
2. REMOVE AND REPLACE CONCRETE CURB AND GUTTER WITHIN LIMITS OF WORK WHERE CONCRETE CURB & GUTTER EXIST, PER ST-8 & ST-11 CONCRETE COLD JOINTS.
3. 3" PIPE SHALL BE GALVANIZED PIPE. RECTANGULAR TUBING SHALL BE STEEL. PVC NOT ALLOWED WITHIN CITY R/W.
4. MINIMUM WALL THICKNESS OF RECTANGULAR TUBING IS 3/16".
5. NO DRAIN SHALL BE PERMITTED IN DRIVE APPROACH AREAS.
6. SIDEWALK DRAINS, EXCEPT CHANNELS, SHALL BE ANGLED IN DIRECTION OF GUTTER FLOW AT 1:5 ANGLE.
7. ALL CONCRETE SHALL BE CLASS 'A' AND EXPOSED SURFACES SHALL BE FINISHED AS PER CURB SPECIFICATIONS.,
8. DRAIN SLOPES SHALL BE 0.010 MIN. AND 0.020 MAX.
9. FLOOR OF TROUGH SHALL BE GIVEN A STEEL TROWEL FINISH. ALL PARTS SHALL BE STRUCTURAL GRADE STEEL AND ALL EXPOSED METAL SHALL BE PAINTED OR DIPPED W/ASPHALTUM PAINT.

**AREAS TO BE DRAINED FROM PRIVATE PROPERTY TO PUBLIC STREETS**

SURFACE AREA	TYPE OF SURFACE	DRAIN AREA REQUIRED
2 ACRES 200'x400'	PAVED GRASS	100 SQ. IN. 25 SQ. IN.
1.5 ACRES 200'x300'	PAVED GRASS	75 SQ. IN. 20 SQ. IN.
1 ACRE 200'x200'	PAVED GRASS	50 SQ. IN. 12 SQ. IN.
0.75 ACRE 150'x200'	PAVED GRASS	40 SQ. IN. 10 SQ. IN.
0.50 ACRE 100'x200'	PAVED GRASS	30 SQ. IN. 6 SQ. IN.
0.25 ACRE 100'x100'	PAVED GRASS	16 SQ. IN. 3 SQ. IN.
USE 1 ACRE = 200'x200' OR 100'x400'		
AREA 3" DIA. PIPE = 7.1 SQ. IN.(ROOF DRAIN)		
AREA 3"x5" RECT. TUBE = 12.3 SQ. IN.		
AREA 3"x6" RECT. TUBE = 14.9 SQ. IN.		
AREA 3"x12" CHANNEL = 36 SQ. IN.		
AREA 4"x14" CHANNEL = 56 SQ. IN.		

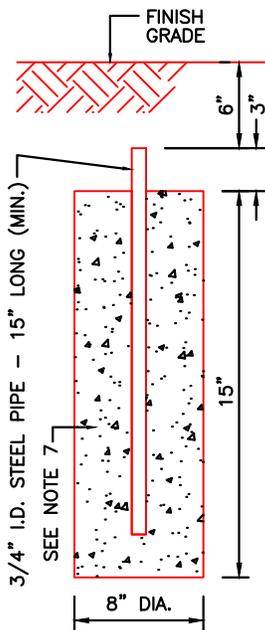


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ST-8 & 11

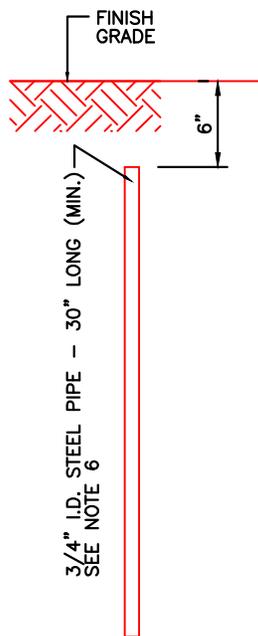
**SIDEWALK DRAINS**

*CITY OF REEDLEY*

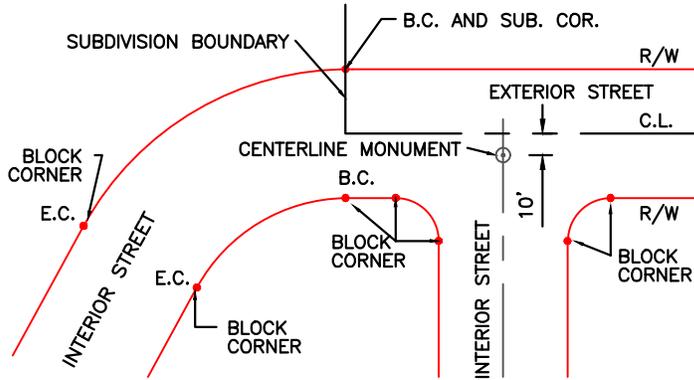
**ST-40**



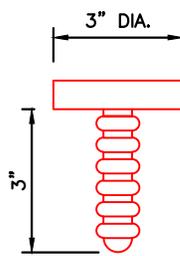
SUBDIVISION AND BLOCK CORNER



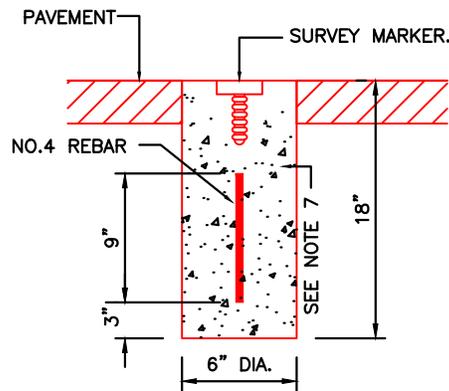
LOT CORNER



TYPICAL LOCATIONS FOR CORNERS AND MONUMENTS



DETAIL



SERVCO NO. 2136 BRONZE SURVEY MARKER.

CENTERLINE MONUMENT

**NOTES:**

1. IN CONFORMANCE WITH SECTION 8772 OF THE "LAND SURVEYORS ACT", ALL CORNERS SHALL BE TAGGED WITH THE SURVEYOR'S NUMBER. EACH NUMBER SHALL BE PRECEDED BY THE LETTERS "PLS" OR "PE" RESPECTIVELY.
2. ALL SUBDIVISION BOUNDARY CORNERS, ANGLE POINTS, AND CURVE POINTS SHALL BE MONUMENTED WITH THE SUBDIVISION CORNER MONUMENT.
3. ALL BLOCK CORNERS, ANGLE POINTS AND CURVE POINTS INTERIOR TO THE TRACT SHALL BE MONUMENTED WITH THE BLOCK CORNER MONUMENT.
4. ALL LOT CORNERS NOT MARKED BY SUBDIVISION OR BLOCK CORNER MONUMENTS SHALL BE MONUMENTED WITH THE LOT CORNER MONUMENT.
5. ALL INTERSECTIONS OF INTERIOR STREET CENTERLINES W/ EXTERIOR OR BOUNDARY STREET CENTERLINES SHALL BE MONUMENTED WITH CENTERLINE MONUMENTS SET ON THE INTERIOR STREET CENTERLINE 10 FT. OFF THE EXTERIOR STREET CENTERLINE.
6. WITH PERMISSION OF THE CITY ENGINEER, PIPE FOR LOT CORNER MONUMENTS MAY BE SHORTENED TO 15" IN LENGTH IN AREAS WITH HARDPAN.
7. CONCRETE FOR MONUMENTS SHALL BE CLASS 'C' (2800 PSI) CONCRETE.
8. ADDITIONAL MONUMENTS MAY BE REQUIRED AT THE DISCRETION OF THE CITY ENGINEER.

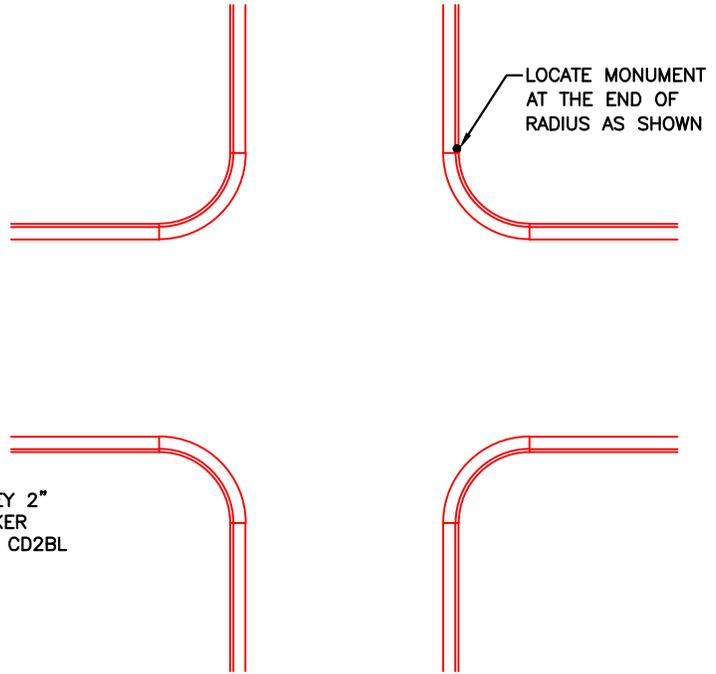
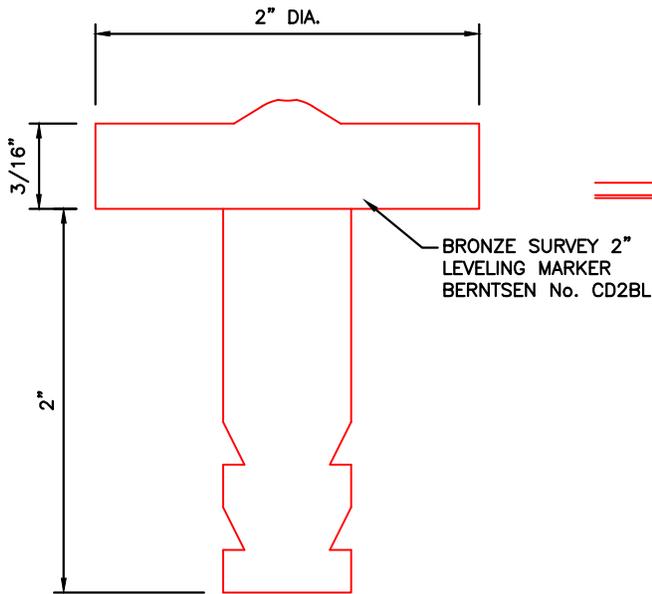


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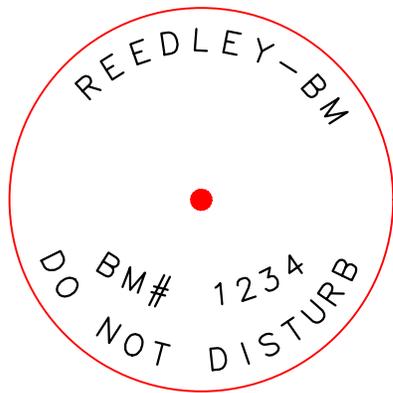
SURVEY MONUMENT  
DETAILS

CITY OF REEDLEY

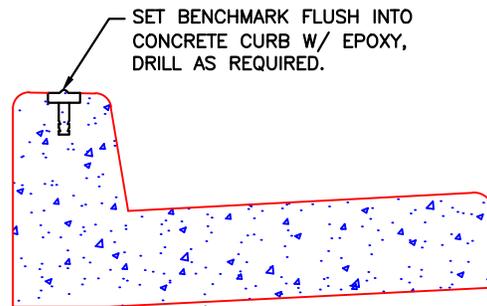
ST-41



ROAD INTERSECTION



SURVEY MONUMENT



STANDARD CURB & GUTTER

**NOTES:**

1. LOCATE BENCHMARKS AT THE CORNER OF INTERSECTIONS APPROVED BY THE CITY ENGINEER.
2. COMPLETE NOTES SHOWING LOCATIONS, ELEVATIONS AND CLOSURES SHALL BE FILED WITH THE CITY SURVEYOR.
3. ELEVATIONS SHALL BE BASED ON CITY OF REEDLEY DATUM, NAVD88.
4. BENCHMARK NUMBER SHALL BE STAMPED WITH DIES ON TOP.

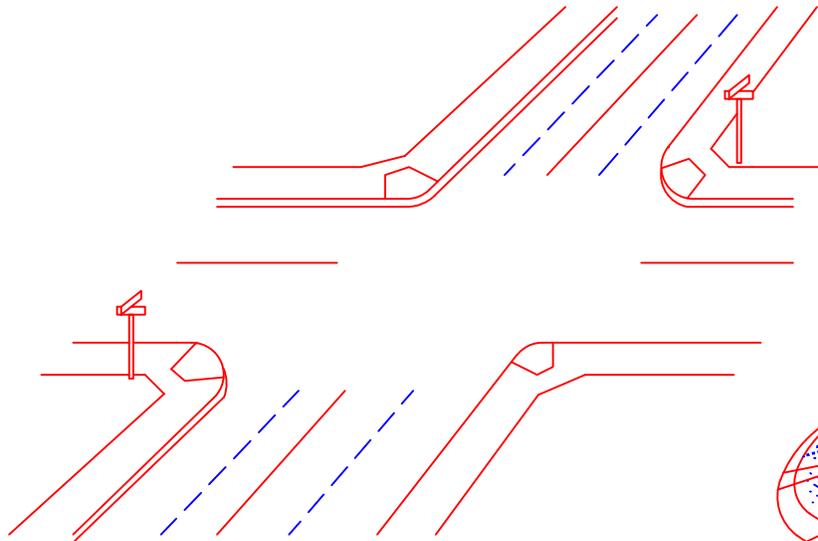


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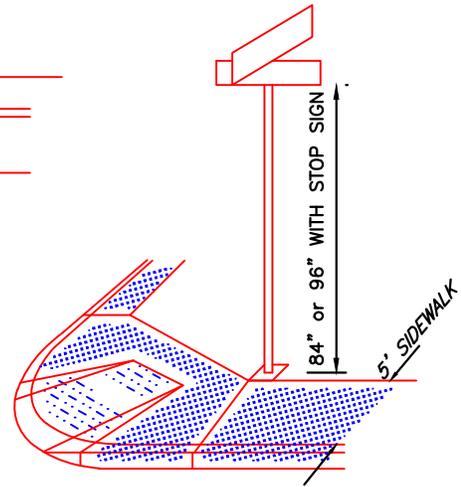
**SURVEY MONUMENT  
DETAILS**

*CITY OF REEDLEY*

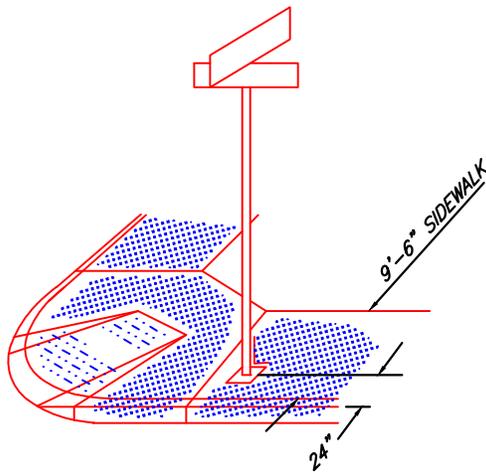
**ST-42**



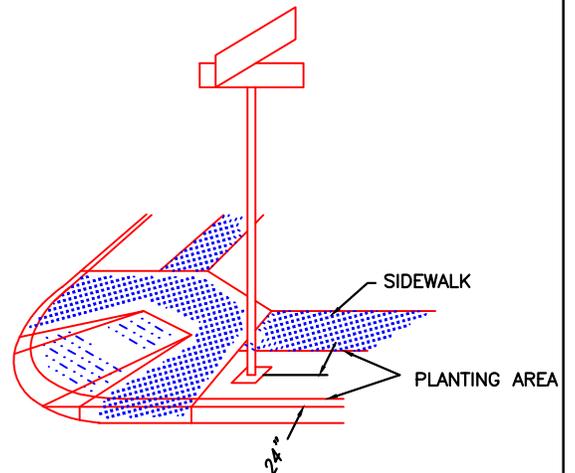
LOCATION AT INTERSECTION



LOCATION IN 5' MONOLITHIC SIDEWALK



LOCATION IN FULL WIDTH SIDEWALK



LOCATION IN PLANTING STRIP

**NOTES:**

1. CORNER FOR INSTALLATION SHALL BE AS DESIGNATED BY THE CITY ENGINEER.
2. SAWCUT REQUIRED IF SIGN INSTALLED AFTER SIDEWALK IS POURED.
3. WHEN INSTALLED IN SIDEWALK, POLES WILL BE SET PRIOR TO SIDEWALK POUR.
4. SAME PIPE FOR STOP SIGN AND STREET NAME SIGN MAY BE UTILIZED WHERE APPROVED.

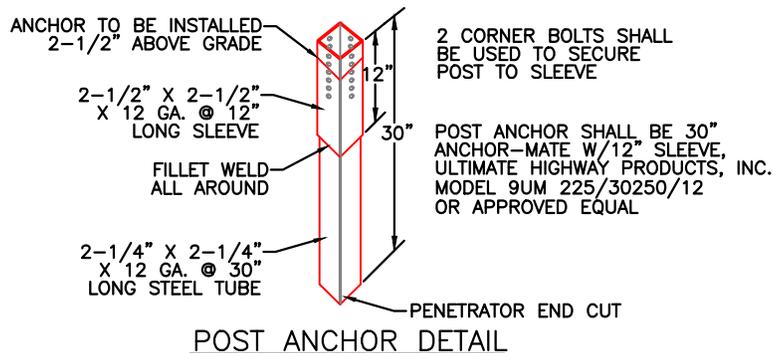
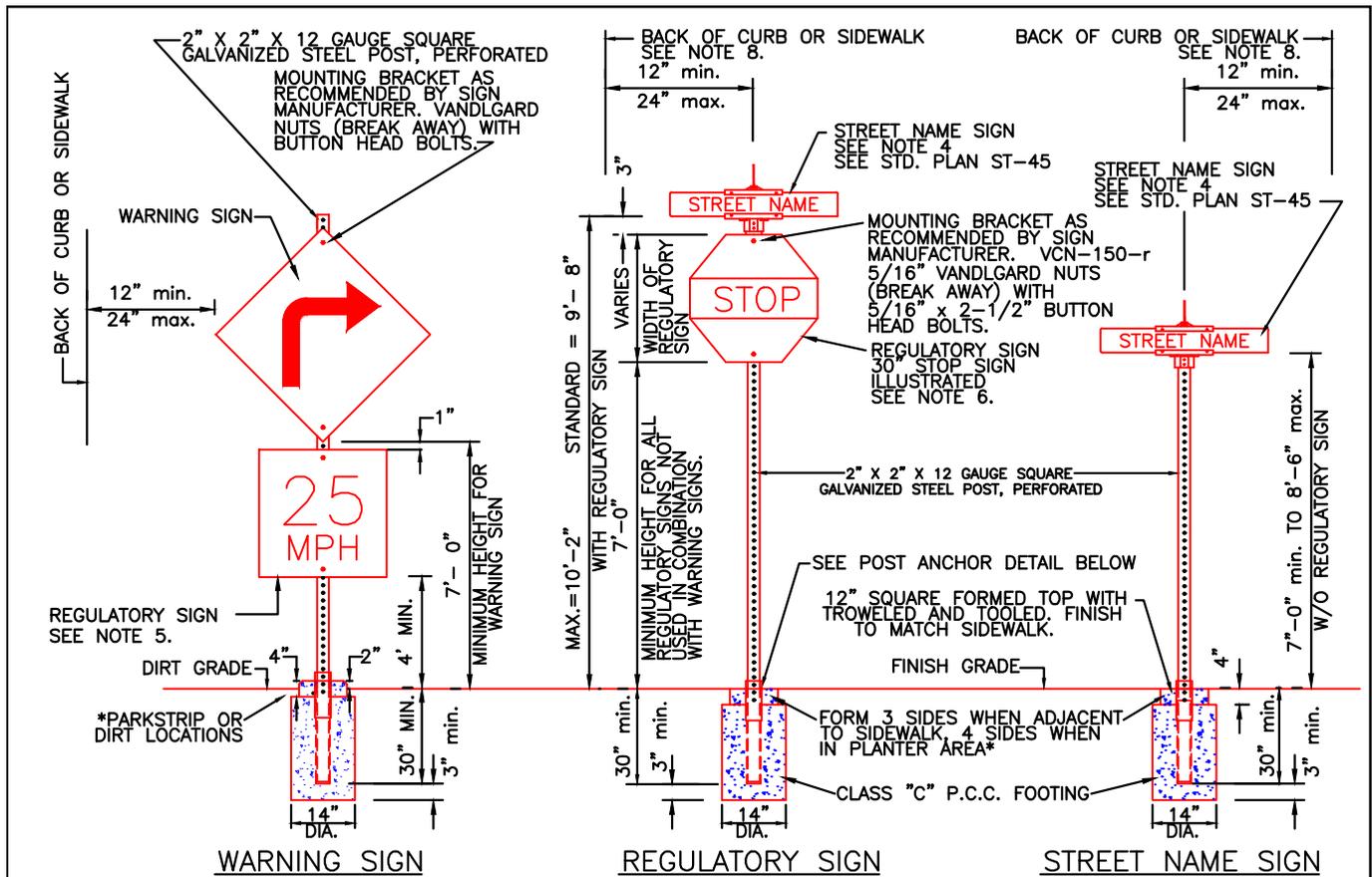


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REF. STD. DWG.:  
ST-43 & 45

**STREET SIGN LOCATION**

*CITY OF REEDLEY*

**ST-43**



**NOTES:**

1. ALL SIGNS, POST, HARDWARE, MOUNTING BRACKETS & INCIDENTALS SHALL BE SUPPLIED, ASSEMBLED AND INSTALLED COMPLETE AND IN ACCORDANCE WITH THIS STANDARD PLAN, THE STANDARD SPECIFICATIONS AND THE CALTRANS SPECIFICATIONS AND THE STATE OF CALIFORNIA, MUTCD, LATEST EDITION.
2. ALL SIGN LOCATION SHALL BE DETERMINED BY THE CITY ENGINEER. FORM & EDGE 12" X 12" CONCRETE APRON 4" THICK WHEN INSTALLED IN PARKSTRIP OR DIRT LOCATIONS.
3. REGULATORY AND WARNING SIGNS SHALL BE PROVIDED AND INSTALLED COMPLETE AND IN PLACE AS REQUIRED BY THE CITY ENGINEER.
4. STREET NAME SIGN MAY BE PLACED ON A REGULATORY SIGN POST ONLY WHERE APPROVED IN ADVANCE BY THE CITY ENGINEER.
5. REGULATORY SIGN MAY BE PLACED ON A WARNING SIGN POST ONLY WHERE APPROVED IN ADVANCE BY THE CITY ENGINEER.
6. A 36-INCH SIZE STOP SIGN MAY BE REQUIRED IN SPECIAL SITUATIONS AS DETERMINED BY THE CITY ENGINEER.
7. ALL STEEL POST AND MOUNTING BRACKETS AND HARDWARE SHALL BE GALVANIZED AS SPECIFIED IN THIS PLAN AND IN ACCORDANCE WITH SECTION 75-1.05 OF THE CALTRANS SPECIFICATIONS.
8. FOR STREET SIGN LOCATION, REFER TO THE CITY OF REEDLEY STANDARD PLAN ST-43.
9. ALL TRAFFIC SIGNS SHALL BE 0.08 INCH THICK ALUMINUM; FACE SHALL HAVE A 3M DIAMOND GRADE DG3 REFLECTIVE SHEETING WITH AN APPLIED 3M #1160 OR EQUAL GRAFFITI FILM, AND 3M ELECTRO CUT FILM.



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REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-43 & 45

**SIGN INSTALLATION**

*CITY OF REEDLEY*

**ST-44**

BACKGROUND COLOR:  
ENGINEER GRADE  
REFLECTIVE GREEN

LETTER COLOR:  
REFLECTIVE WHITE

SUFFIX AND BLOCK NUMBER  
SHALL BE 2" U.C.

6" WIDE x VARIABLE LENGTH  
(24" MINIMUM) 0.080" GAUGE  
ALUMINUM FLAT BLADE  
DOUBLE FACED, ENGINEER  
GRADE REFLECTIVE SHEETING.



SIZES:  
STD. LENGTHS - 24", 30" OR 36"

LEGEND FOR NAME PLATE

NAME PLATE

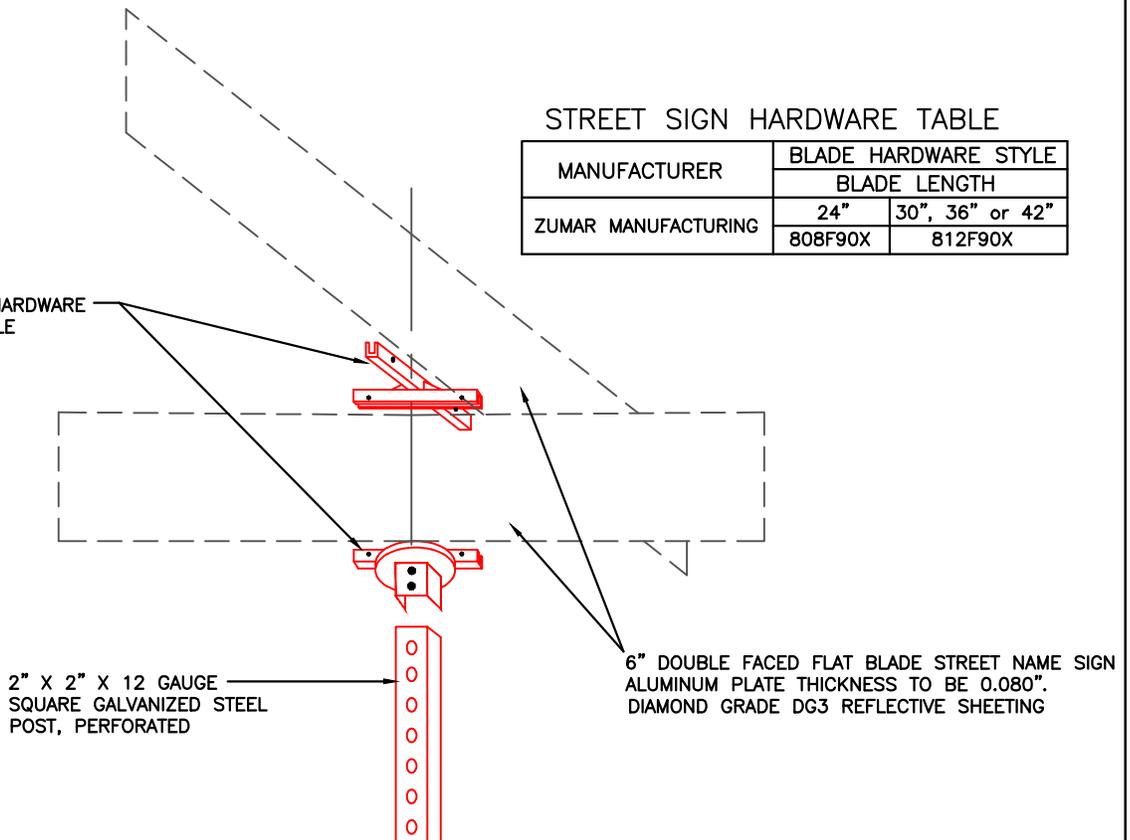
NOTES FOR 6" STREET NAME SIGNS:

1. STREET NAMES SHALL BE 4 INCH UPPER CASE, FOLLOWED BY 3 INCH LOWERCASE FHWA SERIES C2000EX. ALL OTHER LETTERING SHALL BE 2 INCH FHWA SERIES D2000EX.
2. STREET NAME AND ADDRESS 1 INCH SPACE FROM EACH END. STREET NAME 1 INCH SPACE TOP AND BOTTOM.
3. STREET ADDRESS AND STREET SUFFIX 3/4" SPACE TOP AND BOTTOM.
4. LETTERING SHALL BE WHITE REFLECTIVE (3M DIAMOND GRADE DG3) BACKGROUND SHALL BE ELECTRO CUTTABLE (3M 1177C) WITH 1/2 INCH CORNER ROUNING

STREET SIGN HARDWARE TABLE

MANUFACTURER	BLADE HARDWARE STYLE	
	BLADE LENGTH	
ZUMAR MANUFACTURING	24"	30", 36" or 42"
	808F90X	812F90X

STREET SIGN HARDWARE  
REFER TO TABLE



DOUBLE FACED STREET NAME SIGN HOLDER ASSEMBLY

NOTE:

ALL STEEL BRACKETS AND HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 75-1.05 OF THE CALTRANS SPECIFICATIONS.



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**STREET NAME SIGNS**

*CITY OF REEDLEY*

**ST-45**

BACKGROUND COLOR:  
REFLECTIVE GREEN

LETTER COLOR:  
REFLECTIVE WHITE

SUFFIX AND BLOCK NUMBER  
SHALL BE 3" U.C.



9" WIDE x VARIABLE LENGTH  
(24" MINIMUM) 0.080" GAUGE  
ALUMINUM FLAT BLADE  
DOUBLE FACED, ENGINEER  
GRADE REFLECTIVE SHEETING.



SIZES:  
STD. LENGTHS - 24", 30", 36" OR 42"

LEGEND FOR NAME PLATE

NAME PLATE

NOTES FOR 9" STREET NAME SIGNS:

1. USE 9" STREET NAME SIGN WHEN POST MOUNTED 2-LANE ROADWAYS OR MULTILANE POSTED LESS THAN 40 MPH.
2. STREET NAMES SHALL BE 6 INCH UPPER CASE, FOLLOWED BY 4.5 INCH LOWERCASE FHWA SERIES C2000EX. ALL OTHER LETTERING SHALL BE 3 INCH FHWA SERIES D2000EX.
3. STREET NAME AND ADDRESS 1 INCH SPACE FROM EACH END. STREET NAME 1.5 INCH SPACE TOP AND BOTTOM.
4. STREET ADDRESS AND STREET SUFFIX 1" SPACE TOP AND BOTTOM.
5. LETTERING SHALL BE WHITE REFLECTIVE (3M DIAMOND GRADE DG3) BACKGROUND SHALL BE ELECTRO CUTTABLE (3M 1177C) WITH 1/2 INCH CORNER ROUNDING.

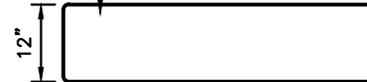
BACKGROUND COLOR:  
REFLECTIVE GREEN

LETTER COLOR:  
REFLECTIVE WHITE

SUFFIX AND BLOCK NUMBER  
SHALL BE 4" U.C.



12" WIDE x VARIABLE LENGTH  
(24" MINIMUM) 0.080" GAUGE  
ALUMINUM FLAT BLADE  
DOUBLE FACED, ENGINEER  
GRADE REFLECTIVE SHEETING.



SIZES:  
STD. LENGTHS - 24", 30", 36", 42" OR 48"

LEGEND FOR NAME PLATE

NAME PLATE

NOTES FOR 12" STREET NAME SIGNS:

1. USE 12" STREET NAME SIGN WHEN POST MOUNTED MULTILANE POSTED 40 MPH OR MORE.
2. STREET NAMES SHALL BE 8 INCH UPPER CASE, FOLLOWED BY 6 INCH LOWERCASE FHWA SERIES C2000EX. ALL OTHER LETTERING SHALL BE 4 INCH FHWA SERIES D2000EX.
3. STREET NAME AND ADDRESS 1 INCH SPACE FROM INSIDE BORDER EDGE. STREET NAME VERTICALLY CENTERED.
4. STREET ADDRESS AND STREET SUFFIX OFFSET 1-3/4" TOP AND BOTTOM.
5. LETTERING SHALL BE WHITE REFLECTIVE (3M DIAMOND GRADE DG3) BACKGROUND SHALL BE ELECTRO CUTTABLE (3M 1177C) WITH 3/4 INCH CORNER ROUNDING.

BACKGROUND COLOR:  
REFLECTIVE GREEN

LETTER COLOR:  
REFLECTIVE WHITE

SUFFIX AND BLOCK NUMBER  
SHALL BE 6" U.C.



21" WIDE x VARIABLE LENGTH  
(30" MINIMUM) 0.080" GAUGE  
ALUMINUM FLAT BLADE  
DOUBLE FACED, ENGINEER  
GRADE REFLECTIVE SHEETING.



SIZES:  
STD. LENGTHS - 30", 36", 42" OR 48"

LEGEND FOR NAME PLATE

NAME PLATE

NOTES FOR 21" STREET NAME SIGNS:

1. USE 21" STREET NAME SIGN WHEN POST MOUNTED ARTERIAL ROADS.
2. STREET NAMES SHALL BE 12 INCH UPPER CASE, FOLLOWED BY 9 INCH LOWERCASE FHWA SERIES C2000EX. ALL OTHER LETTERING SHALL BE 6 INCH FHWA SERIES D2000EX.
3. STREET NAME AND ADDRESS 2 INCH SPACE FROM INSIDE BORDER EDGE. STREET NAME VERTICALLY CENTERED.
4. STREET ADDRESS AND STREET SUFFIX OFFSET 1" TOP AND BOTTOM.
5. LETTERING SHALL BE WHITE REFLECTIVE (3M DIAMOND GRADE DG3) BACKGROUND SHALL BE ELECTRO CUTTABLE (3M 1177C) WITH 1 INCH CORNER ROUNDING

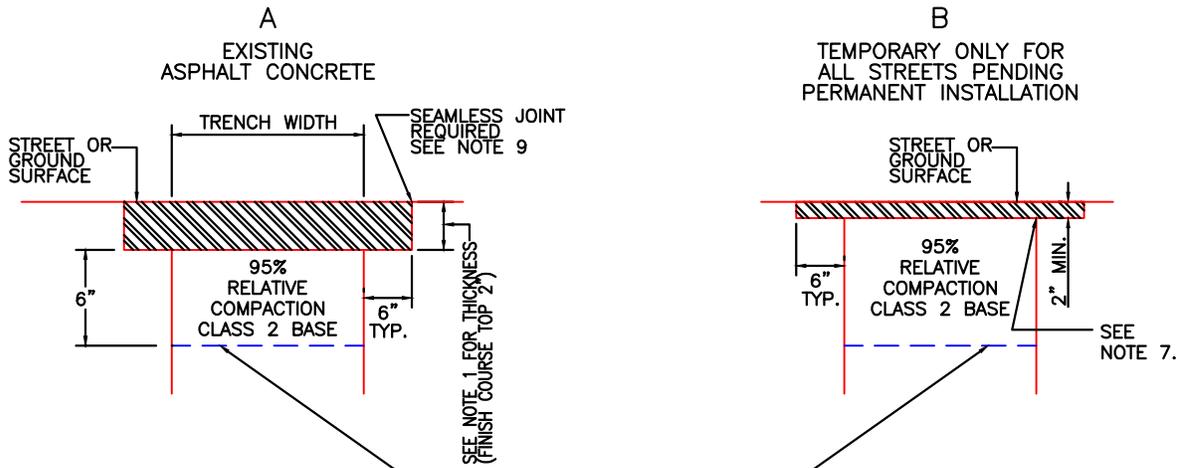


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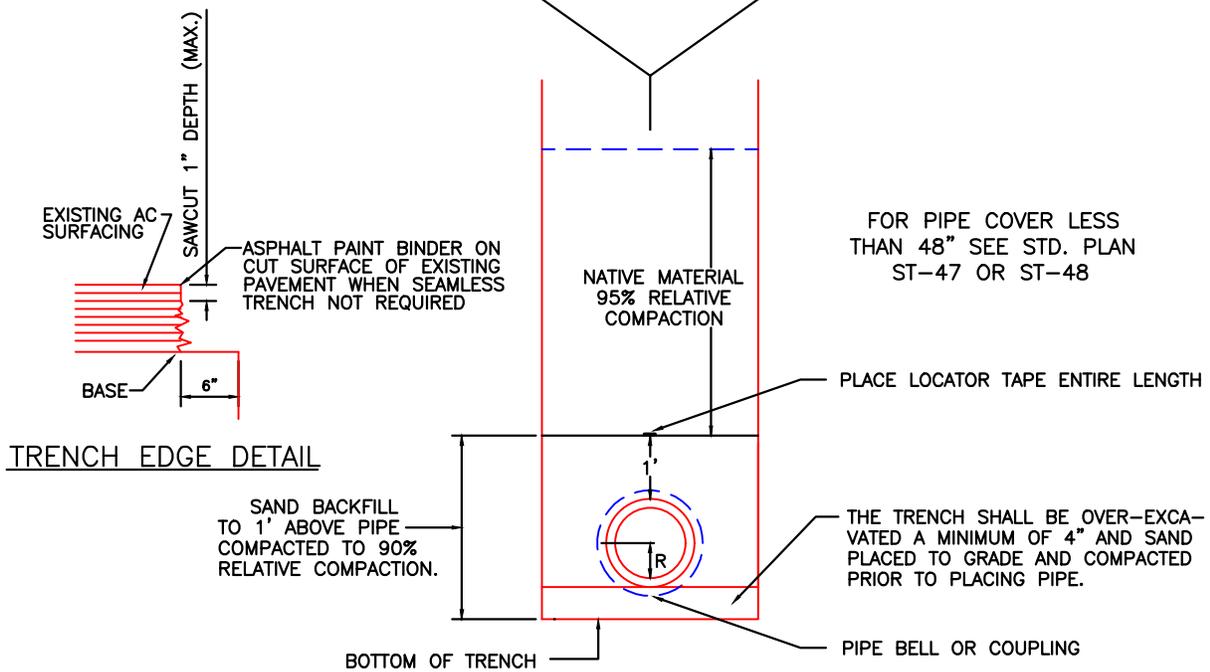
**STREET NAME SIGNS**  
**9", 12" & 21"**

*CITY OF REEDLEY*

**ST-45A**



TRENCH SURFACING - SEE ABOVE SECTIONS 'A' AND 'B'



**NOTES:**

1. AC SHALL BE 7" THICK FOR MAJOR ARTERIALS, ARTERIALS AND COLLECTORS. AC SHALL BE 5" THICK FOR LOCAL STREETS.
2. TWO INCH (2") MINIMUM THICKNESS OF TEMPORARY RESURFACING AS SHOWN ON SECTION "B", SHALL BE INSTALLED IMMEDIATELY ON BACKFILLED TRENCHES IN ALL STREETS.
3. NO TRAFFIC SHALL BE ALLOWED TO CROSS OVER BACKFILLED TRENCHES IN THE ROADWAY PRIOR TO PLACEMENT OF TEMPORARY ASPHALT SURFACING AS SHOWN IN SECTION "B".
4. CALIFORNIA TEST METHOD NO. 216 SHALL BE USED TO DETERMINED ALL PERCENTAGES OF RELATIVE COMPACTION.
5. AC = ASPHALT CONCRETE
6. THE PAVEMENT SECTIONS SHOWN ABOVE ARE MINIMUM ONLY. IF THE EXISTING STRUCTURAL SECTION IS GREATER, IT SHALL BE MATCHED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
7. CUT BACK OR COLD MIX TO BE REMOVED PRIOR TO FINAL PAVING. REFER TO SEC. 12-6F, SEC. 15-3 OF THE CITY OF REEDLEY STANDARD SPECIFICATIONS.
8. A TACK COAT SHALL BE APPLIED TO THE ASPHALT CONCRETE VERTICAL EDGE OF TRENCH WALL PRIOR TO PLACEMENT OF FINAL ASPHALT SURFACING.
9. ALL CUTS IN EXISTING PAVEMENT THAT IS LESS THAN 8 YEARS OLD OR AS DIRECTED BY THE CITY ENGINEER SHALL BE REQUIRED TO HAVE SEAMLESS JOINTS WITH THE EXISTING PAVEMENT BY USING A HEATER-REMIX PROCESS.
10. MANHOLE & WATER VALVE RAISING ASSOCIATED WITH NEW STREET CONSTRUCTION IS NOT REQUIRED TO FOLLOW NOTE No. 9.
11. STREET CUTS SHALL BE MADE PARALLEL OR AT RIGHT ANGLES TO THE CENTERLINE OF THE STREET.
12. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE CURRENT EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS".



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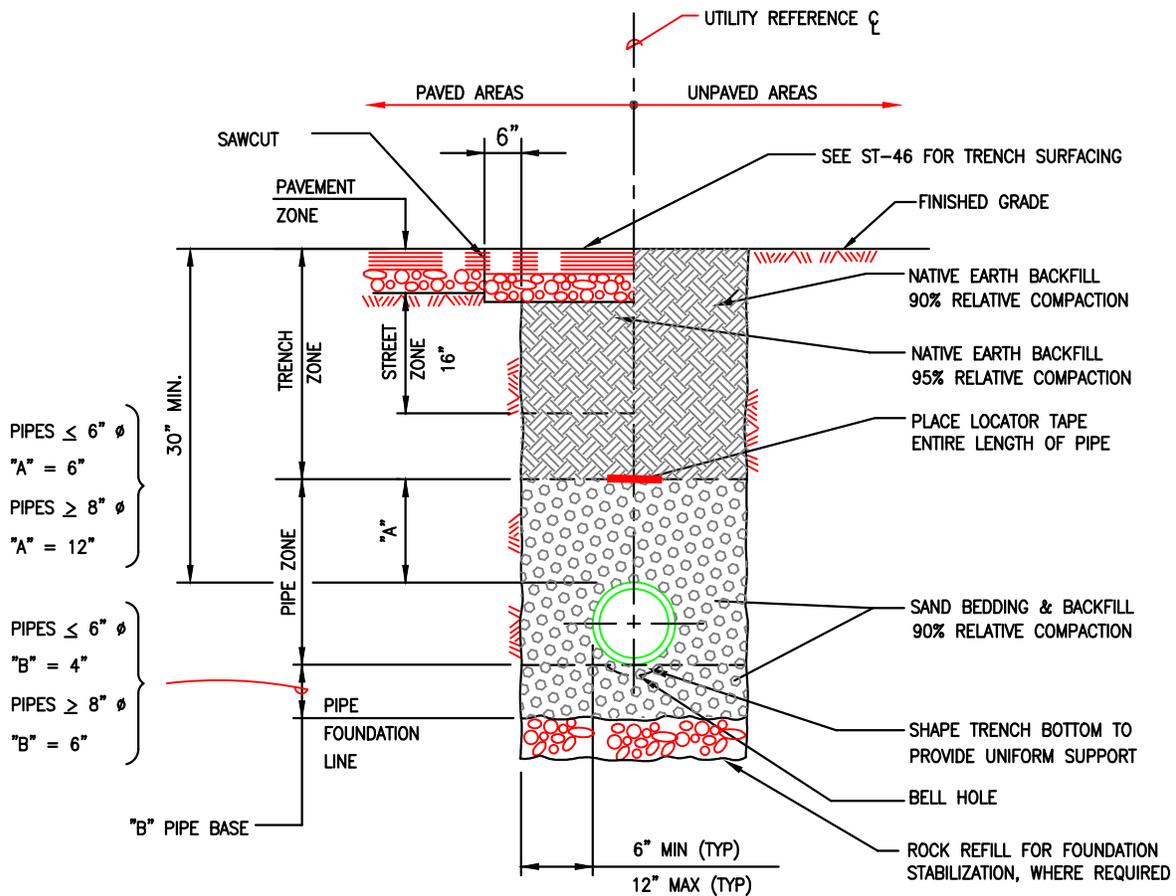
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-47 & 48

## TRENCH BACKFILL AND SURFACE REPLACEMENT

*CITY OF REEDLEY*

# ST-46



**NOTES:**

1. TRENCH WALL SHOWN VERTICAL FOR CLARITY, EXCAVATE PER OSHA REQUIREMENTS.
2. USE THE SAME DETAIL FOR SERVICE LATERALS. REDUCE THICKNESS OF STREET ZONE AS REQUIRED TO HOLD OTHER DIMENSIONS AS SHOWN.



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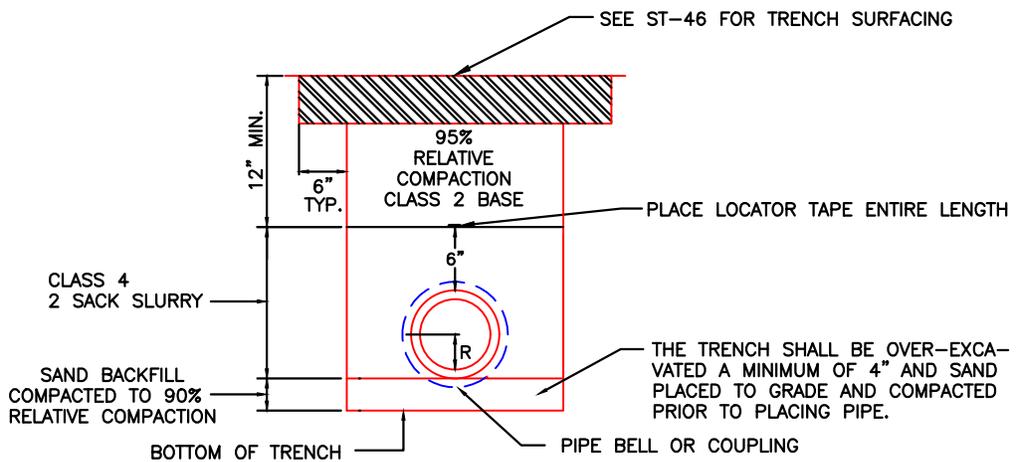
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 ST-46

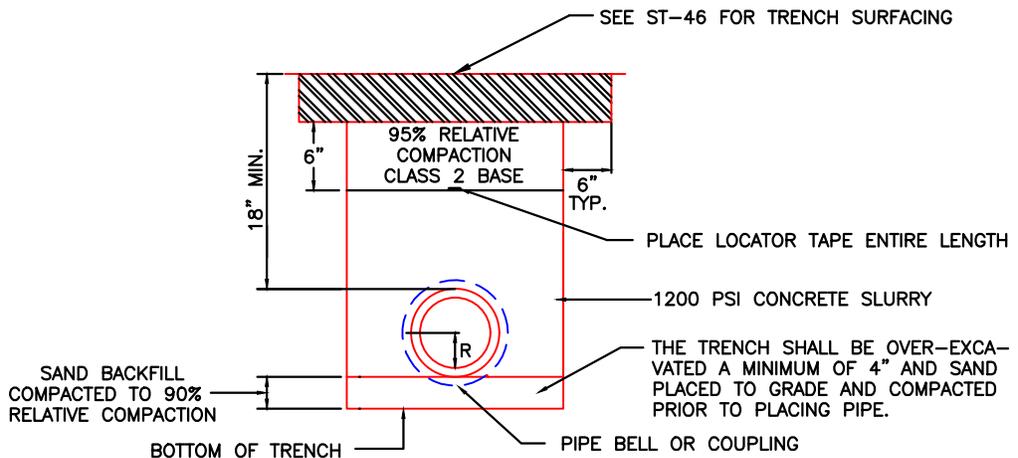
**TRENCH DETAIL FOR  
 COVER LESS THAN 48"**

*CITY OF REEDLEY*

**ST-47**



OPTION 1



OPTION 2

NOTES:

1. PIPE CONCRETE BACKFILL SHALL BE REQUIRED FOR ALL PIPE INSTALLED WITH LESS THAN 30" OF COVER OR AS DIRECTED BY THE CITY ENGINEER.
2. ALL CONCRETE BACKFILL SHALL BE 1200 PSI CONCRETE.
3. CONCRETE BACKFILL SHALL BE PLACED IN THE TRENCH AGAINST UNDISTURBED SOIL AND SHALL BE PLACED IN A MANNER THAT WILL PREVENT FLOATING OR SHIFTING OF THE PIPE.
4. FOREIGN MATERIAL WHICH FALLS INTO THE TRENCH DURING PLACEMENT OF THE CONCRETE SHALL BE IMMEDIATELY REMOVED.
5. NO MATERIAL SHALL BE PLACED ON TOP OF THE CONCRETE BACKFILL UNTIL 8 HOURS AFTER PLACING THE CONCRETE BACKFILL.



SCALE:  
NOT TO SCALE

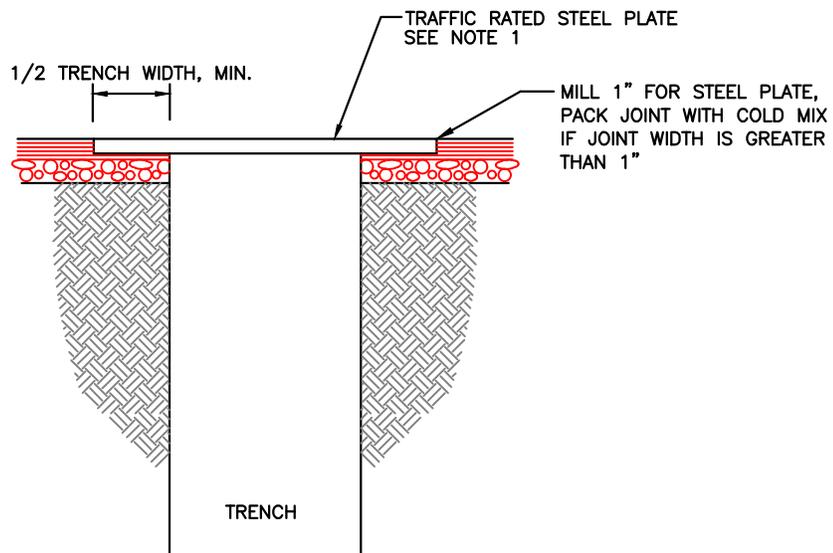
REVISED:  
OCT. 2019

REF. STD. DWG.:

TRENCH DETAIL FOR  
COVER LESS THAN 30"

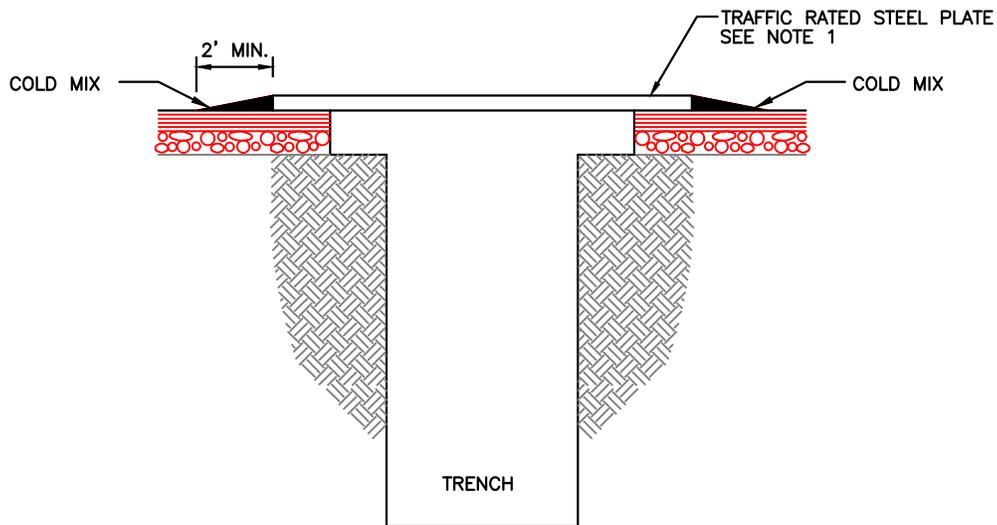
*CITY OF REEDLEY*

**ST-48**



**TYPE 'A' PLATING**

CITY POSTED SPEEDS OF  
GREATER THAN 25 MPH  
OR BUS & TRUCK ROUTE



**TYPE 'B' PLATING**

CITY POSTED SPEEDS OF  
25 MPH AND UNDER

**NOTES:**

1. THE CONTRACTOR SHALL PROVIDE ADEQUATE OVERLAP OF PLATE ON ASPHALT TO ASSURE NO SLIPPAGE OF PLATE AND NO COLLAPSING OF TRENCH.
2. "POSTED SPEED" DOES NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING.

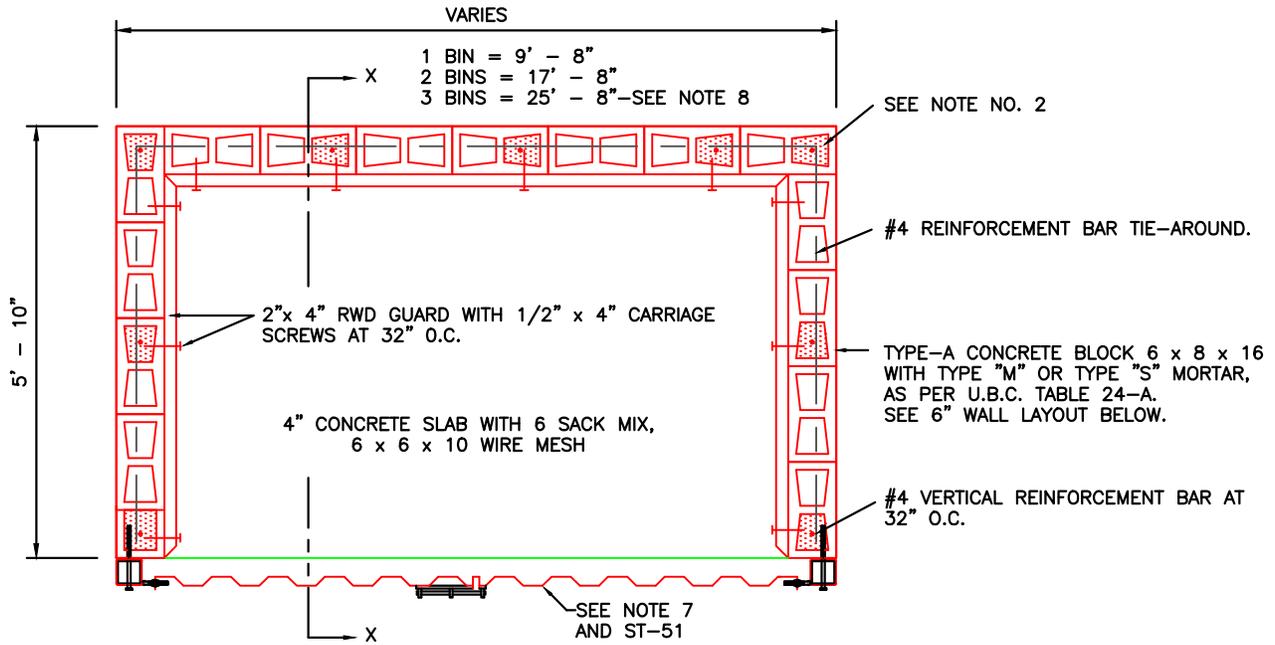


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

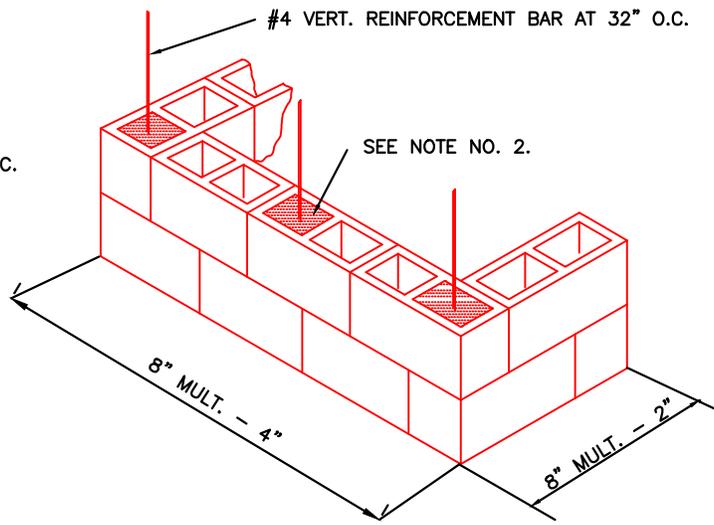
**TRENCH PLATE DETAILS**

*CITY OF REEDLEY*

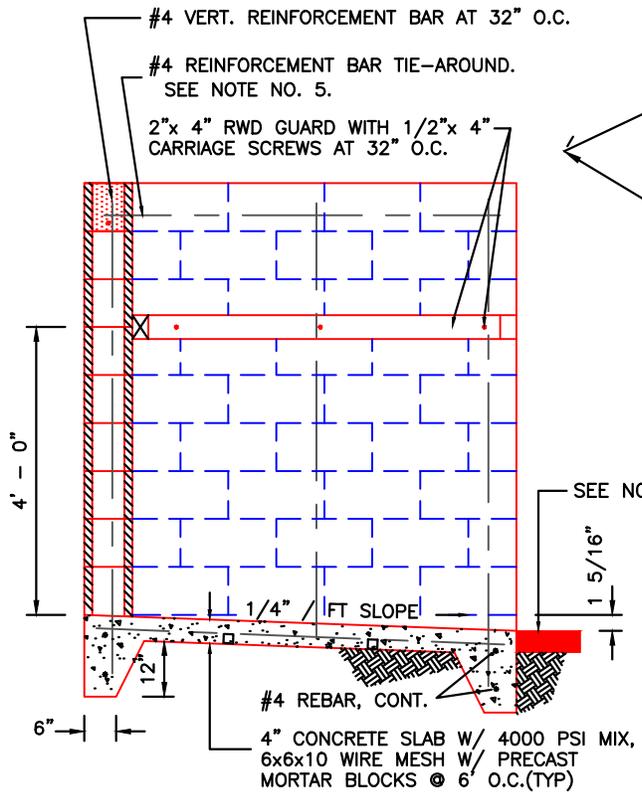
**ST-49**



PLAN VIEW



6" WALL LAYOUT



SECTION X-X

- SEE NOTE 6.
- NOTES:**
1. AT TIME OF LAYING, ALL MASONRY UNITS SHALL BE FREE OF EXCESSIVE DUST AND DIRT.
  2. ALL CELLS WITH REINFORCEMENT SHALL BE FILLED WITH GROUT.
  3. ALL REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING.
  4. ALL CONSTRUCTION SHALL CONFORM TO U.B.C. SECTION 2415.
  5. TOP LAYER OF CONCRETE BLOCK FULLBEDDED WITH MORTAR.
  6. CONCRETE SURFACING ON APPROACH TO OPEN SIDE AS A MINIMUM. PLACE TO TOP OF SLAB. SEE ST-53.
  7. ENCLOSURE DOORS SHALL BE INSTALLED AS REQUIRED: RESIDENTIAL OR APTS. - STEEL DOORS  
 COMMERCIAL - CHAIN LINK W/ WOOD SLATS IS ALLOWABLE
  8. 3 BIN ENCLOSURE REQUIRES AN ADDITIONAL GATE.



SCALE:  
 NOT TO SCALE

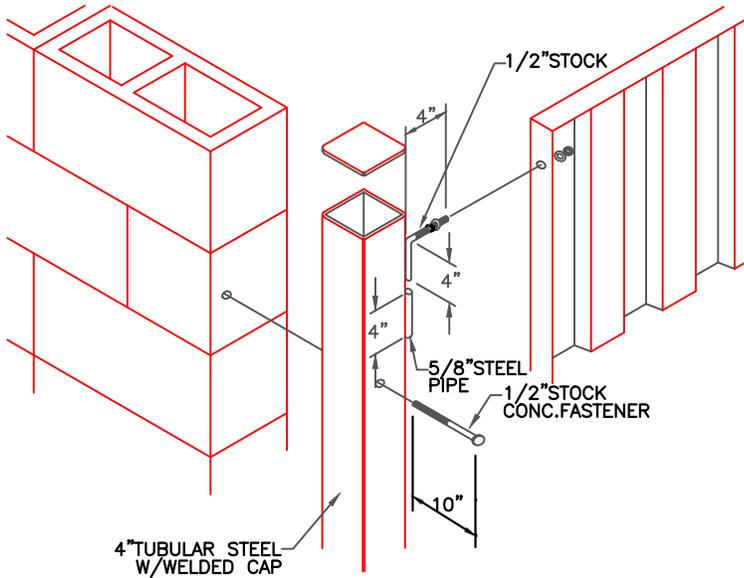
REVISED:  
 OCT. 2019

REF. STD. DWG.:  
 ST-50 & 53

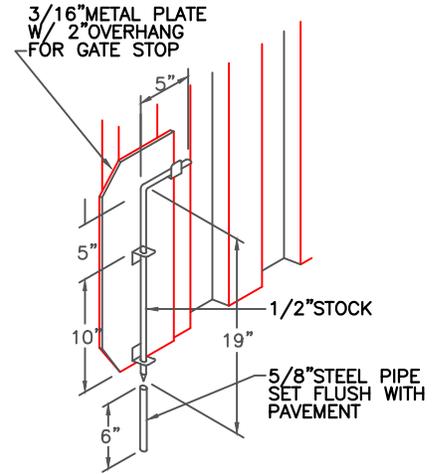
TRASH BIN ENCLOSURE

CITY OF REEDLEY

ST-50



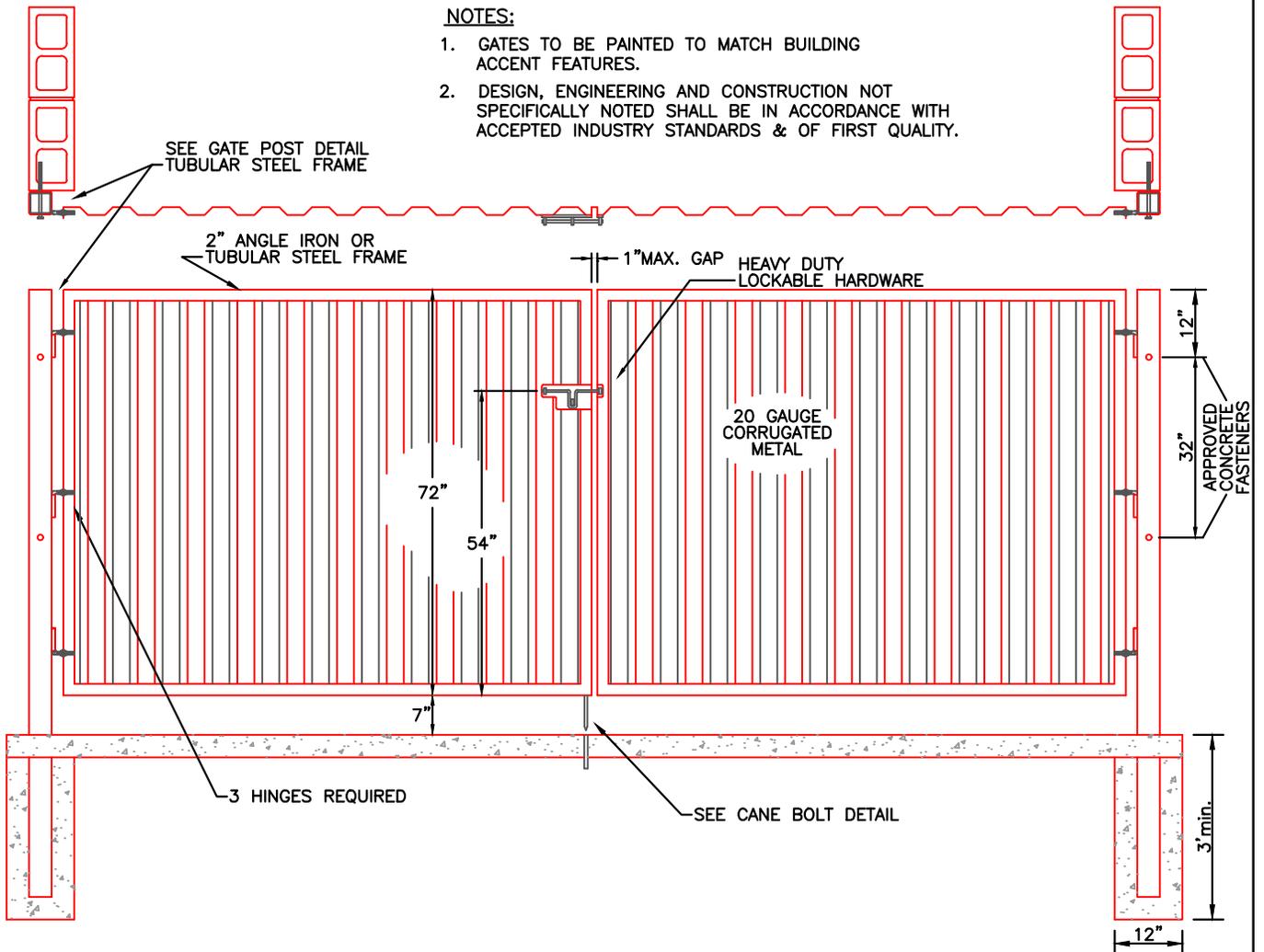
**GATE POST DETAIL**



**CANE BOLT DETAIL**

**NOTES:**

1. GATES TO BE PAINTED TO MATCH BUILDING ACCENT FEATURES.
2. DESIGN, ENGINEERING AND CONSTRUCTION NOT SPECIFICALLY NOTED SHALL BE IN ACCORDANCE WITH ACCEPTED INDUSTRY STANDARDS & OF FIRST QUALITY.

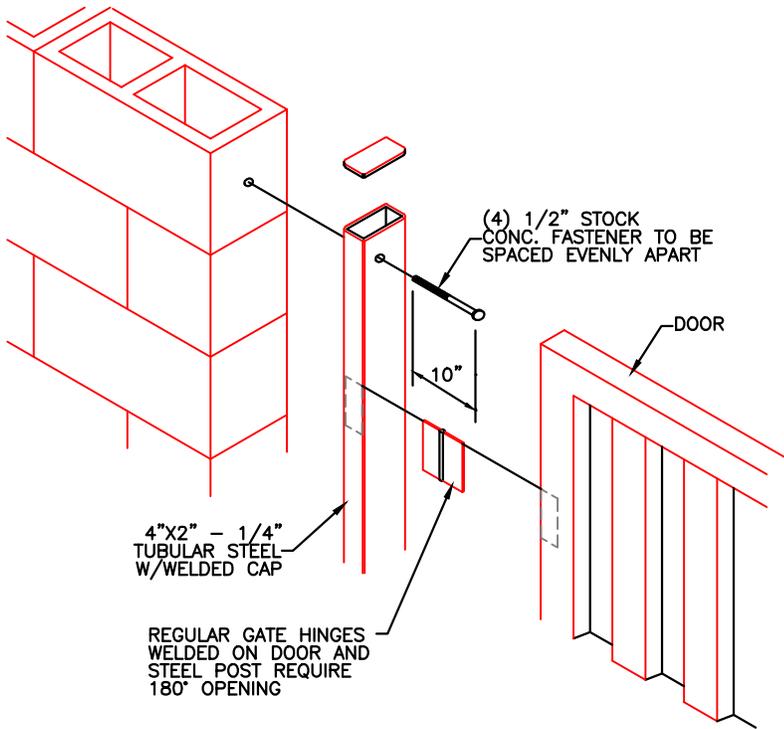


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

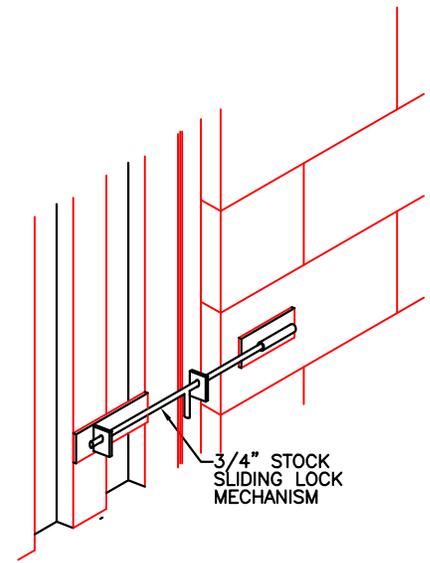
**TRASH BIN ENCLOSURE  
GATE DETAILS**

*CITY OF REEDLEY*

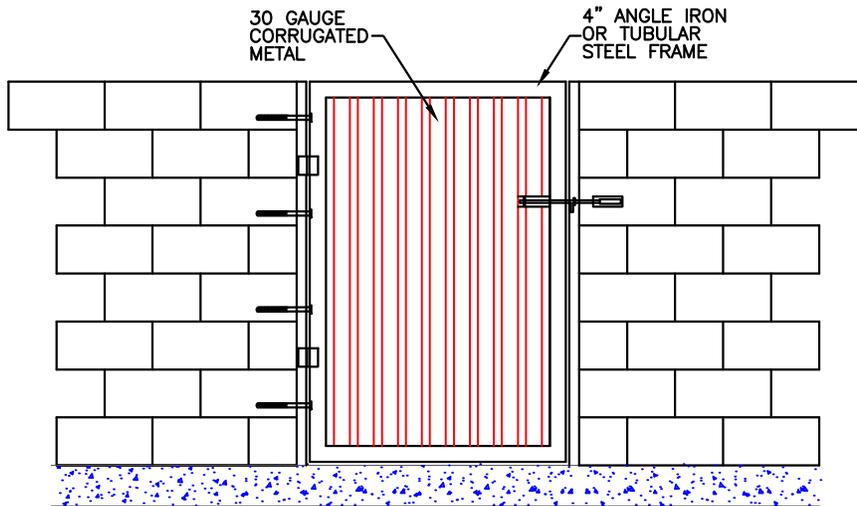
**ST-51**



DOOR POST DETAIL



LOCKABLE HARDWARE DETAIL

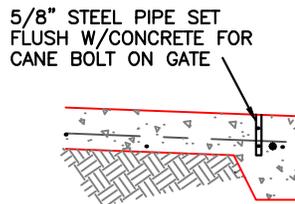
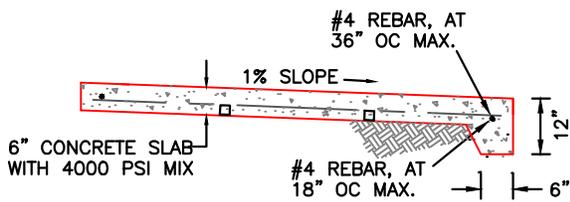
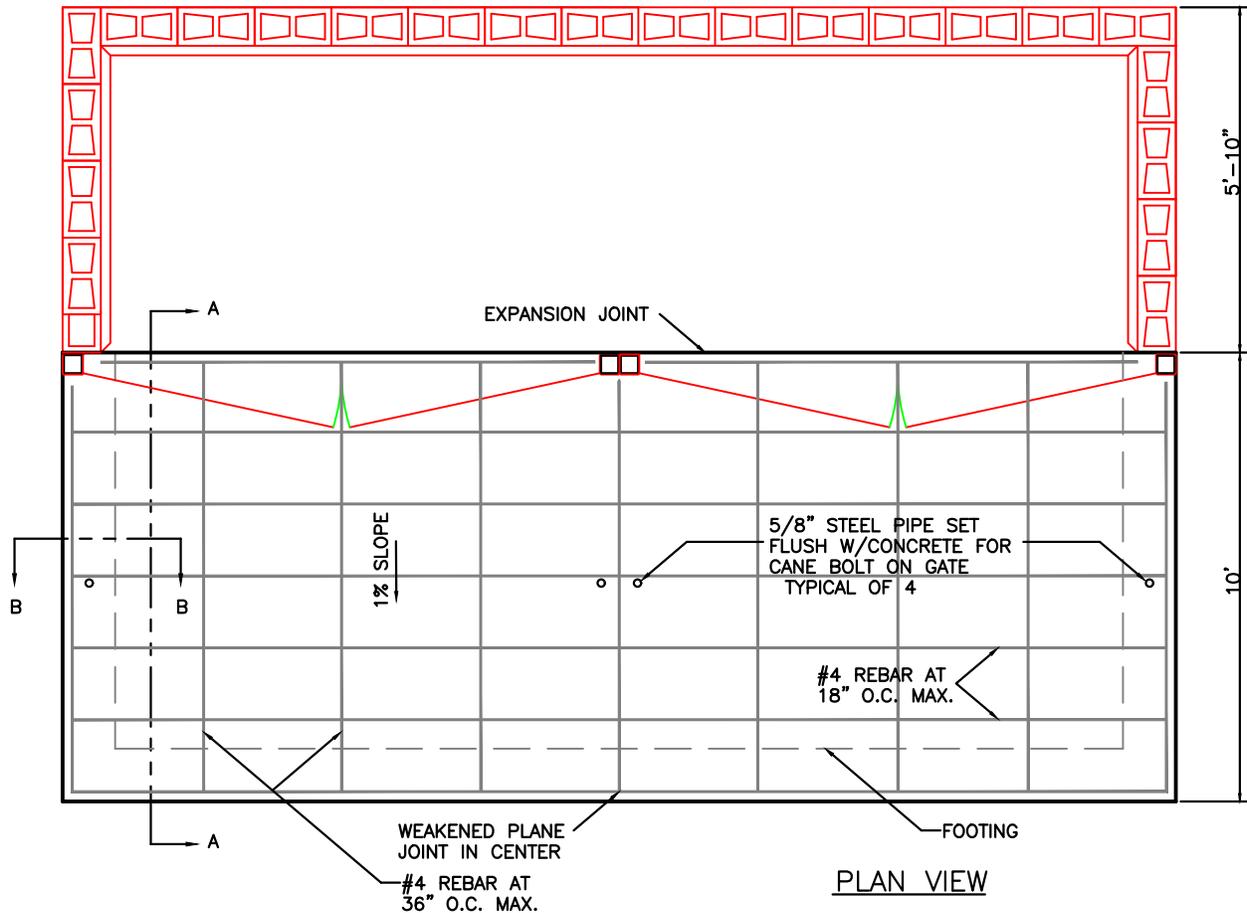


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**TRASH BIN ENCLOSURE  
DOOR DETAILS**

*CITY OF REEDLEY*

**ST-52**



**NOTES:**

1. ALL CONCRETE SHALL BE CLASS A, 6 SACK.
2. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MIN. REBAR SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
3. REBAR SHALL HAVE A MINIMUM OF 2" OF CLEAR COVERAGE.
4. ALL TRASH BIN ENCLOSURES SHALL HAVE A CONCRETE APRON. ANY EXCEPTIONS REQUIRE APPROVAL BY CITY ENGINEER.
5. CONCRETE PAD SHALL BE PLACED ON MOIST AND COMPACTED BASE MATERIALS. 95% R.C.
6. STEEL PIPE LOCATION IN CONCRETE PAD SHALL BE DETERMINED BY CANE BOLT LOCATION ON GATE. SEE TRASH BIN ENCLOSURE GATE DETAILS



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:

**TRASH BIN ENCLOSURE  
CONCRETE APRON DETAILS**

*CITY OF REEDLEY*

**ST-53**

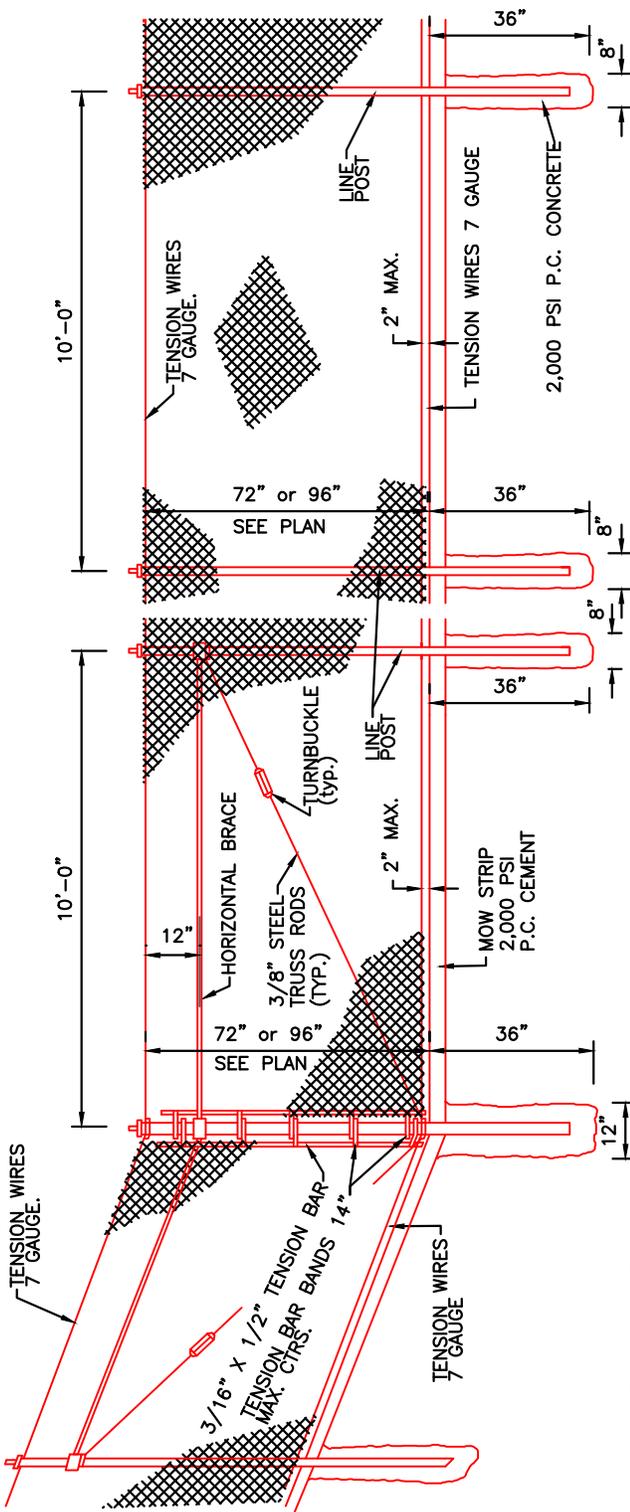


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

# CHAIN LINK FENCE

CITY OF REEDLEY

ST-54



CORNER POST

LINE POST

TYPE CL-6 = 72" FABRIC - 11 GAUGE  
TYPE CL-8 = 96" FABRIC - 9 GAUGE

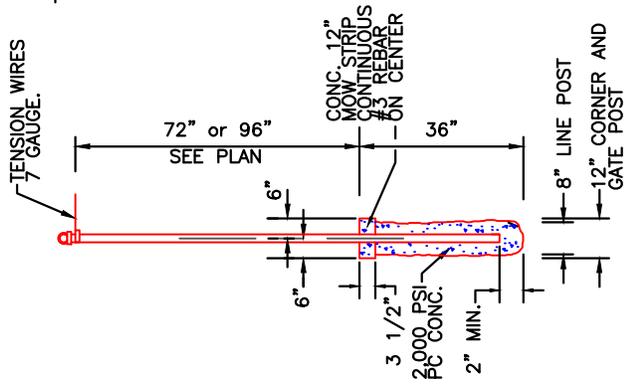
TYPICAL MEMBER DIMENSIONS

FENCE HEIGHT	LINE POSTS		END, LATCH & CORNER POST		BRACES						
	ROUND (I.D.)	H	ROUND (I.D.)	ROLL FORMED	ROUND (I.D.)	ROLL FORMED					
6 FT. & LESS	1 1/2"	1 7/8" X 5/8"	1 3/4" X 1 3/4"	1 3/4" X 1 3/4"	2"	3 1/2" X 3 1/2"	2" X 1 3/4"	1 1/4"	1 1/2" X 1 5/16"	1 5/8" X 1 1/4"	1 3/4" X 1 1/4"
OVER 6 FT.	2"	2 1/4" X 2"	2" X 1 3/4"	2" X 1 3/4"	2 1/2"	3 1/2" X 3 1/2"	2 1/2" X 2 1/2"	1 1/4"	1 1/2" X 1 5/16"	1 5/8" X 1 1/4"	1 3/4" X 1 1/4"

GATE POST DIMENSIONS (SEE STD. PLAN ST-17)

FENCE HEIGHT	GATE WIDTHS	NOMINAL I.D.	WEIGHT PER FOOT
6'-0" AND LESS	UP THRU 6 FT.	2 1/2"	4.95
	OVER 6 FT. THRU 12 FT.	4"	10.79
	OVER 12 FT. THRU 18 FT.	5"	14.62
OVER 6'-0"	OVER 18 FT. THRU 24 FT. MAX.	6"	18.97
	UP THRU 6 FT.	3"	7.58
	OVER 6 FT. THRU 12 FT.	5"	14.62
OVER 6'-0"	OVER 12 FT. THRU 18 FT.	6"	18.97
	OVER 18 FT. THRU 24 FT. MAX.	8"	28.55

NOTE: ABOVE POST DIMENSIONS AND WEIGHTS ARE MINIMUMS. LARGER SIZES MAY BE USED ON APPROVAL OF THE CITY ENGINEER.



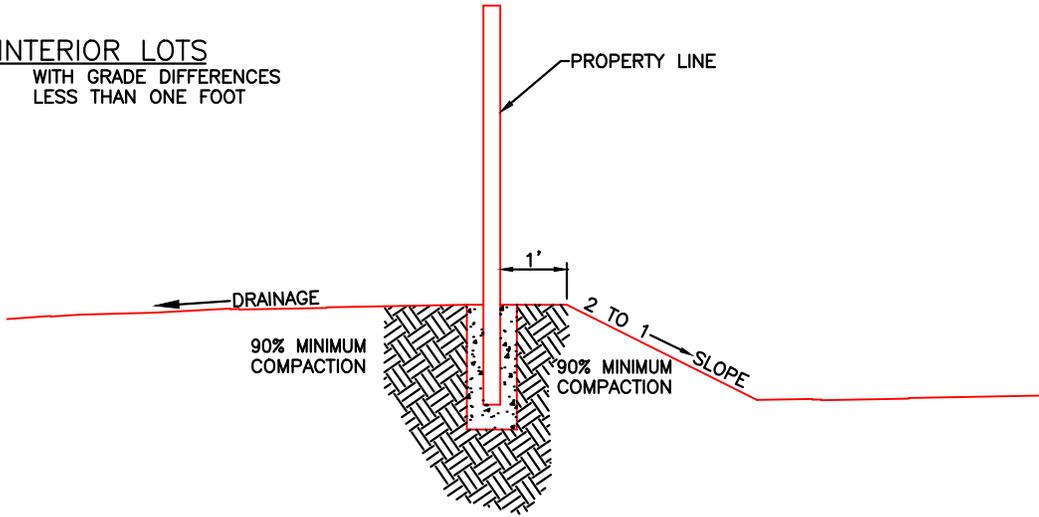
FOOTING

12" CORNER AND GATE POST

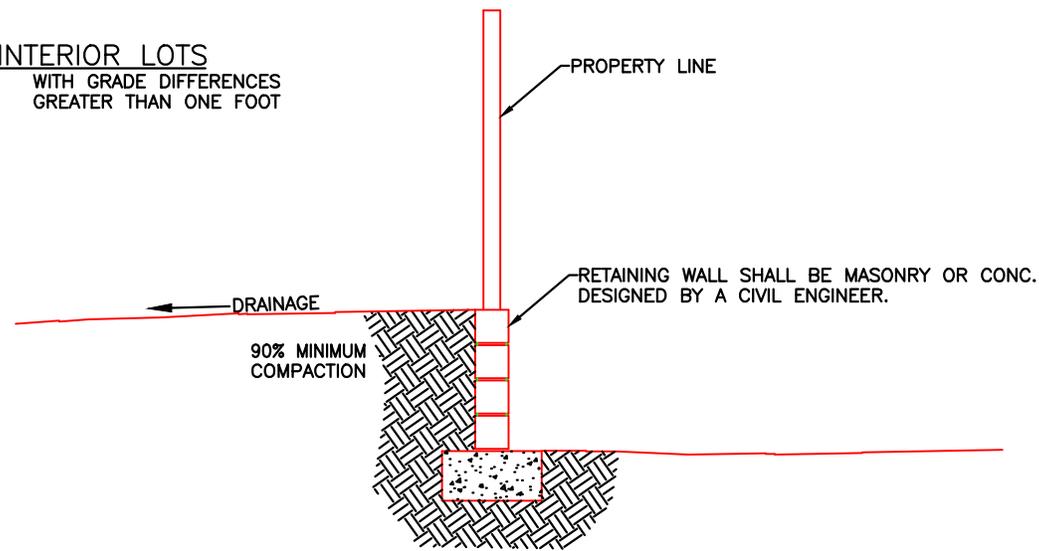
8" LINE POST



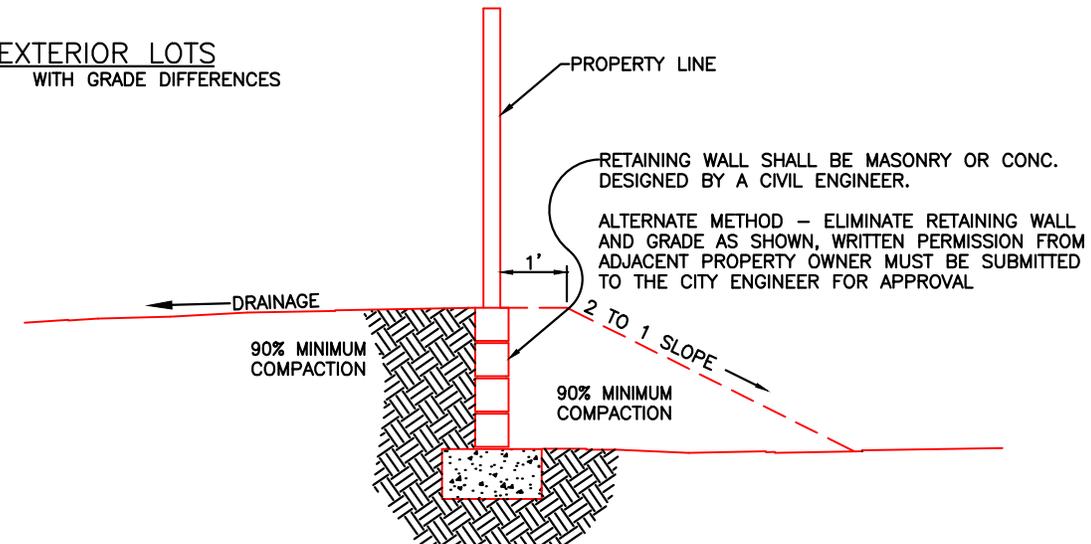
**INTERIOR LOTS**  
WITH GRADE DIFFERENCES  
LESS THAN ONE FOOT



**INTERIOR LOTS**  
WITH GRADE DIFFERENCES  
GREATER THAN ONE FOOT



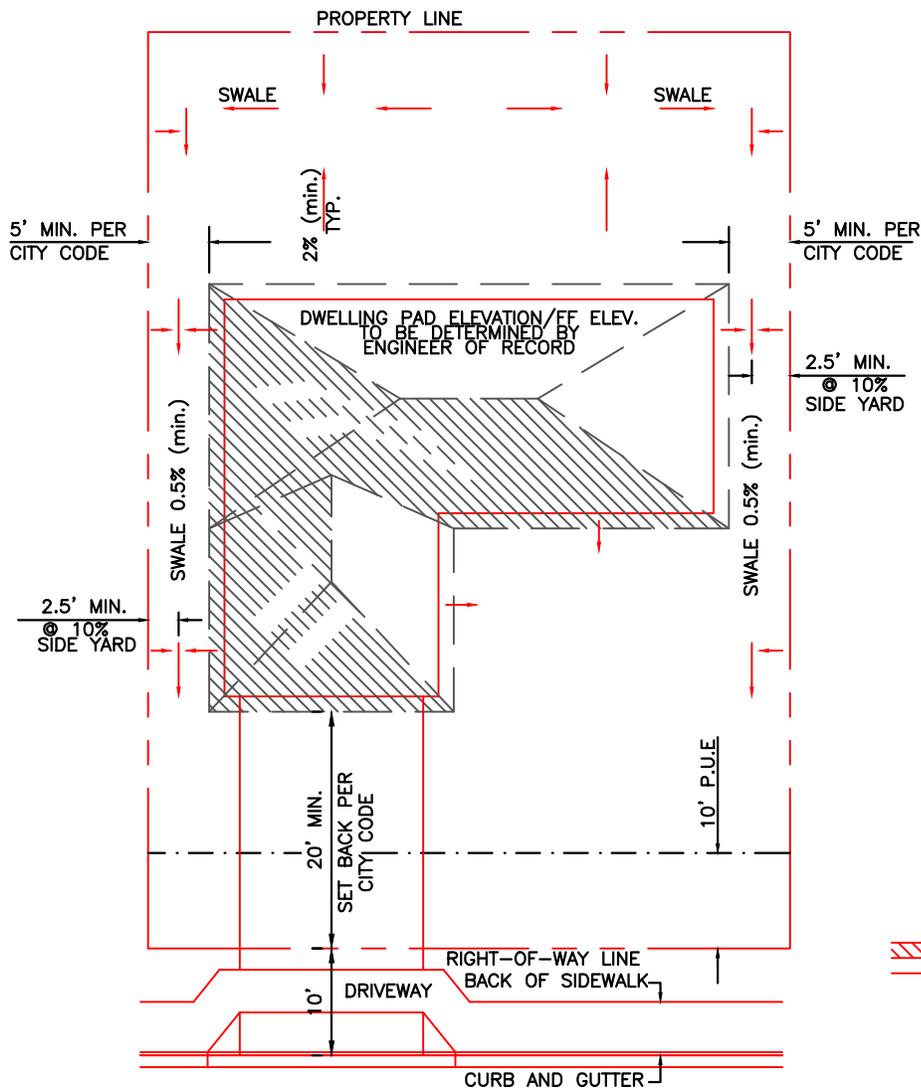
**EXTERIOR LOTS**  
WITH GRADE DIFFERENCES



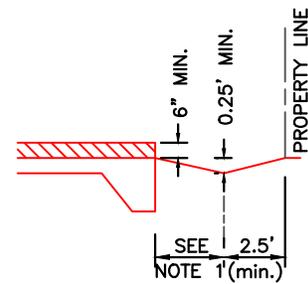
SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**LOT LINE GRADING  
STANDARD**

*CITY OF REEDLEY*  
**ST-56**



PLAN VIEW



SIDE YARD X-SECTION

**NOTES:**

1. A MINIMUM OF 2% SLOPE FOR A MINIMUM OF 5 FEET FOR DRAINAGE AWAY FROM BUILDING EXCEPT SIDE YARD SLOPE MAY BE 2.5 FEET AT 10% MINIMUM SLOPE AWAY FROM BUILDING.
2. NO WATER SHALL DRAIN TO ADJACENT PROPERTY. ALL LOT DRAINAGE SHALL BE TO CITY STREET.
3. ALL GRADING SHALL COMPLY TO APPENDIX J OF THE 2019 CALIFORNIA BUILDING CODE.
4. COMPACTION REPORTS SHALL BE PREPARED BY AN APPROVED TESTING AGENCY UPON COMPLETION OF GRADING.
5. THE OVERALL BUILDING SITE SHALL HAVE A MINIMUM SLOPE OF 0.5% IN ALL AREAS TO AN APPROVED DRAINAGE FACILITY OR PUBLIC STREET.
6. BUILDING SHALL HAVE THE FOUNDATION WALL OR CONCRETE FLOOR SLAB CONSTRUCTED AT LEAST TWELVE INCHES (12") ABOVE THE CROWN OF THE ADJOINING STREET OR 12" ABOVE THE HIGHEST POINT OF TOP OF CURB ALONG THE PROPOSED SITE.



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

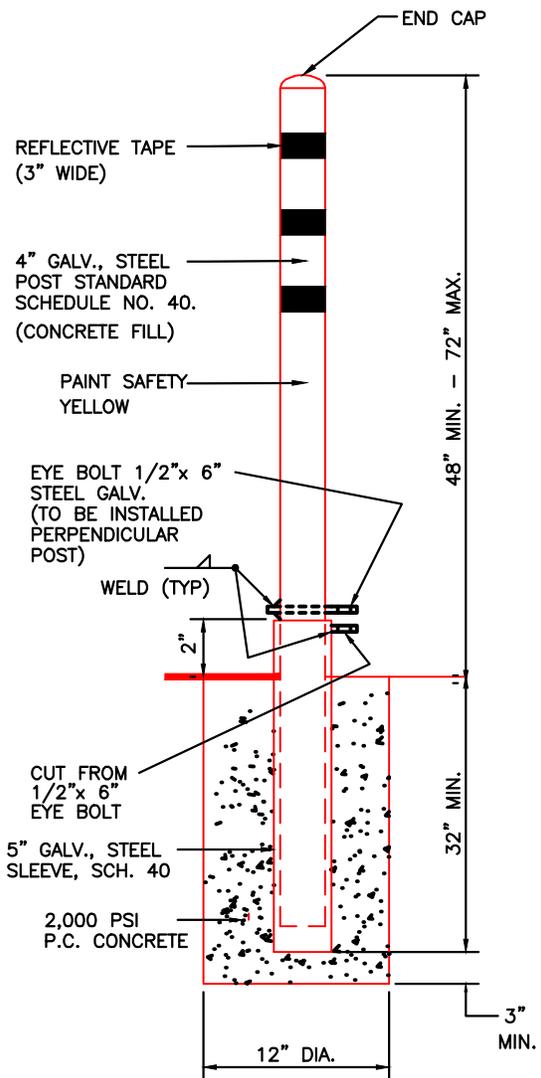
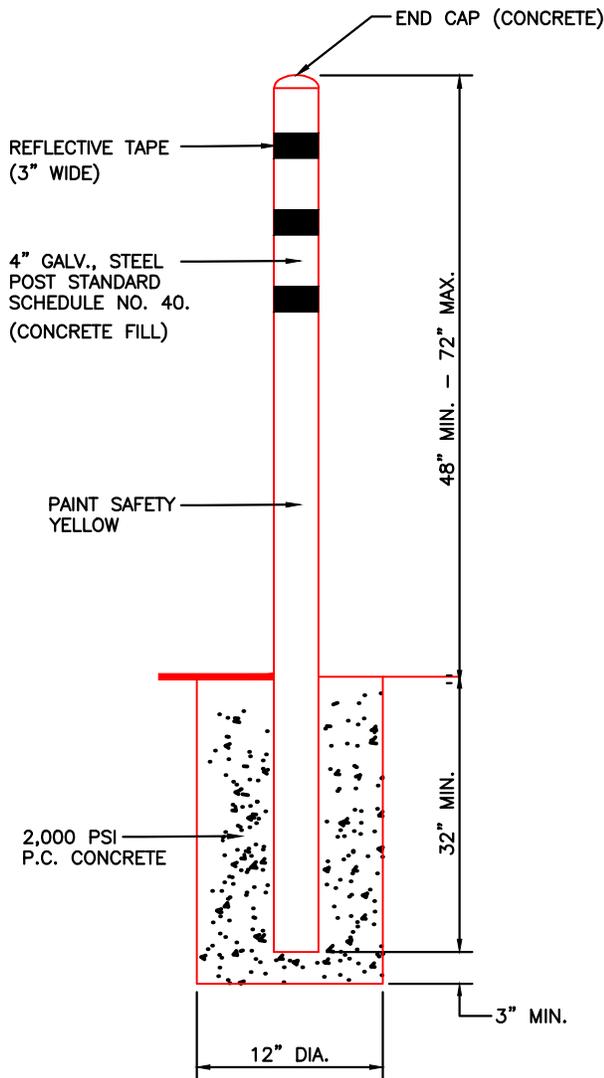
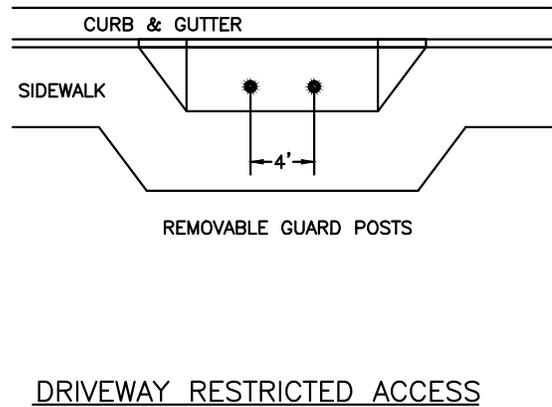
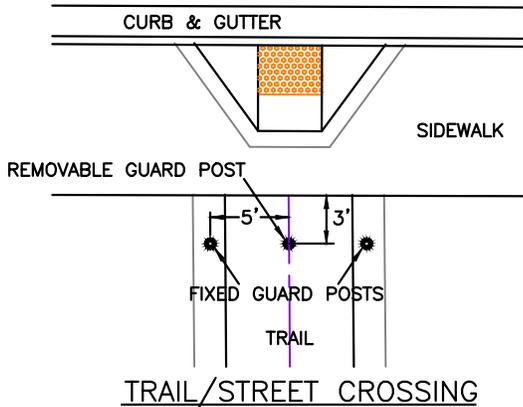
TYPICAL RESIDENTIAL LOT  
DRAINAGE

CITY OF REEDLEY

ST-57



DECORATIVE BOLLARDS MAY BE USED IN PLACE OF GUARD POSTS. SEE STD. PLAN ST-60



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:

STEEL GUARD POST DETAIL

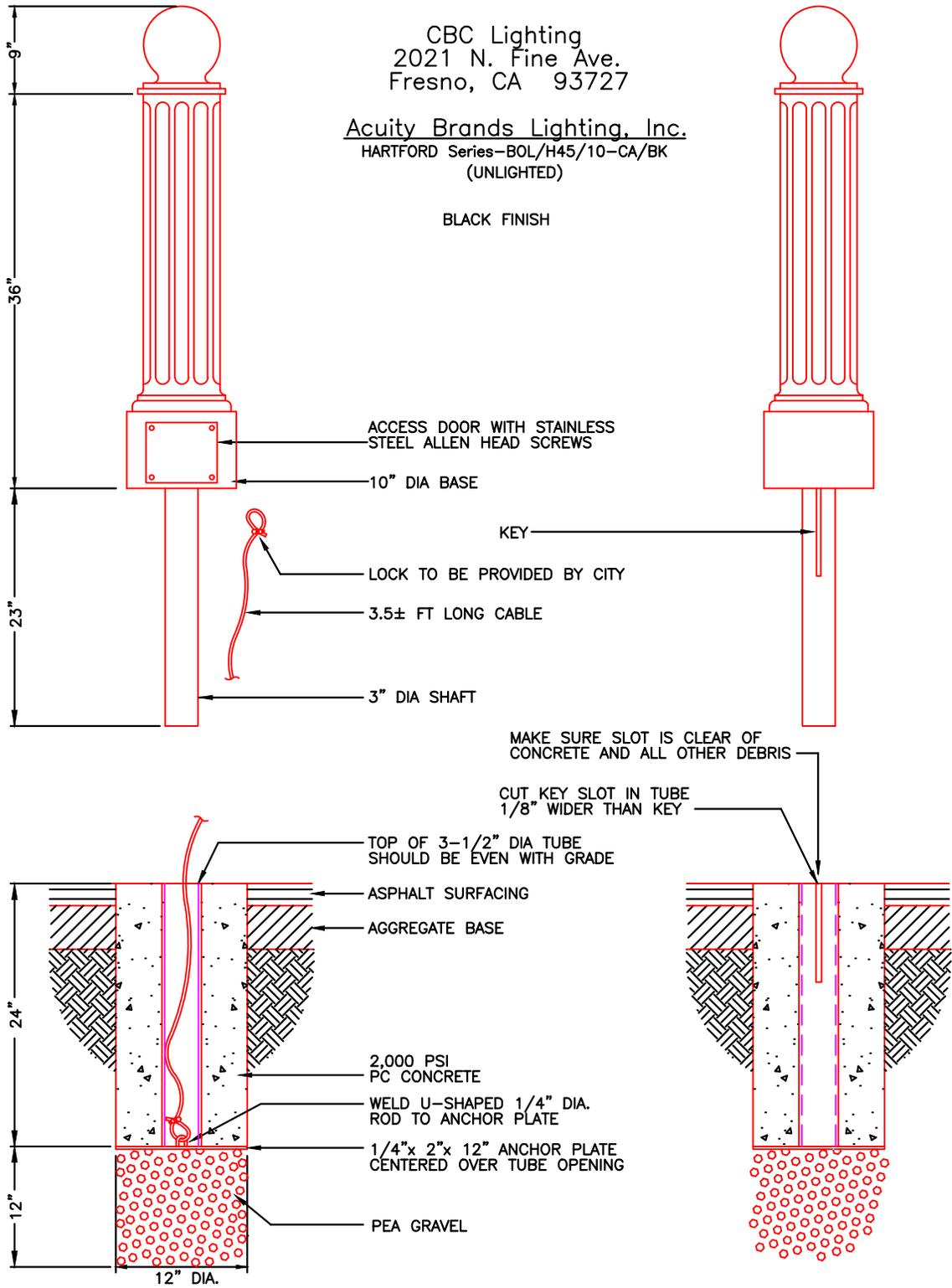
CITY OF REEDLEY

ST-59

CBC Lighting  
 2021 N. Fine Ave.  
 Fresno, CA 93727

Acuity Brands Lighting, Inc.  
 HARTFORD Series-BOL/H45/10-CA/BK  
 (UNLIGHTED)

BLACK FINISH

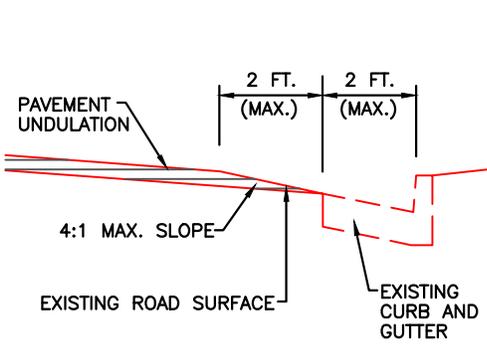
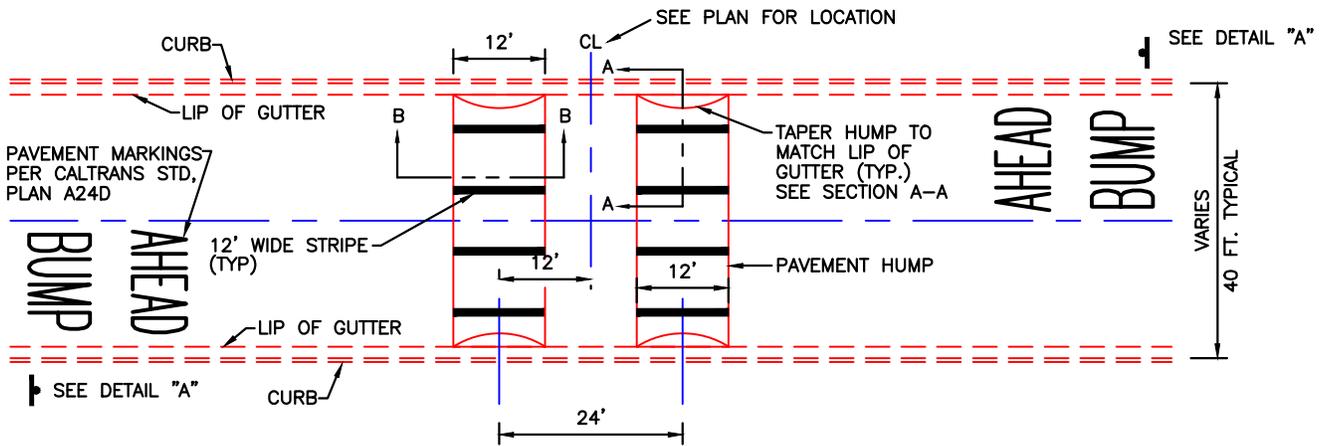


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 REVISED:  
 OCT. 2019  
 REF. STD. DWG.:

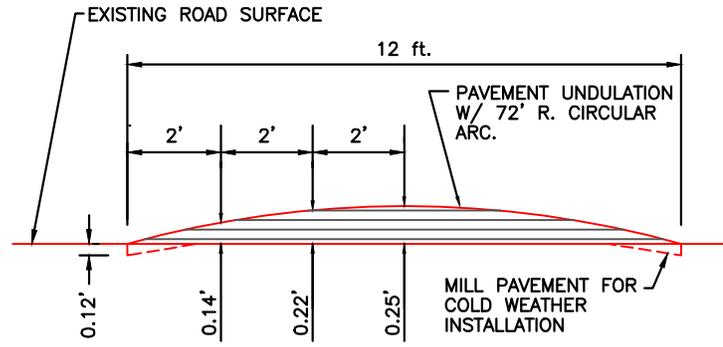
QUICK RELEASE  
 DECORATIVE BOLLARD

CITY OF REEDLEY

ST-60



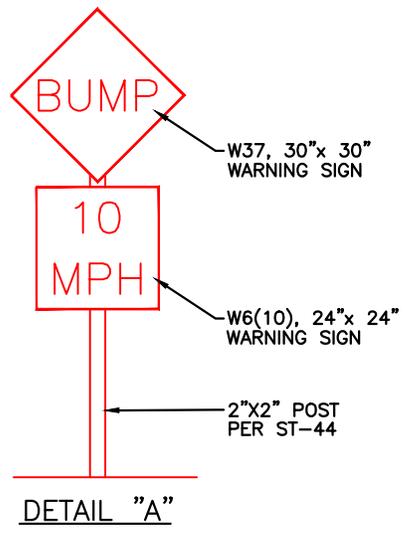
SECTION A-A



SECTION B-B

**INSTALLATION DETAILS**

1. TWO HUMPS 24 FT. APART CENTER TO CENTER SHALL BE CONSTRUCTED AT GIVEN LOCATIONS UNLESS OTHERWISE NOTED.
2. HUMPS SHALL NOT BE PLACED OVER EXISTING ROAD SERVICE COVERS, DRAIN INLETS, ETC.
3. WHENEVER POSSIBLE EDGE OF HUMPS SHALL BE 5 FT. MINIMUM FROM EDGE OF DRIVEWAY.
4. WHENEVER POSSIBLE HUMPS SHALL BE PLACED AT PROPERTY LINES.
5. WHENEVER POSSIBLE HUMPS SHALL BE PLACED ADJACENT TO STREET LIGHTS.
6. PARKING SHALL BE PROHIBITED AS DIRECTED BY THE CITY ENGINEER.
7. ALL STRIPING SHALL BE WHITE, OR YELLOW AT LOCATIONS WITHIN 500 FT. OF A SCHOOL.



**NOTE:**

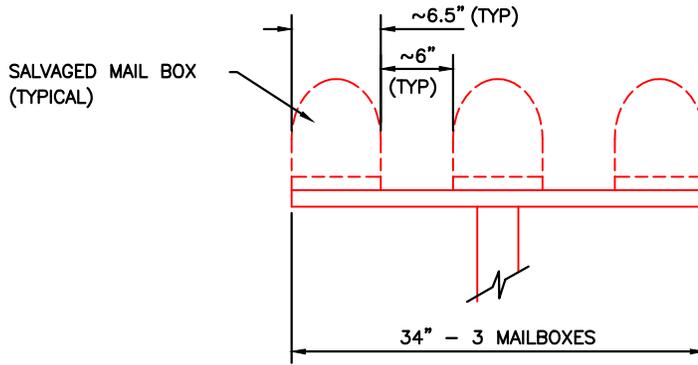
THE LOCATION, FUNDING AND APPROVAL FOR INSTALLATION OF SPEED BUMPS SHALL BE BY RESOLUTION OF THE CITY COUNCIL AFTER REVIEW BY THE TRAFFIC SAFETY COMMISSION. SPEED BUMPS MUST MEET THE CITY OF REEDLEY SPEED BUMP POLICY WARRANT REQUIREMENTS.



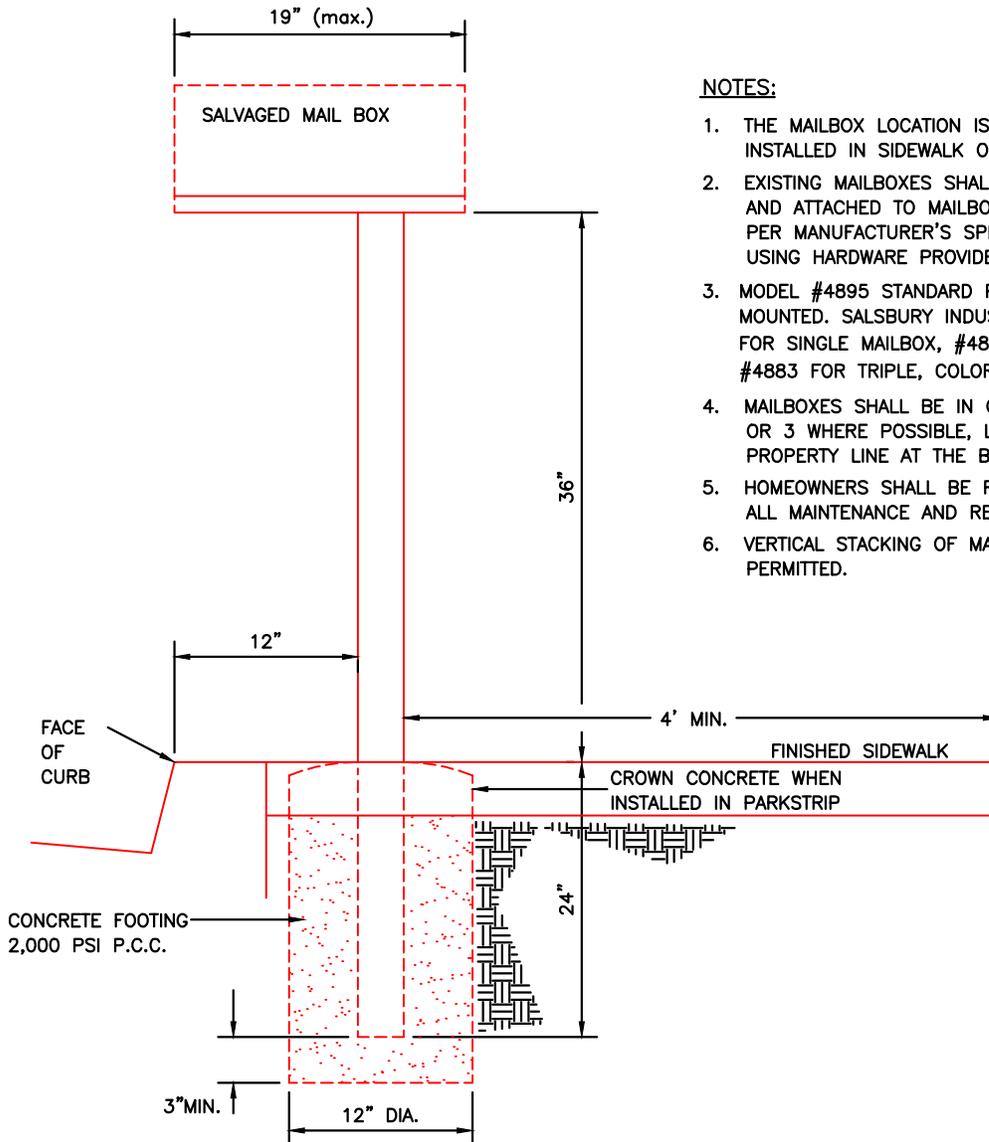
SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-44

**STANDARD SPEED BUMP**

*CITY OF REEDLEY*  
**ST-61**



MAILBOX SUPPORT DETAIL



**NOTES:**

1. THE MAILBOX LOCATION IS THE SAME WHEN INSTALLED IN SIDEWALK OR IN PARKSTRIP.
2. EXISTING MAILBOXES SHALL BE SALVAGED AND ATTACHED TO MAILBOX SUPPORT PER MANUFACTURER'S SPECIFICATIONS USING HARDWARE PROVIDED WITH POST.
3. MODEL #4895 STANDARD POST IN-GROUND MOUNTED. SALSBURY INDUSTRIES OR EQUAL, FOR SINGLE MAILBOX, #4882 FOR DOUBLE AND #4883 FOR TRIPLE, COLOR SHALL BE BLACK.
4. MAILBOXES SHALL BE IN COLLECTIONS OF 2 OR 3 WHERE POSSIBLE, LOCATED AT THE PROPERTY LINE AT THE BACK OF CURB.
5. HOMEOWNERS SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND REPAIR.
6. VERTICAL STACKING OF MAILBOXES IS NOT PERMITTED.

INSTALLATION DETAILS

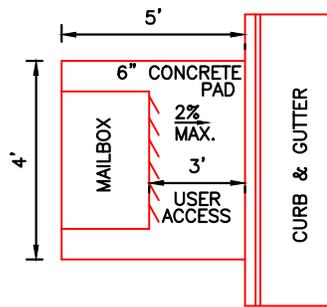


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REVISED:  
OCT. 2019  
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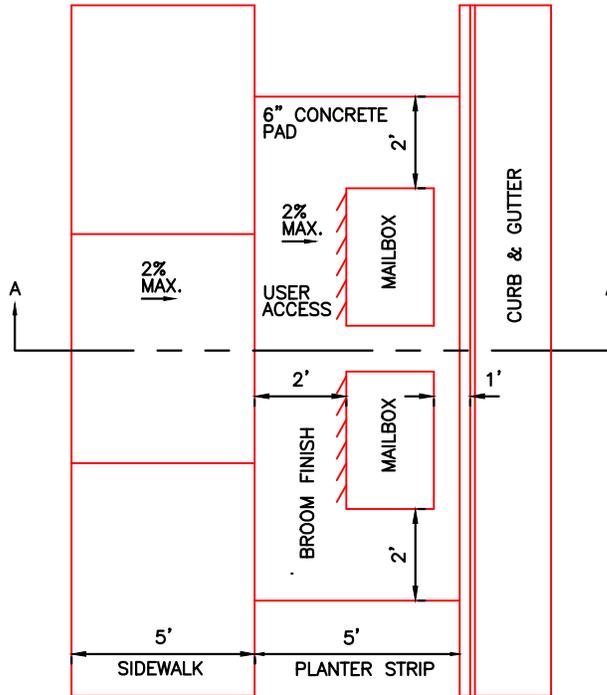
STANDARD MAILBOX POST  
RELOCATION DETAIL

CITY OF REEDLEY

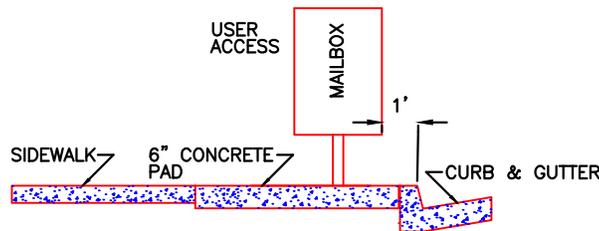
ST-62



PLAN-WITHOUT SIDEWALK



PLAN-IN PARKSTRIP



SECTION A-A

**NOTES:**

1. ALL MAILBOX CLUSTER DESIGNS SHALL BE APPROVED BY THE UNITED STATES POSTAL SERVICE PRIOR TO INSTALLATION.
2. ALL MAILBOX CONCRETE PADS SHALL HAVE 4"x6" WELDED WIRE MESH REINFORCEMENT.

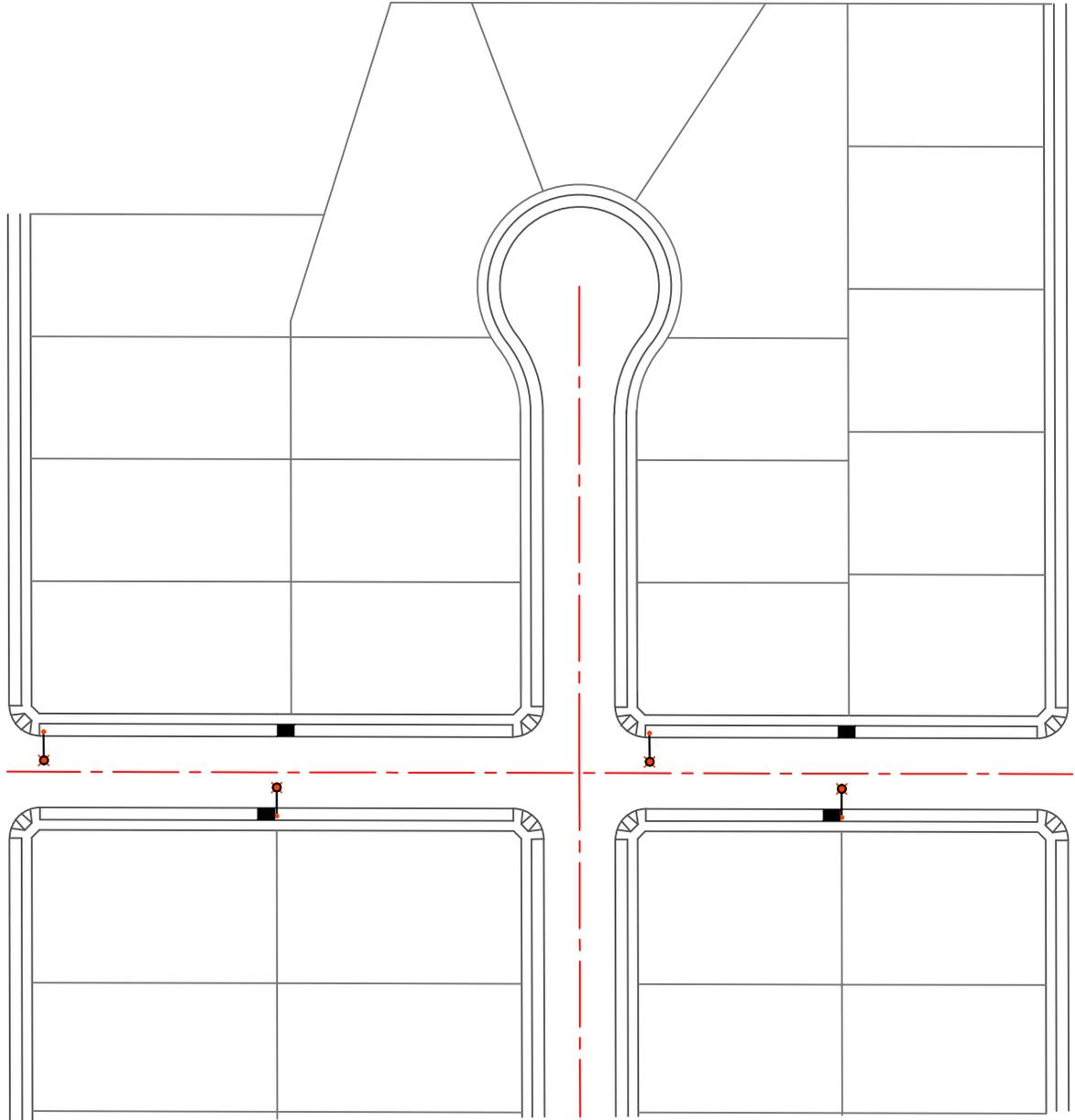


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

TYPICAL MAILBOX CLUSTER  
DETAIL

CITY OF REEDLEY

ST-63



■ TYPICAL MAILBOX CLUSTER LOCATION

**NOTES:**

1. ALL MAILBOX CLUSTER LOCATIONS SHALL BE APPROVED BY THE UNITED STATES POSTAL SERVICE PRIOR TO INSTALLATION.
2. ALL MAILBOX CLUSTER LOCATIONS SHALL HAVE A STREETLIGHT WITHIN 10 FEET OF CONCRETE PAD OR DIRECTLY ACROSS THE STREET.



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**TYPICAL MAILBOX CLUSTER LOCATION**

*CITY OF REEDLEY*

**ST-64**

ORIENTATE PEC TO THE NORTH

SEE DATA TABLE

CAST IRON OR STEEL CAP WITH SET SCREWS

SEE DATA TABLE

30'-0" or 33'-9" MOUNTING HEIGHT

TWO #10 COPPER CONDUCTORS STANDARD (THHN) BETWEEN FUSE AND FIXTURE

LOCAL RESIDENTIAL = 5.75'  
COLLECTOR/ARTERIAL = 24"  
(WITH 10' SIDEWALK WIDTH)

FUSE FOR FIXTURE, 5A W/TRON TYPE FUSE HOLDER  
NO. 3-1/2 PULL BOX WITH #3 REBAR. SEE CITY STD. ST-67 AND ST-73  
SIDEWALK PER CITY STD.  
2% (MIN.)

1-1/2" CONDUIT (SCH. 80 PVC) WITH 18" RADIUS BEND-NO NIPPLES ON VERTICAL RISER AND NO FACTORY 90° BENDS. THREE #6 COPPER CONDUCTORS (XLP)

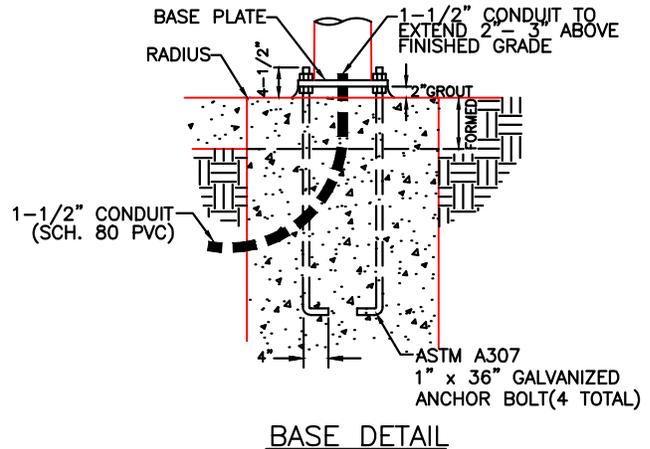
FIELDCAST FOUNDATION 2500 PSI P.C.C.

POLE AND LUMINAIRE ARM DATA

STREET CLASSIFICATION	No. OF LANES	MAST ARM LENGTH	POLE HEIGHT
LOCAL	2	8-FOOT	28-FOOT
COLLECTOR	2	8-FOOT	28-FOOT
	4	12-FOOT	30-FOOT
ARTERIAL	4	12-FOOT	30-FOOT

NOTES:

1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, BUSINESS AND TRANSPORTATION AGENCY, DEPARTMENT OF TRANSPORTATION AND NATIONAL ELECTRICAL CODE, AND THESE PROVISIONS.
2. REFER TO PLAN SHEET OR ST-69 FOR PLACEMENT AND WATTAGE EQUIVALENCY REQUIREMENTS.
3. ALL STREET LIGHTS SHALL BE NUMBERED. REFER TO ST-70.
4. THE DEVELOPER SHALL APPLY FOR RULE 16 WITH PG&E.
5. THE CITY SHALL REQUEST STREET LIGHT ACTIVATION WITH PG&E PRIOR TO NOTICE OF COMPLETION.
6. LUMINAIRE SHALL BE:  
HPS 70W EQUIVALENT CREE  
STR-LWY-2S-HT-03-E-UL-SV-525-40K-DIM-UTL-R  
HPS 100W EQUIVALENT CREE  
STR-LWY-2S-HT-04-E-UL-SV-525-40K-DIM-UTL-R  
HPS 150W EQUIVALENT CREE  
STR-LWY-2S-HT-05-E-UL-SV-525-40K-DIM-UTL-R



LIGHT STANDARD  
TYPE 15

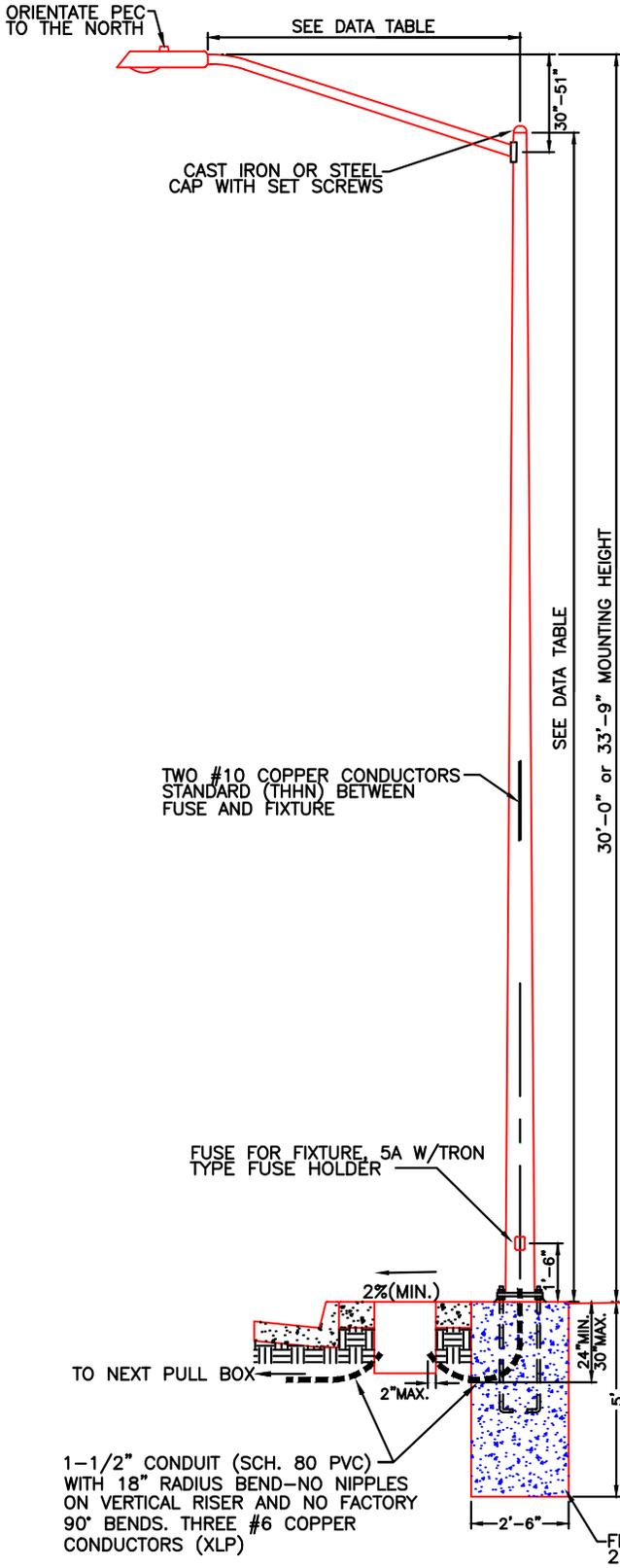


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-67, 69, 70 & 73

STREET LIGHT STANDARD

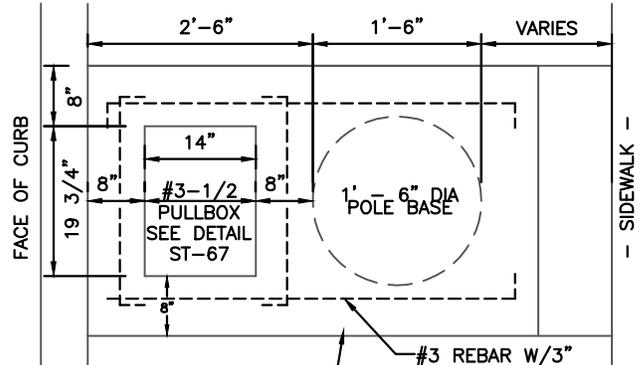
CITY OF REEDLEY

ST-65



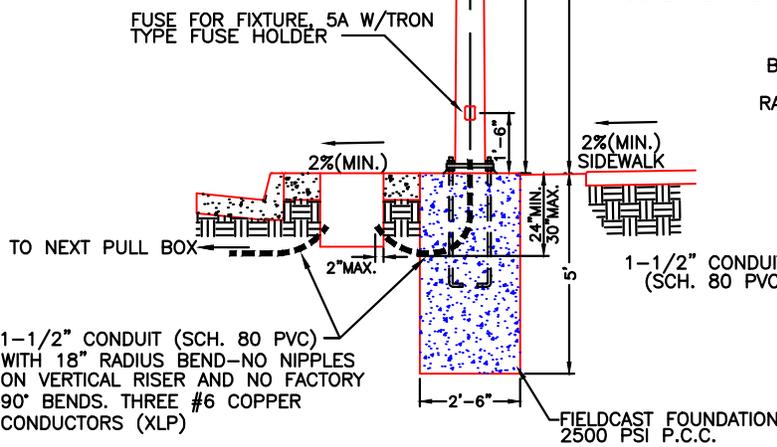
POLE AND LUMINAIRE ARM DATA			
STREET CLASSIFICATION	No. OF LANES	MAST ARM LENGTH	POLE HEIGHT
LOCAL	2	8-FOOT	28-FOOT
COLLECTOR	2	8-FOOT	28-FOOT
	4	12-FOOT	30-FOOT
ARTERIAL	4	12-FOOT	30-FOOT

- NOTES:**
1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, BUSINESS AND TRANSPORTATION AGENCY, DEPARTMENT OF TRANSPORTATION AND NATIONAL ELECTRICAL CODE, AND THESE PROVISIONS.
  2. REFER TO PLAN SHEET OR ST-69 FOR PLACEMENT AND WATTAGE EQUIVALENCY REQUIREMENTS.
  3. ALL STREET LIGHTS SHALL BE NUMBERED. REFER TO ST-70.
  4. THE DEVELOPER SHALL APPLY FOR RULE 16 WITH PG&E.
  5. THE CITY SHALL REQUEST STREET LIGHT ACTIVATION WITH PG&E PRIOR TO NOTICE OF COMPLETION.
  6. LUMINAIRE SHALL BE:  
 HPS 70W EQUIVALENT CREE  
 STR-LWY-2S-HT-03-E-UL-SV-525-40K-DIM-UTL-R  
 HPS 100W EQUIVALENT CREE  
 STR-LWY-2S-HT-04-E-UL-SV-525-40K-DIM-UTL-R  
 HPS 150W EQUIVALENT CREE  
 STR-LWY-2S-HT-05-E-UL-SV-525-40K-DIM-UTL-R

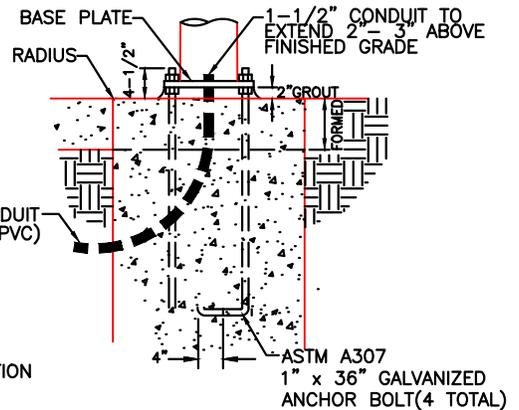


4" THICK CONCRETE, FORMED AND POURED AS A 3' X 5' CAP. SLOPE (-)2% FROM TOP OF CONCRETE POLE FOUNDATION TOWARDS TOP OF CURB

**PLAN VIEW**



**LIGHT STANDARD**  
TYPE 15



**BASE DETAIL**



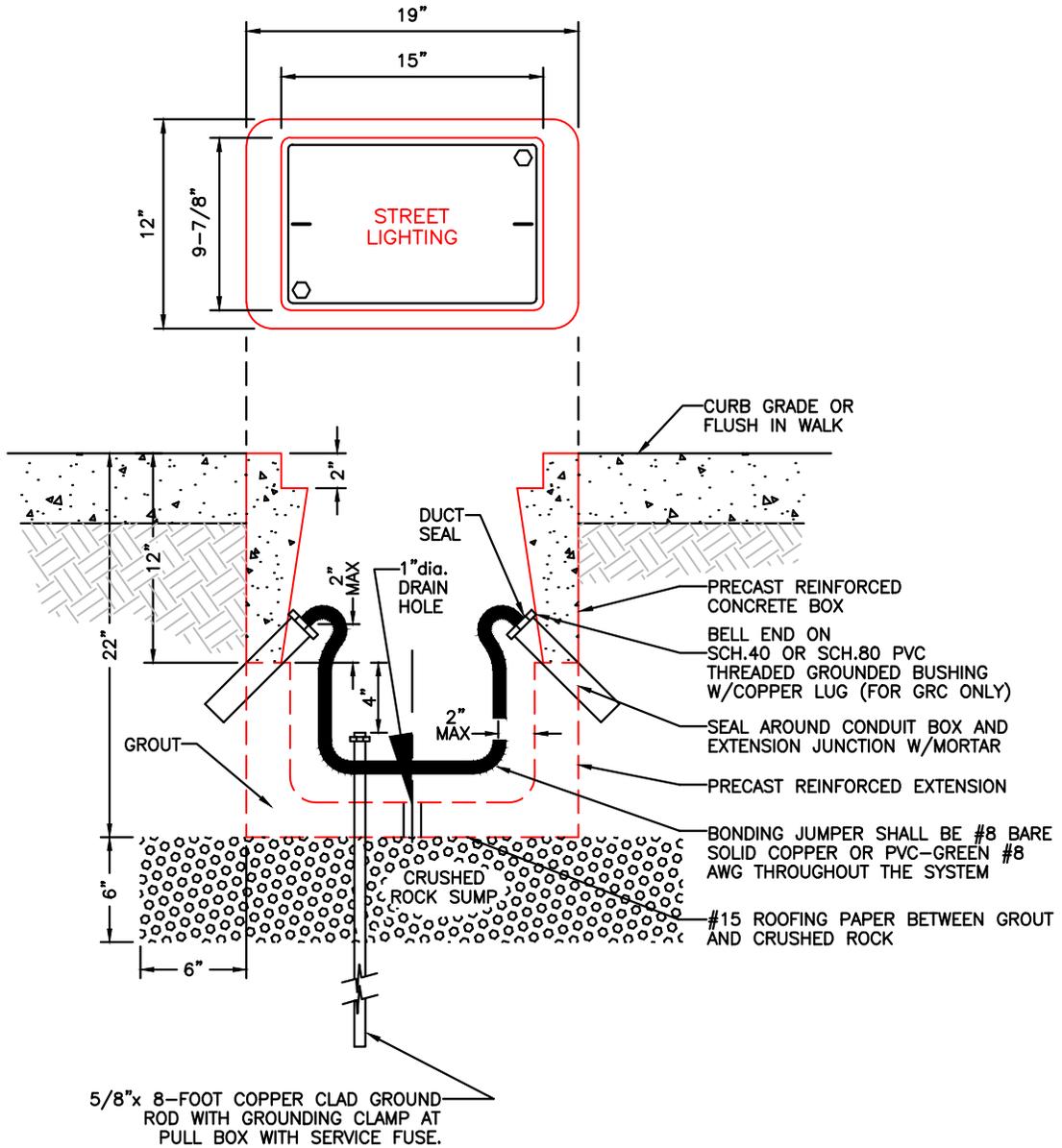
SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-67, 69, 70 & 73

**STREET LIGHT STANDARD**

(LOCATED WITHIN PLANTER STRIP)

*CITY OF REEDLEY*

**ST-66**



**NOTES:**

1. PULL BOXES SHALL BE NO. 3-1/2 AS PER CAL TRANS STANDARD SPECIFICATIONS OR CHRISTY N-9 OR APPROVED EQUAL.
2. PULL BOXES SHALL BE GROUTED PRIOR TO INSTALLATION OF CONDUCTORS SLOPED TOWARD THE DRAIN HOLE. PLACE A LAYER OF ROOFING PAPER BETWEEN THE CRUSHED ROCK AND THE GROUT.
3. PULL LIDS BEFORE POURING CONCRETE AROUND PULL BOXES.
4. WRAP PULL BOX WITH ROOFING PAPER BEFORE BACKFILLING.
5. FUSE AT POINT OF SERVICE SHALL BE 60A IF #6 CONDUCTOR AND 40A IF #8 CONDUCTOR AND SHALL HAVE A TRON TYPE FUSE HOLDER (SINGLE POLE).
6. INSTALL A ONE-FOOT RING OF CONCRETE, FOUR INCHES DEEP, AROUND THE WRAPPED PULL BOX INSTALLED IN DIRT AREA, SLOPED TO DRAIN AWAY FROM THE PULL BOX.
7. ALL LIDS ON ALL UTILITY BOXES SHALL HAVE LOCKING BOLTS.

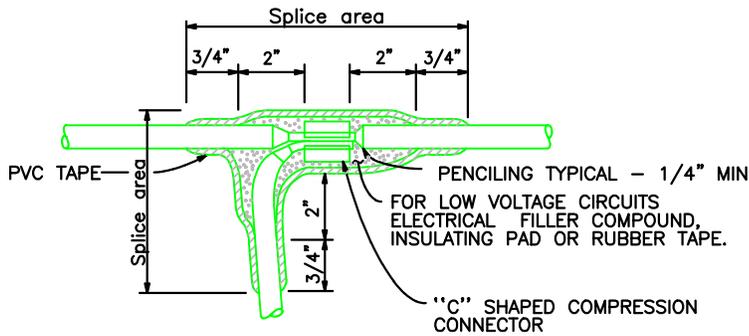


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

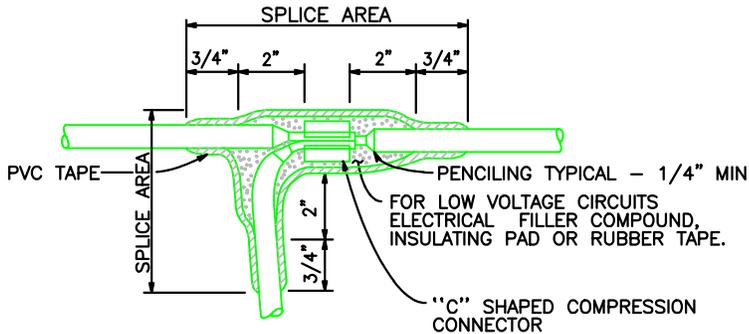
**STREET LIGHT STANDARD  
PULL BOX**

*CITY OF REEDLEY*

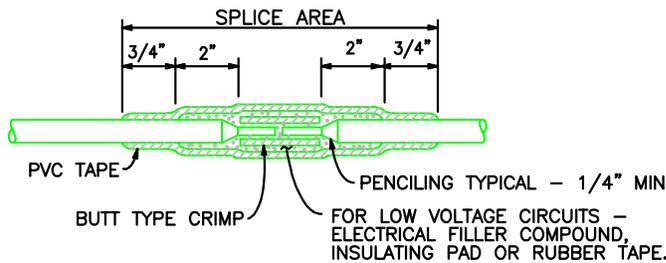
**ST-67**



**TYPE "C" SPLICE**  
BETWEEN 1 FREE-END AND 1 THROUGH CONDUCTOR



**TYPE "T" SPLICE**  
FOR 3 FREE-ENDS



**TYPE "S" SPLICE**  
BETWEEN 2 FREE-ENDS

**LOW VOLTAGE CIRCUITS (0-600 V)**  
**INSTALLATION METHODS**

**METHOD "A" (USED ONLY WHEN SPECIFIED)**

1. COMPLETELY COVER THE SPLICE AREA WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.
2. APPLY ELECTRICAL FILLER COMPOUND WITH MINIMUM THICKNESS OF 0.15".
3. APPLY 3 LAYERS HALF LAPPED POLYVINYL CHLORIDE TAPE.
4. COVER ENTIRE SPLICE WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.

OR

**METHOD "B"**

1. COMPLETELY COVER THE SPLICE AREA WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.
2. APPLY 2 LAYERS OF ELECTRICAL INSULATING PAD WITH MIN. THICKNESS OF 0.15" EACH LAYER OR 2 LAYERS, HALF LAPPED, SYNTHETIC OIL RESISTANT, SELF FUSING RUBBER TAPE.
3. APPLY 3 LAYERS HALF LAPPED POLYVINYL CHLORIDE TAPE.
4. COVER ENTIRE SPLICE WITH ELECTRICAL INSULATING COATING AND ALLOW TO DRY.

**NOTES:**

1. ALL DIMENSIONS ARE MINIMUM.
2. RUBBER TAPES SHALL BE ROLLED AFTER APPLICATION.

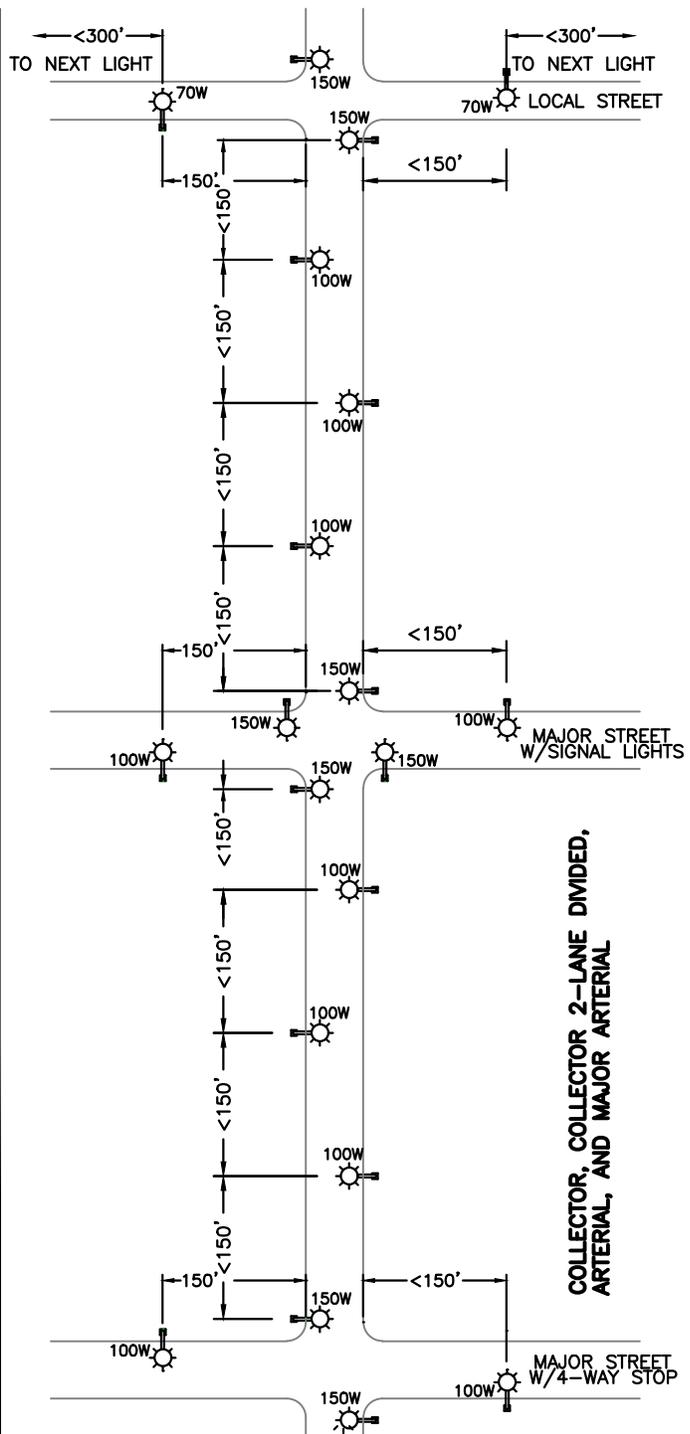
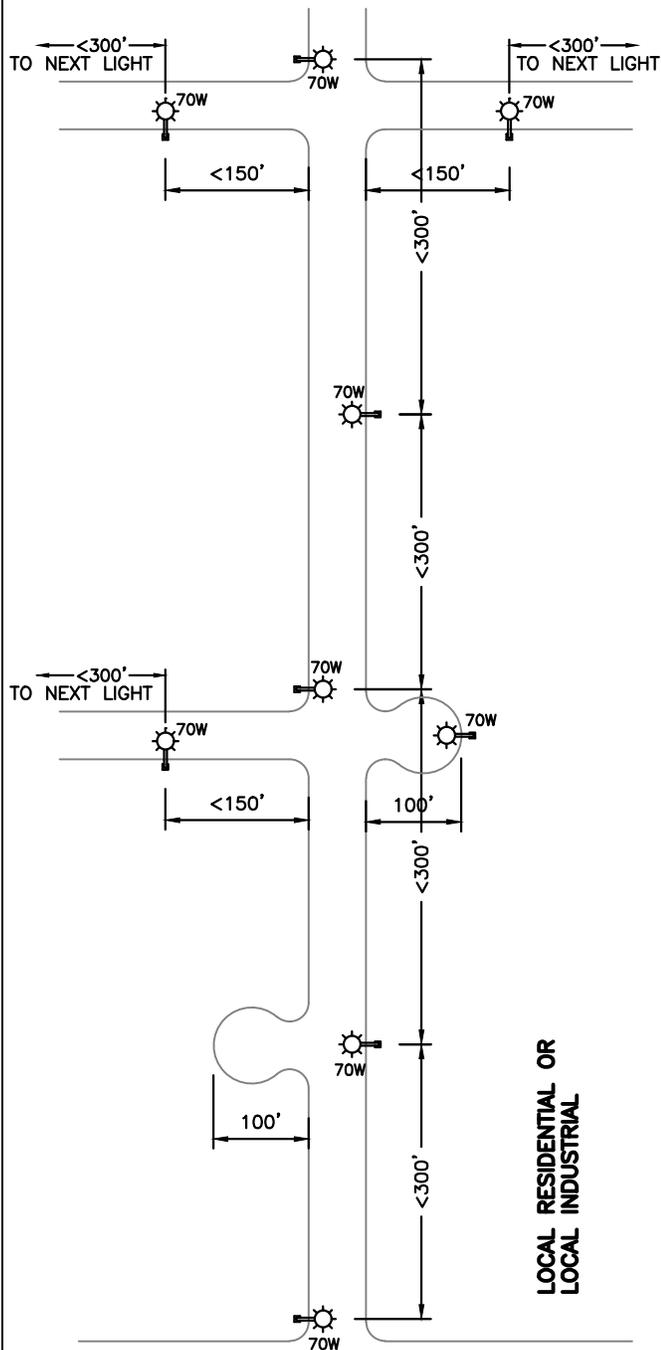


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**STREET LIGHT AND  
ELECTRICAL SYSTEMS  
SPLICING DETAILS**

*CITY OF REEDLEY*

**ST-68**



**PLACEMENT REQUIREMENTS**

**STREET CLASSIFICATION**  
 LOCAL RESIDENTIAL  
 LOCAL INDUSTRIAL  
 COLLECTOR  
 COLLECTOR 2-LANE DIVIDED  
 ARTERIAL  
 MAJOR ARTERIAL

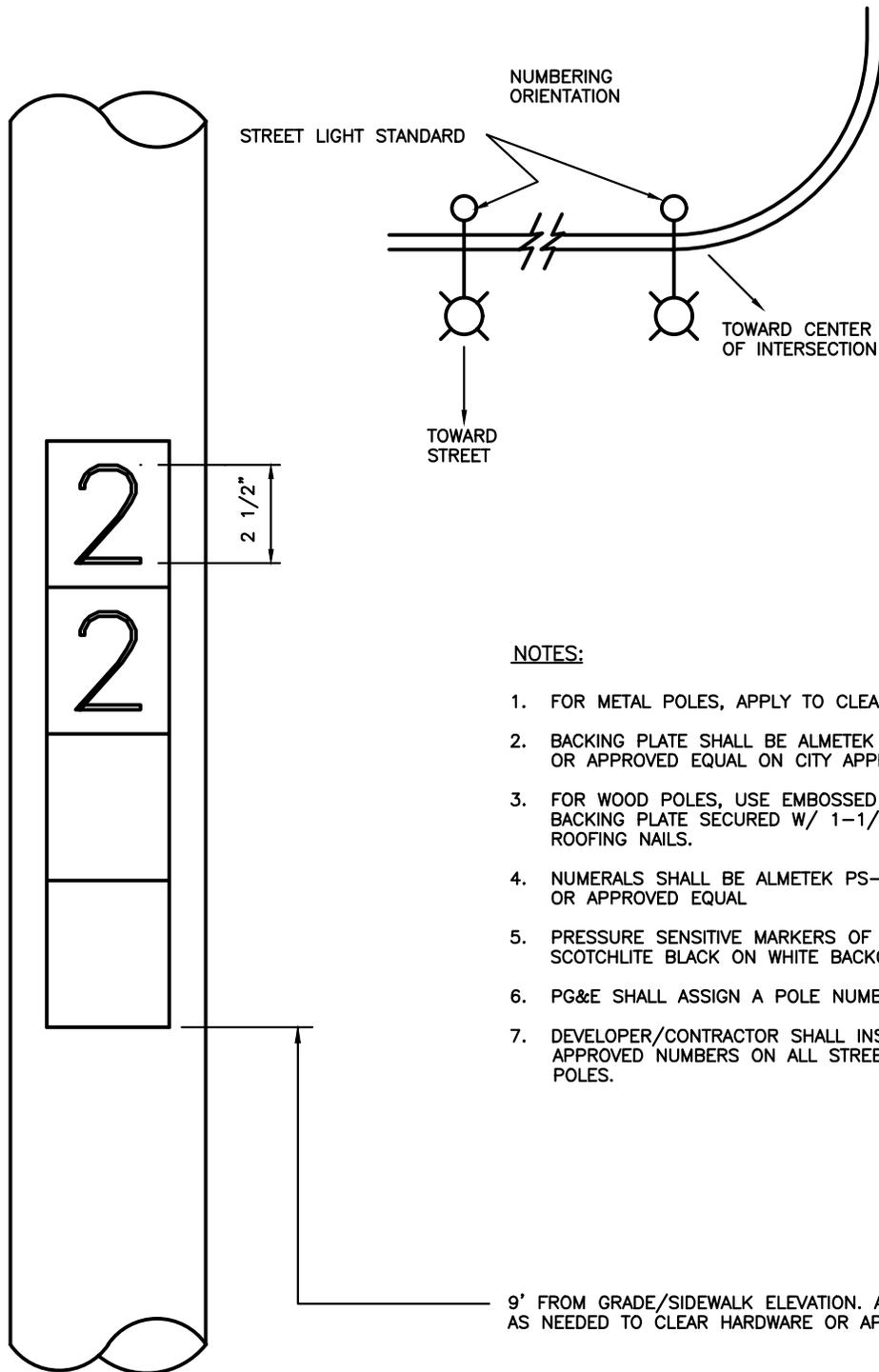
**MAXIMUM DISTANCE BETWEEN LIGHTS**  
 300' EITHER SIDE OF STREET 70 WATT LIGHTS EQUIVALENT  
 300' ON BOTH SIDES OF STREET, STAGGERED AT 150'  
 150 WATT LIGHTS EQUIVALENT AT INTERSECTIONS  
 100 WATT LIGHTS EQUIVALENT MID BLOCK



SCALE:  
 NOT TO SCALE  
 REVISED:  
 OCT. 2019  
 REF. STD. DWG.:

**STREET LIGHT PLACEMENT**

*CITY OF REEDLEY*  
**ST-69**



**NOTES:**

1. FOR METAL POLES, APPLY TO CLEAN SURFACE.
2. BACKING PLATE SHALL BE ALMETEK EMP-2.5V5 OR APPROVED EQUAL ON CITY APPROVED POLES.
3. FOR WOOD POLES, USE EMBOSSED ALUMINUM BACKING PLATE SECURED W/ 1-1/2" ALUMINUM ROOFING NAILS.
4. NUMERALS SHALL BE ALMETEK PS-2.5 SERIES OR APPROVED EQUAL
5. PRESSURE SENSITIVE MARKERS OF REFLECTIVE SCOTCHLITE BLACK ON WHITE BACKGROUND.
6. PG&E SHALL ASSIGN A POLE NUMBER.
7. DEVELOPER/CONTRACTOR SHALL INSTALL CITY APPROVED NUMBERS ON ALL STREET LIGHT POLES.



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:

**STREET LIGHT POLE  
NUMBERING**

*CITY OF REEDLEY*

**ST-70**



SCALE:  
NOT TO SCALE

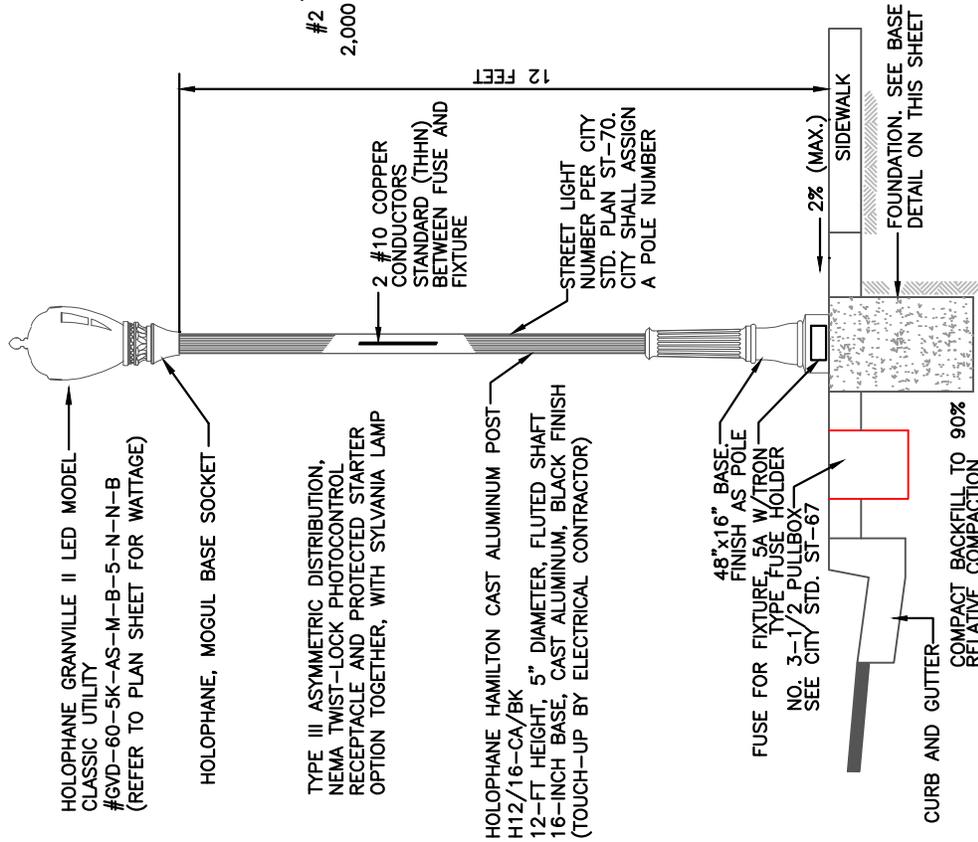
REVISED:  
OCT. 2019

REF. STD. DWG.:  
ST-67, 70 & 73

# HISTORIC LIGHT STANDARD

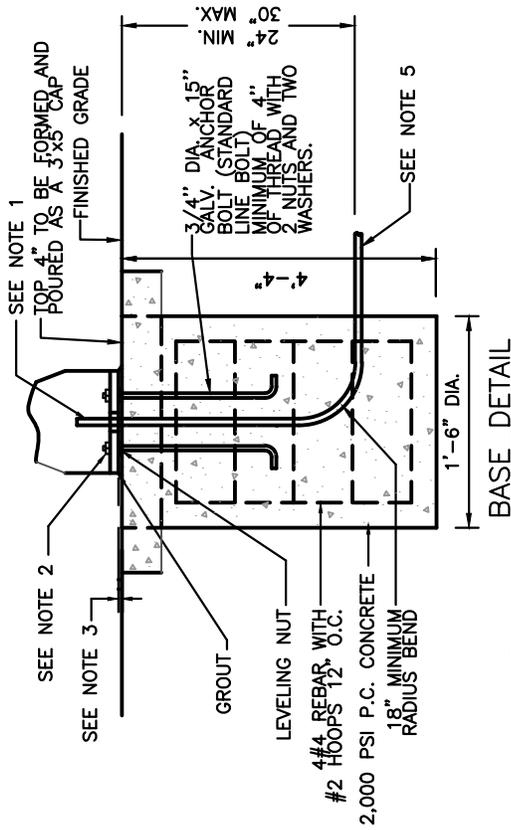
CITY OF REEDLEY

ST-71



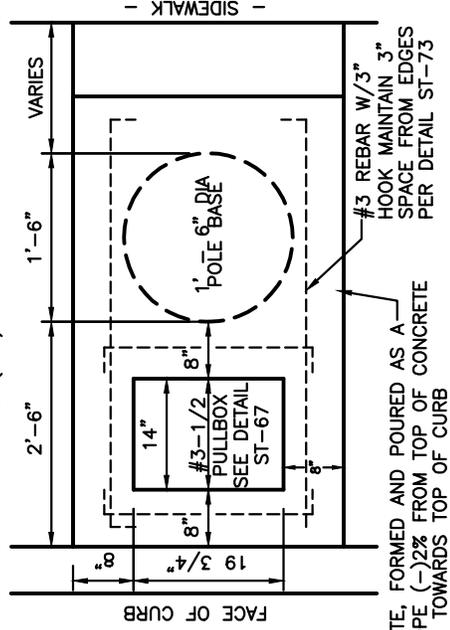
**GENERAL NOTES:**

1. THE DEVELOPER SHALL APPLY FOR RULE 16 WITH PG&E.
2. ORIENTATE PHOTO ELECTRIC CELL (PEC) TO THE NORTH.
3. THE CITY SHALL REQUEST STREET LIGHT ACTIVATION WITH PG&E PRIOR TO NOTICE OF COMPLETION.



**NOTES:**

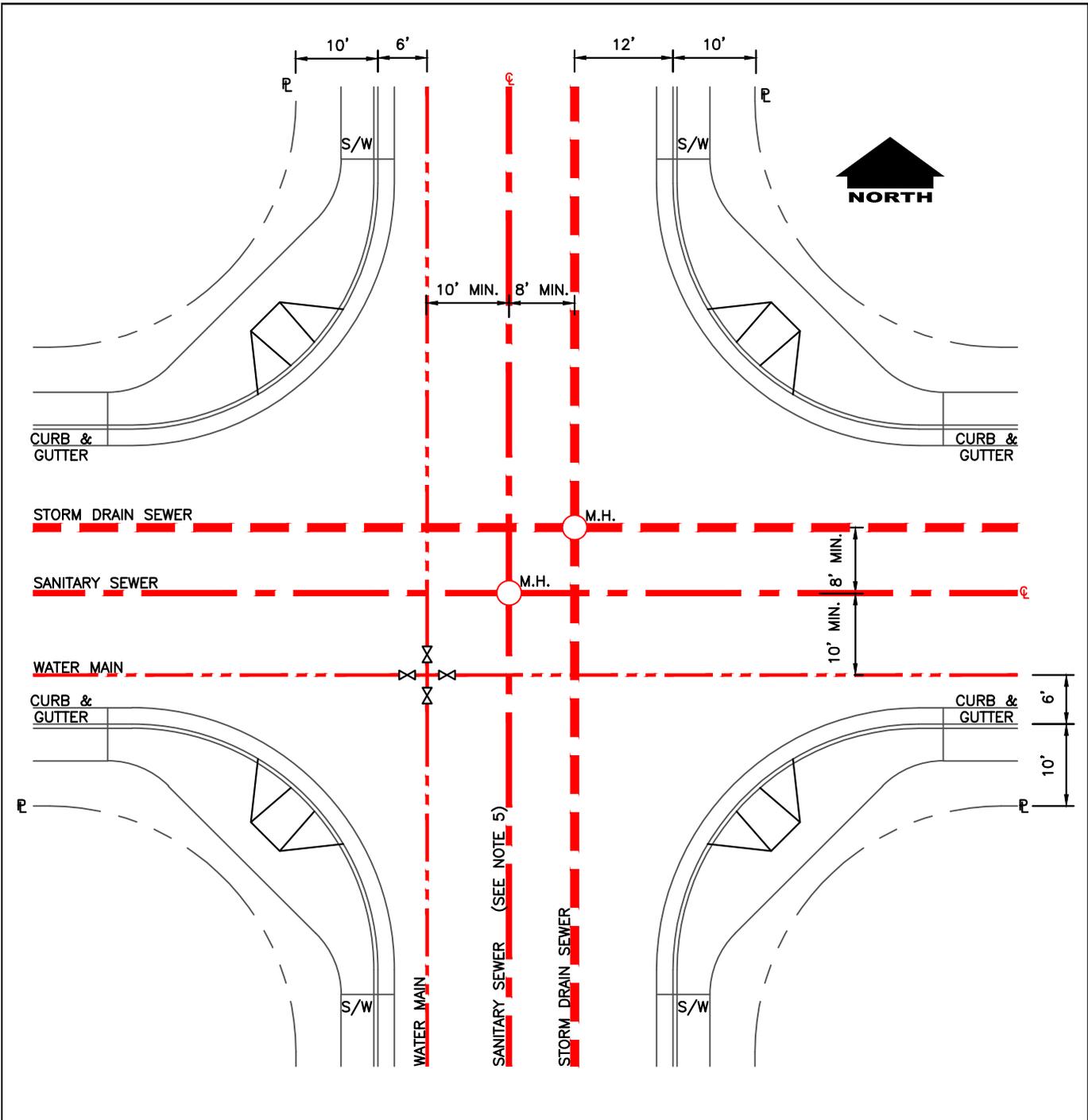
1. CONDUITS SHALL EXTEND 2" MAXIMUM ABOVE BASE PLATE.
2. THREADED PORTION OF ANCHOR BOLTS NOT TO EXTEND MORE THAN 1" ABOVE TOP OF HOLD DOWN NUT.
3. 2" (MAX.) FROM BOTTOM OF STEEL BASE PLATE TO FINISHED SURFACE.
4. #4 REBAR CAGE PER DETAIL NOTE ABOVE
5. 1-1/2" CONDUIT WITH 18" RADIUS BEND—NO NIPPLES ON VERTICAL RISER AND NO FACTORY 90° BENDS. THREE #6 COPPER CONDUCTORS (XLP)



- 4" THICK CONCRETE, FORMED AND POURED AS A 3' X 5' CAP. SLOPE (-)2% FROM TOP OF CONCRETE POLE FOUNDATION TOWARDS TOP OF CURB

**PLAN VIEW**

**STREET LIGHT AND PULL BOX LOCATION**



**NOTES:**

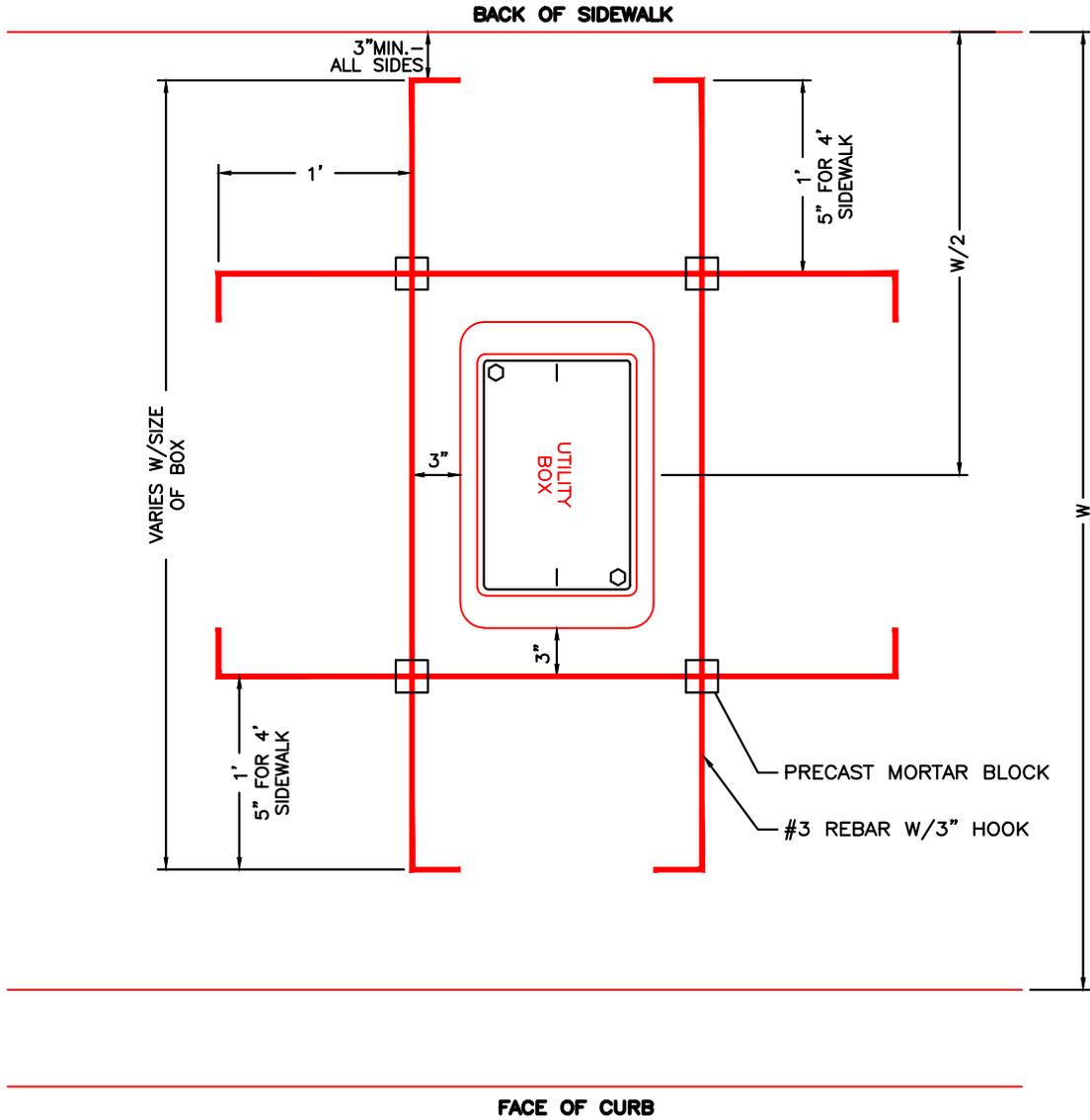
1. THIS "STANDARD" IS A GUIDE ONLY AND DEVIATIONS WILL BE ACCEPTABLE WHERE CONDITIONS DICTATE.
2. DIMENSIONS SHOWN ARE DESIRABLE BUT DO NOT GOVERN.
3. THE INTENTION IS TO SHOW THE RELATIVE POSITION OF ALL UTILITIES.
4. ANY CHANGES OR DEVIATION MUST BE APPROVED BY THE CITY ENGINEER.
5. IN STREETS WITH A MEDIAN ISLAND THE SEWER MAIN SHALL BE LOCATED 5 FEET FROM THE MEDIAN ISLAND CURB FACE ON THE OPPOSITE SIDE OF THE STORM DRAIN PIPELINE.



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**UNDERGROUND UTILITIES  
LOCATION**

*CITY OF REEDLEY*  
**ST-72**



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:

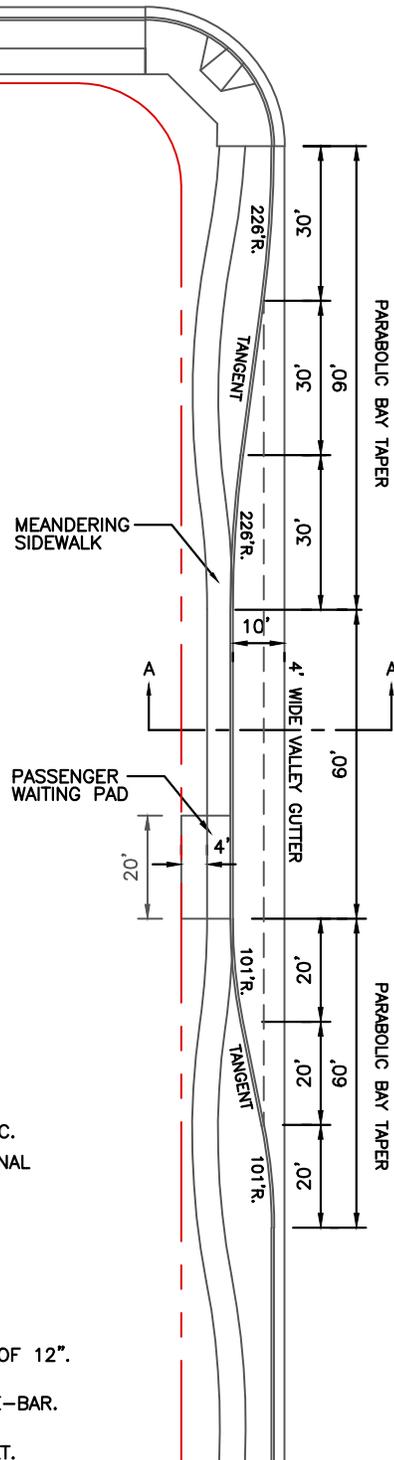
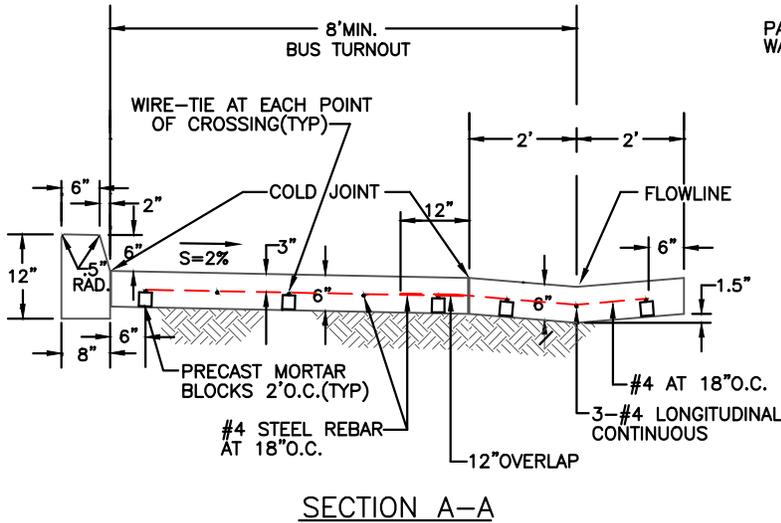
UTILITY BOX  
REINFORCEMENT DETAIL

CITY OF REEDLEY

ST-73

**GENERAL NOTES:**

1. THIS "STANDARD" IS A GUIDE ONLY AND DEVIATIONS WILL BE ACCEPTABLE WHERE CONDITIONS DICTATE.
2. DIMENSIONS SHOWN ARE DESIRABLE BUT DO NOT GOVERN.
3. ANY CHANGES OR DEVIATION MUST BE APPROVED BY THE CITY ENGINEER.



**NOTES:**

1. O.G. 95% RELATIVE COMPACTION BENEATH CONCRETE SLAB TO DEPTH OF 12".
2. CONCRETE FOR SLAB SHALL BE CLASS 'B' 3500 PSI.
3. MAINTAIN 6" CLEARANCE BETWEEN ALL JOINTS AND ENDS OF STEEL RE-BAR.
4. EXPANSION JOINTS AT EACH 60 FOOT TANGENT POINT.
5. WEAKENED PLANE JOINTS SHALL BE PLACED AT A SPACING OF 20 FEET.



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

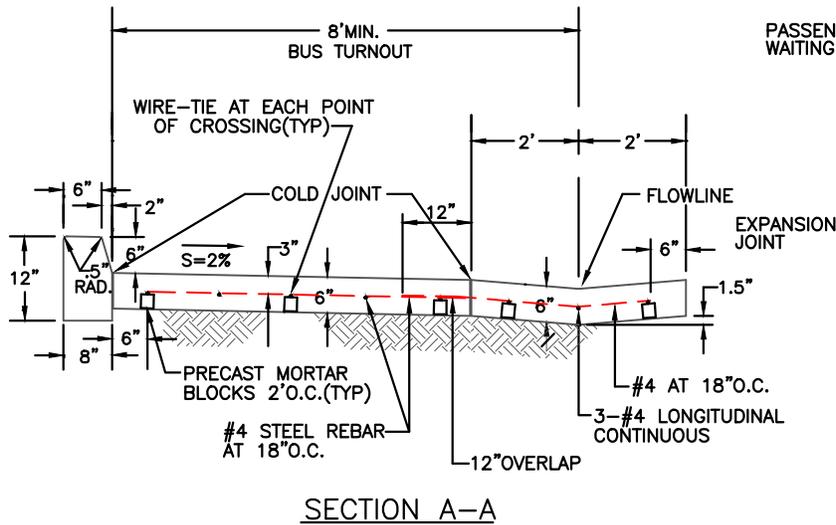
**MID-BLOCK BUS TURNOUT  
DESIGN WITH MINIMUM OF  
17' LANDSCAPE BUFFER**

*CITY OF REEDLEY*

**ST-74**

**GENERAL NOTES:**

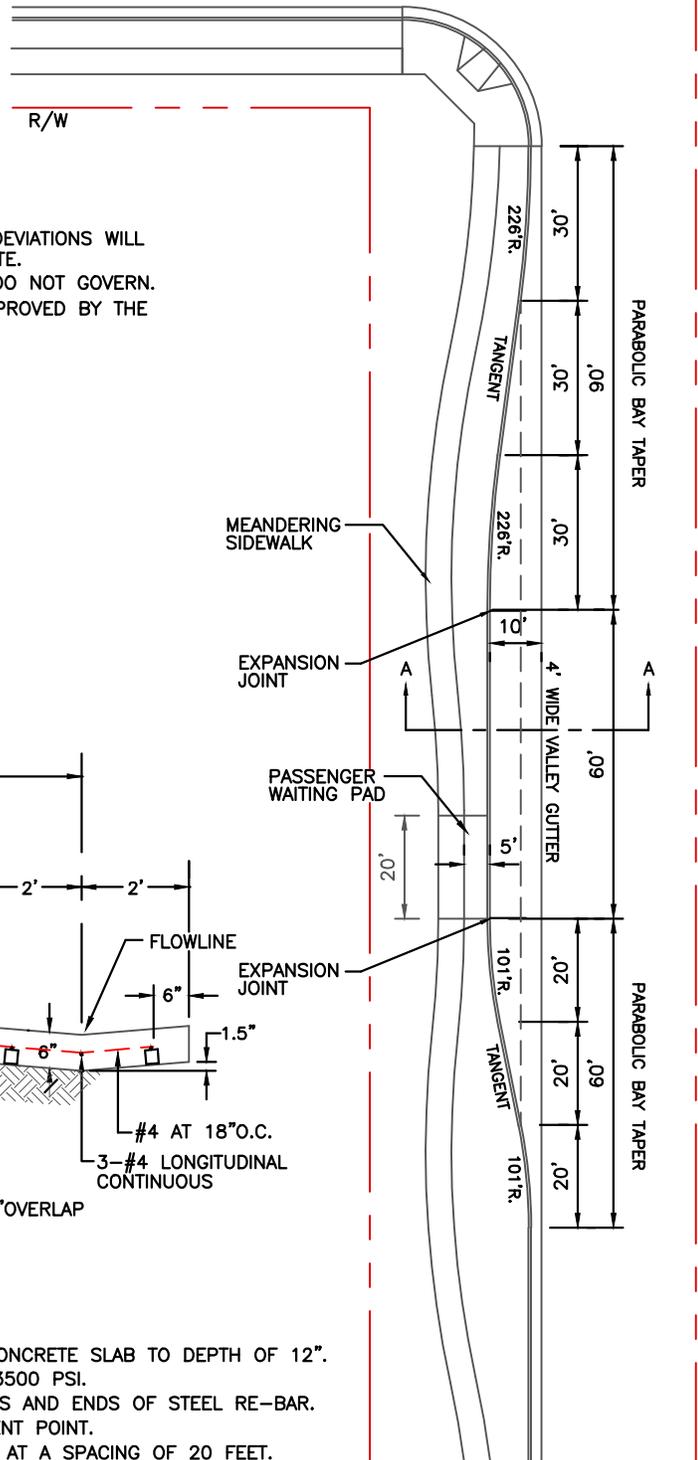
1. THIS "STANDARD" IS A GUIDE ONLY AND DEVIATIONS WILL BE ACCEPTABLE WHERE CONDITIONS DICTATE.
2. DIMENSIONS SHOWN ARE DESIRABLE BUT DO NOT GOVERN.
3. ANY CHANGES OR DEVIATION MUST BE APPROVED BY THE CITY ENGINEER.



**SECTION A-A**

**NOTES:**

1. O.G. 95% RELATIVE COMPACTION BENEATH CONCRETE SLAB TO DEPTH OF 12".
2. CONCRETE FOR SLAB SHALL BE CLASS 'B' 3500 PSI.
3. MAINTAIN 6" CLEARANCE BETWEEN ALL JOINTS AND ENDS OF STEEL RE-BAR.
4. EXPANSION JOINTS AT EACH 60 FOOT TANGENT POINT.
5. WEAKENED PLANE JOINTS SHALL BE PLACED AT A SPACING OF 20 FEET.

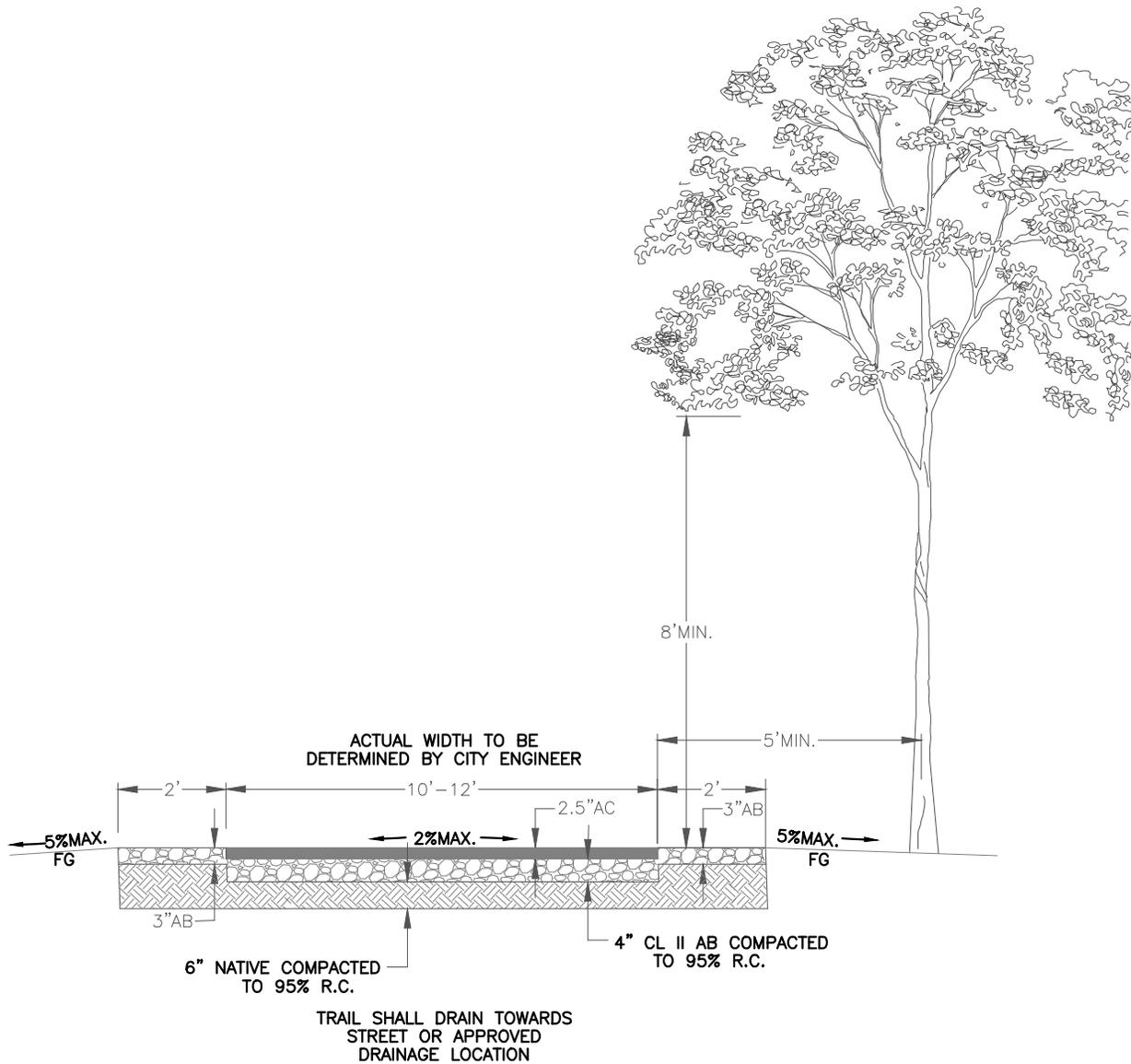


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**MID-BLOCK BUS TURNOUT  
DESIGN WITH GREATER THAN  
24' LANDSCAPE BUFFER**

*CITY OF REEDLEY*

**ST-75**



**NOTES:**

1. THIS STANDARD SHALL BE USED ONLY UPON APPROVAL BY CITY ENGINEER.
2. CITY ENGINEER MAY PERMIT A CURVILINEAR DESIGN. PRECISE DATA SHALL BE PROVIDED TO STAKE THE ALIGNMENT AND SET APPROPRIATE GRADES.



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:

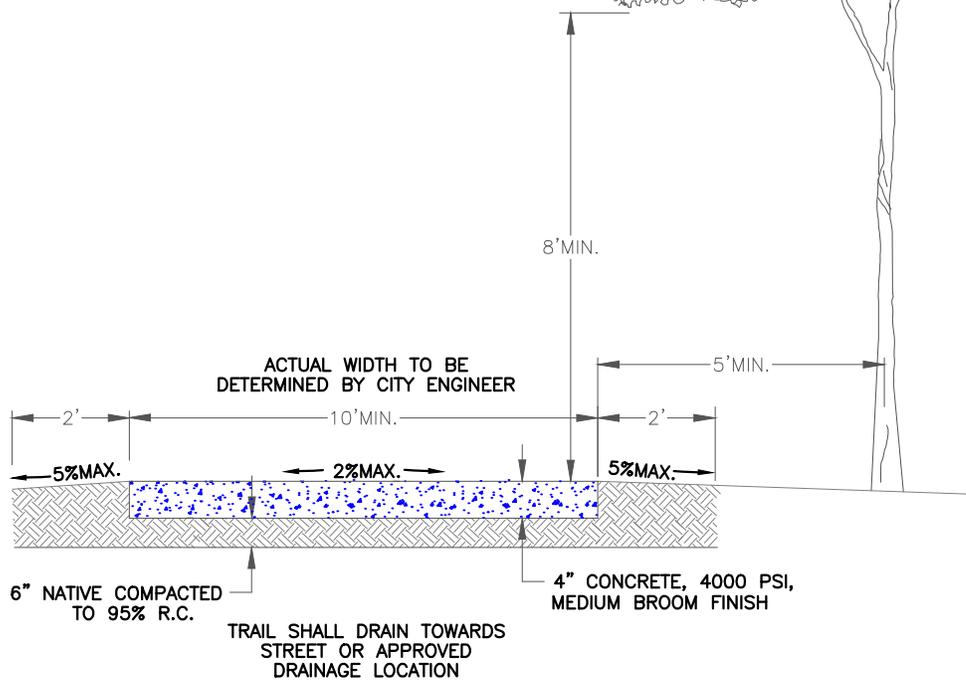
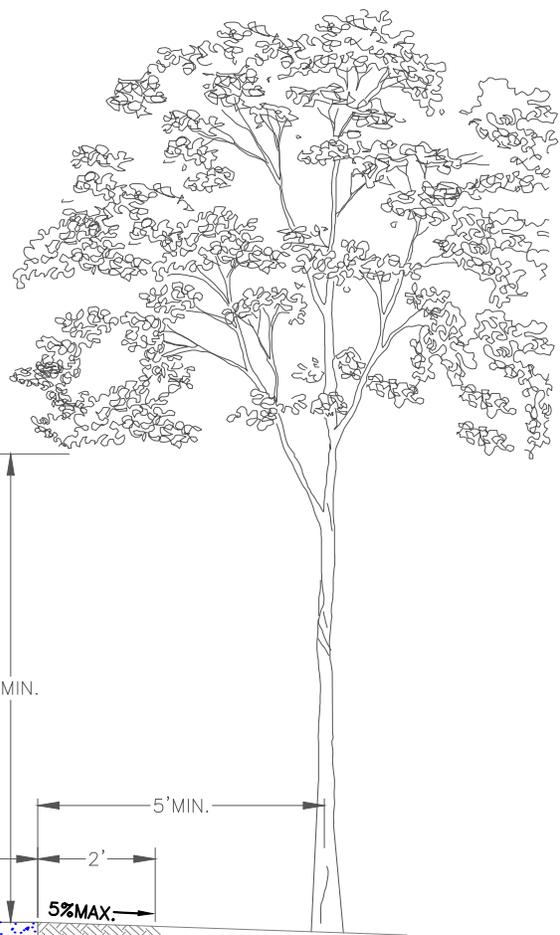
**ASPHALT  
MULTI-PURPOSE TRAIL**

*CITY OF REEDLEY*

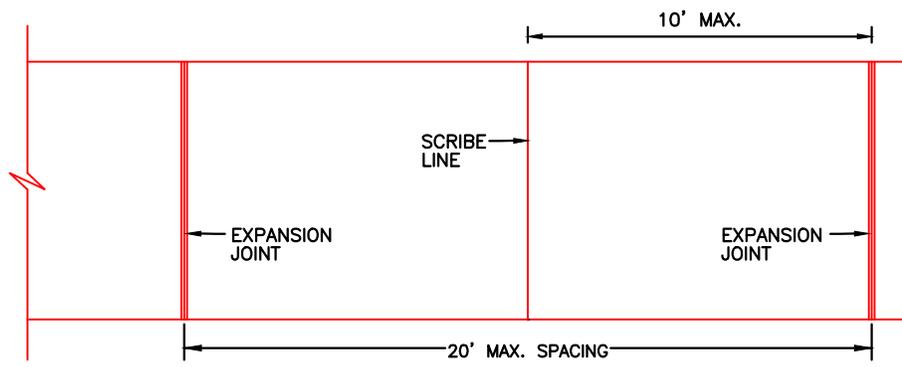
**ST-76**

**NOTES:**

1. THIS STANDARD SHALL BE USED ONLY UPON APPROVAL BY THE CITY ENGINEER.
2. CITY ENGINEER MAY PERMIT A CURVILINEAR DESIGN. PRECISE DATA SHALL BE PROVIDED TO STAKE THE ALIGNMENT AND SET APPROPRIATE GRADES.
3. MAXIMUM SPACE FOR EXPANSION JOINTS IS 20 FT.



ELEVATION VIEW



PLAN VIEW



SCALE:  
NOT TO SCALE

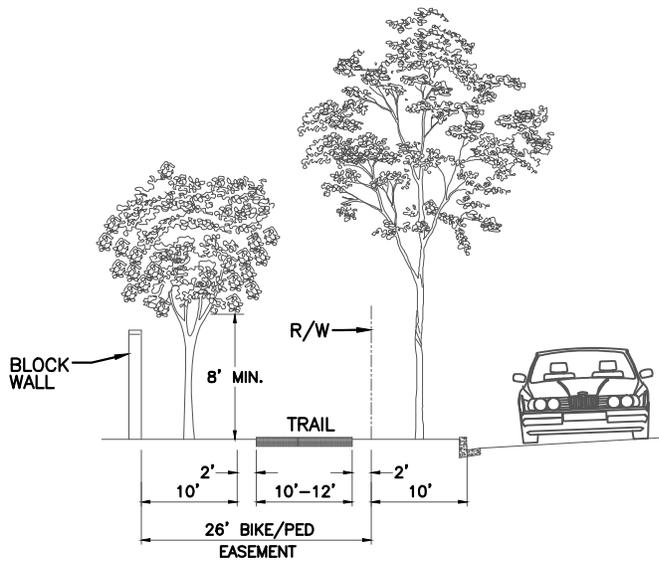
REVISED:  
OCT. 2019

REF. STD. DWG.:

**CONCRETE  
MULTI-PURPOSE TRAIL**

*CITY OF REEDLEY*

**ST-77**



MAJOR STREET TRAIL

GENERAL NOTES:

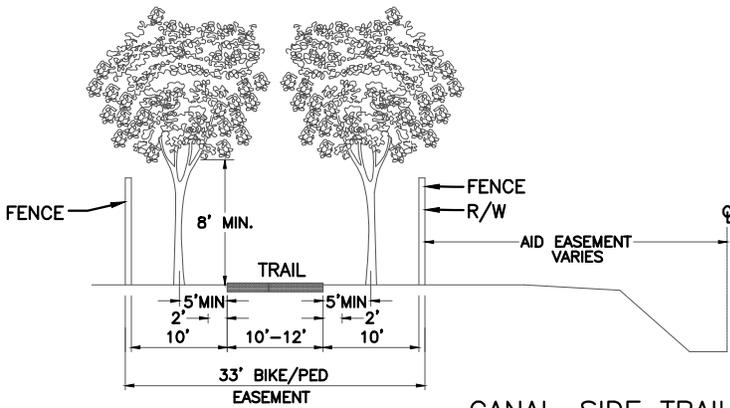
R=155' MIN. (25 mph)

EASEMENTS SHOWN ARE MINIMUMS. ADDITIONAL WIDTHS MAY BE NEEDED FOR GRADING & DRAINAGE PURPOSES.

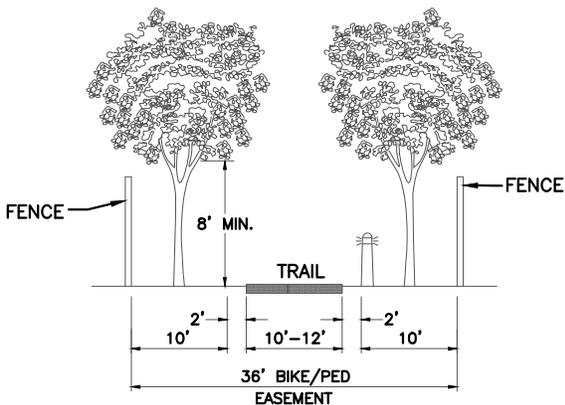
CROSS SLOPES = 2% FOR TRAIL  
2' SHOULDER

TRAIL DESIGN SHALL COMPLY WITH CHAPTER 1000 OF THE CALTRANS HIGHWAY DESIGN MANUAL.

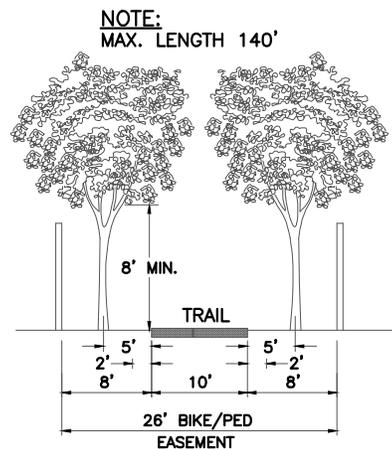
AN ADDITIONAL 12' EASEMENT REQUIRED FOR EQUESTRIAN PURPOSES.



CANAL-SIDE TRAIL



OFF-STREET TRAIL



CONNECTOR TRAIL

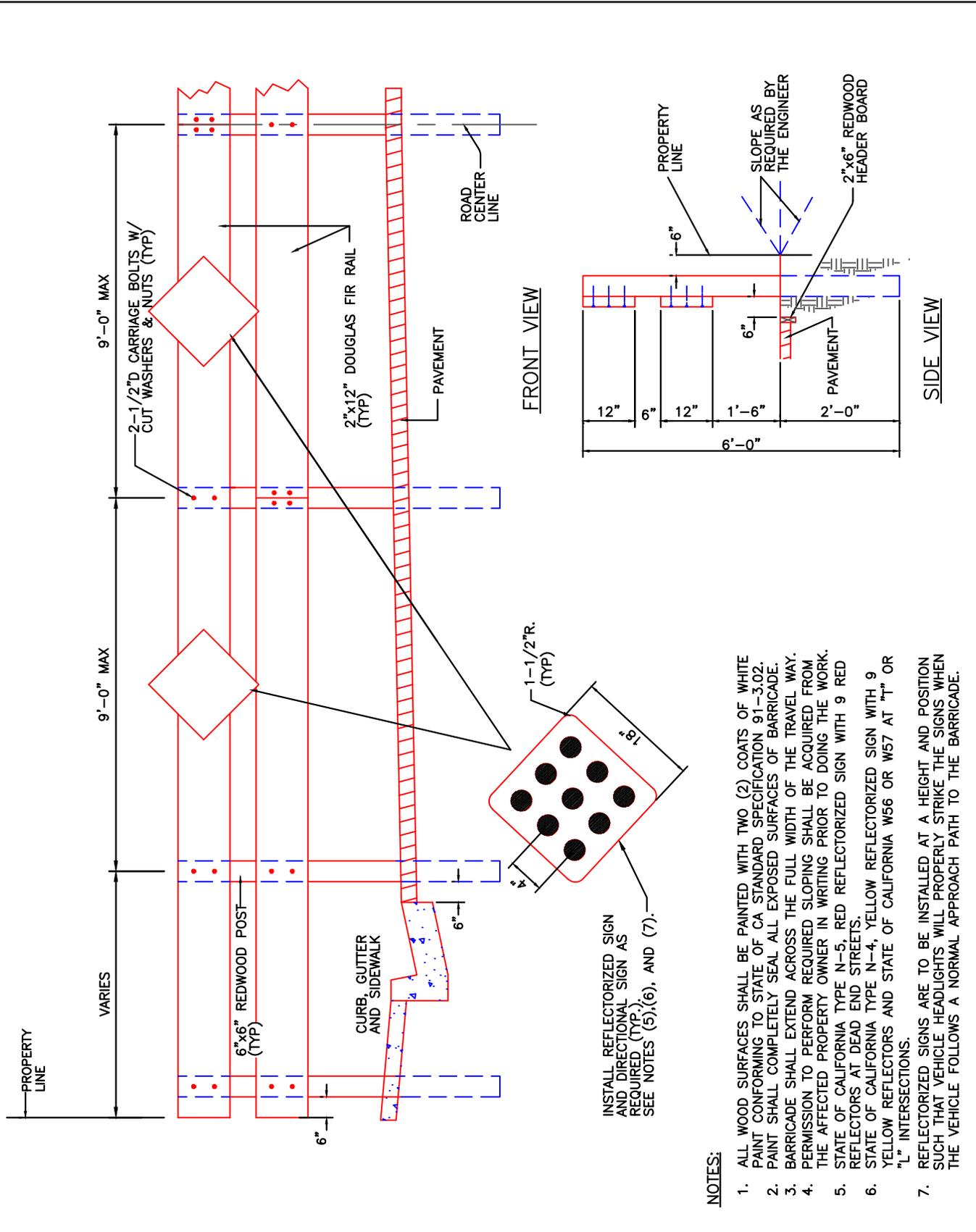


SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:

**TRAIL DETAILS**

*CITY OF REEDLEY*

**ST-78**



- NOTES:**
1. ALL WOOD SURFACES SHALL BE PAINTED WITH TWO (2) COATS OF WHITE PAINT CONFORMING TO STATE OF CA STANDARD SPECIFICATION 91-3.02.
  2. PAINT SHALL COMPLETELY SEAL ALL EXPOSED SURFACES OF BARRICADE.
  3. BARRICADE SHALL EXTEND ACROSS THE FULL WIDTH OF THE TRAVEL WAY.
  4. PERMISSION TO PERFORM REQUIRED SLOPING SHALL BE ACQUIRED FROM THE AFFECTED PROPERTY OWNER IN WRITING PRIOR TO DOING THE WORK.
  5. STATE OF CALIFORNIA TYPE N-5, RED REFLECTORIZED SIGN WITH 9 RED REFLECTORS AT DEAD END STREETS.
  6. STATE OF CALIFORNIA TYPE N-4, YELLOW REFLECTORIZED SIGN WITH 9 "L" INTERSECTIONS.
  7. REFLECTORIZED SIGNS ARE TO BE INSTALLED AT A HEIGHT AND POSITION SUCH THAT VEHICLE HEADLIGHTS WILL PROPERLY STRIKE THE SIGNS WHEN THE VEHICLE FOLLOWS A NORMAL APPROACH PATH TO THE BARRICADE.



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:

## TEMPORARY TIMBER BARRICADE

CITY OF REEDLEY

ST-79



SCALE:  
NOT TO SCALE  
REVISED:  
SEPT. 2019  
REF. STD. DWG.:  
W-2, W-3, W-7

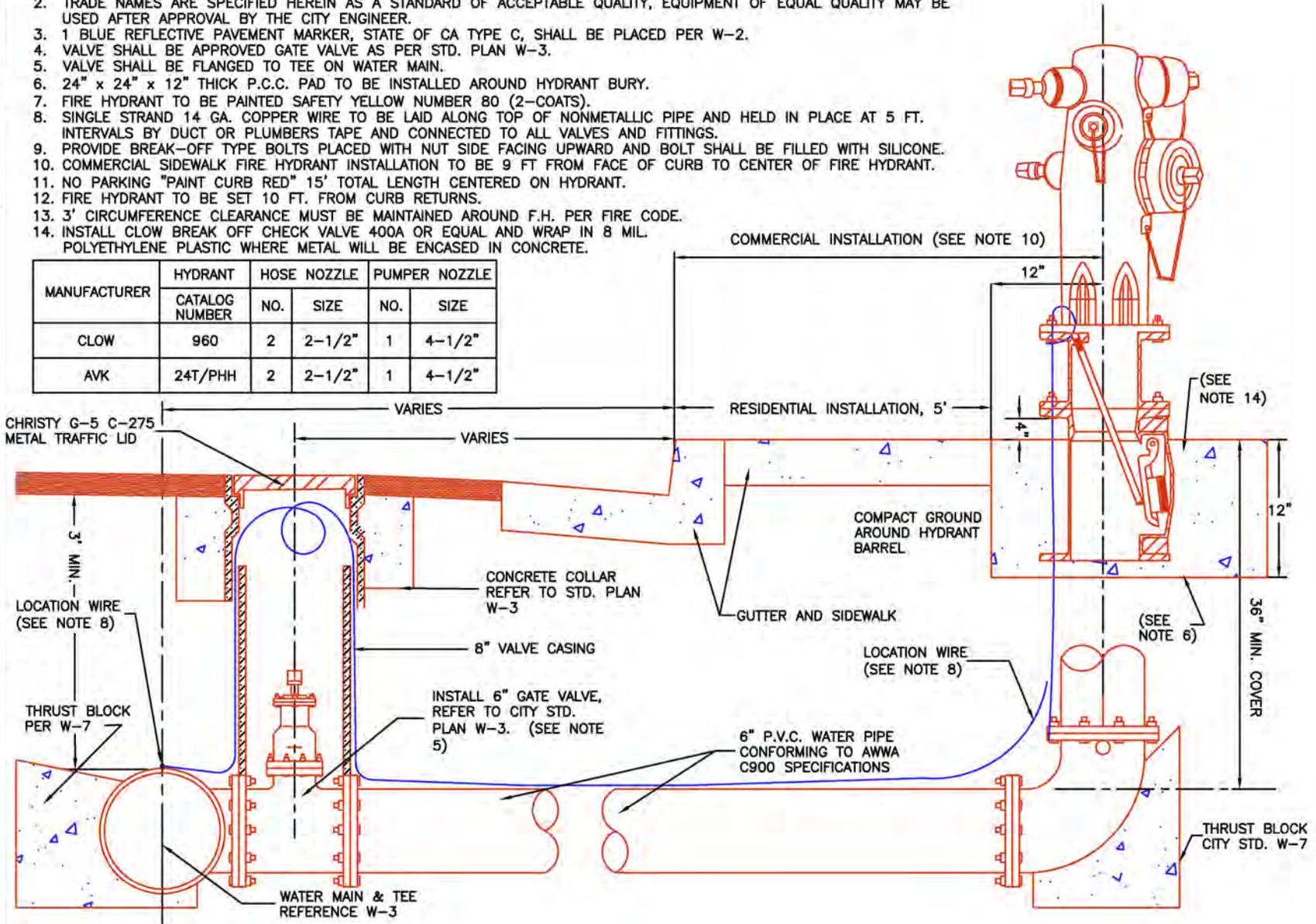
(WET BARREL)  
FIRE HYDRANT  
ASSEMBLY

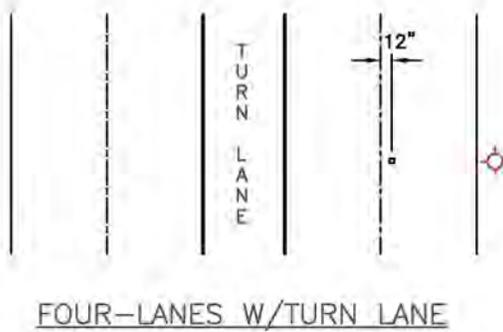
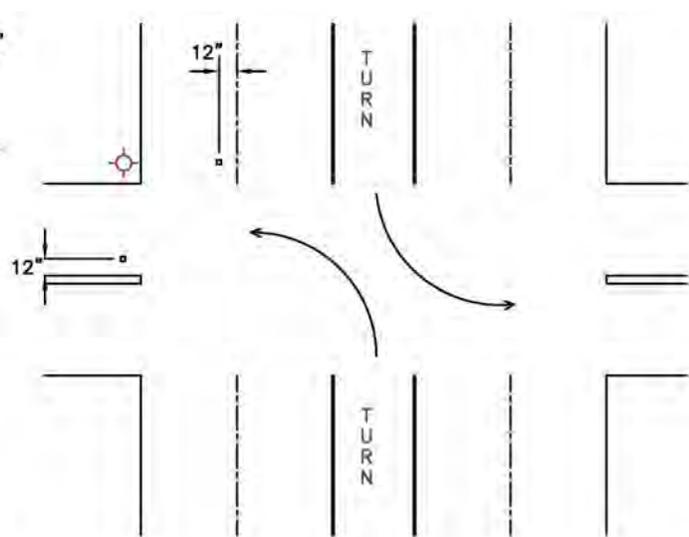
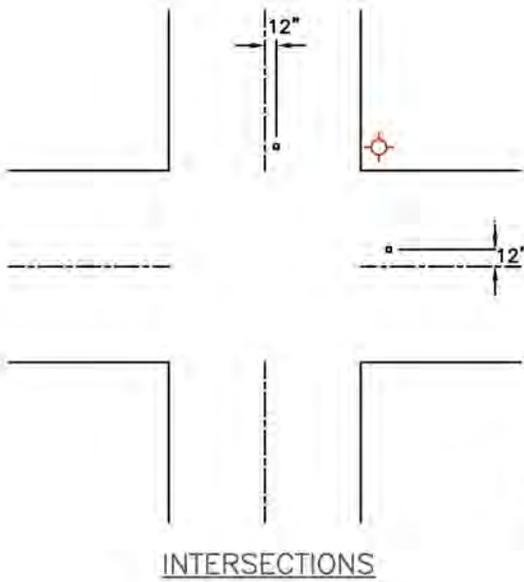
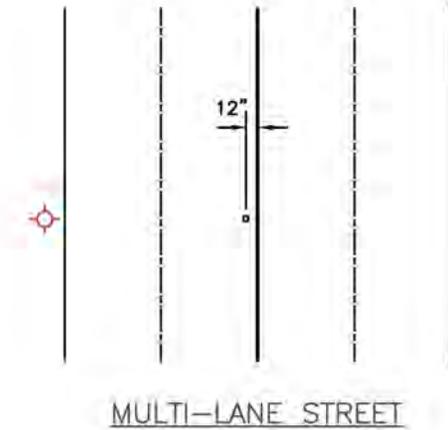
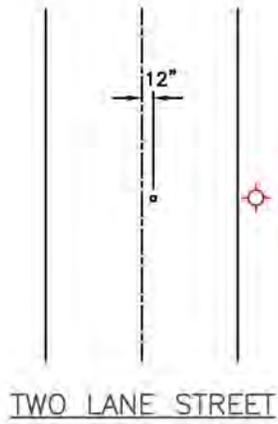
CITY OF REEDLEY  
W-1

**Notes:**

1. CAST IRON COVER SHALL BE MARKED "WATER".
2. TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY, EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
3. 1 BLUE REFLECTIVE PAVEMENT MARKER, STATE OF CA TYPE C, SHALL BE PLACED PER W-2.
4. VALVE SHALL BE APPROVED GATE VALVE AS PER STD. PLAN W-3.
5. VALVE SHALL BE FLANGED TO TEE ON WATER MAIN.
6. 24" x 24" x 12" THICK P.C.C. PAD TO BE INSTALLED AROUND HYDRANT BURY.
7. FIRE HYDRANT TO BE PAINTED SAFETY YELLOW NUMBER 80 (2-COATS).
8. SINGLE STRAND 14 GA. COPPER WIRE TO BE LAID ALONG TOP OF NONMETALLIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBERS TAPE AND CONNECTED TO ALL VALVES AND FITTINGS.
9. PROVIDE BREAK-OFF TYPE BOLTS PLACED WITH NUT SIDE FACING UPWARD AND BOLT SHALL BE FILLED WITH SILICONE.
10. COMMERCIAL SIDEWALK FIRE HYDRANT INSTALLATION TO BE 9 FT FROM FACE OF CURB TO CENTER OF FIRE HYDRANT.
11. NO PARKING "PAINT CURB RED" 15' TOTAL LENGTH CENTERED ON HYDRANT.
12. FIRE HYDRANT TO BE SET 10 FT. FROM CURB RETURNS.
13. 3' CIRCUMFERENCE CLEARANCE MUST BE MAINTAINED AROUND F.H. PER FIRE CODE.
14. INSTALL CLOW BREAK OFF CHECK VALVE 400A OR EQUAL AND WRAP IN 8 MIL. POLYETHYLENE PLASTIC WHERE METAL WILL BE ENCASED IN CONCRETE.

MANUFACTURER	HYDRANT	HOSE NOZZLE		PUMPER NOZZLE	
	CATALOG NUMBER	NO.	SIZE	NO.	SIZE
CLOW	960	2	2-1/2"	1	4-1/2"
AVK	24T/PHH	2	2-1/2"	1	4-1/2"





- ⊗ FIRE HYDRANT
- ▣ PAVEMENT MARKER EQUAL TO STIMSONITE C88 OR C80 "TWO WAY" BLUE MARKER



SCALE:  
NOT TO SCALE

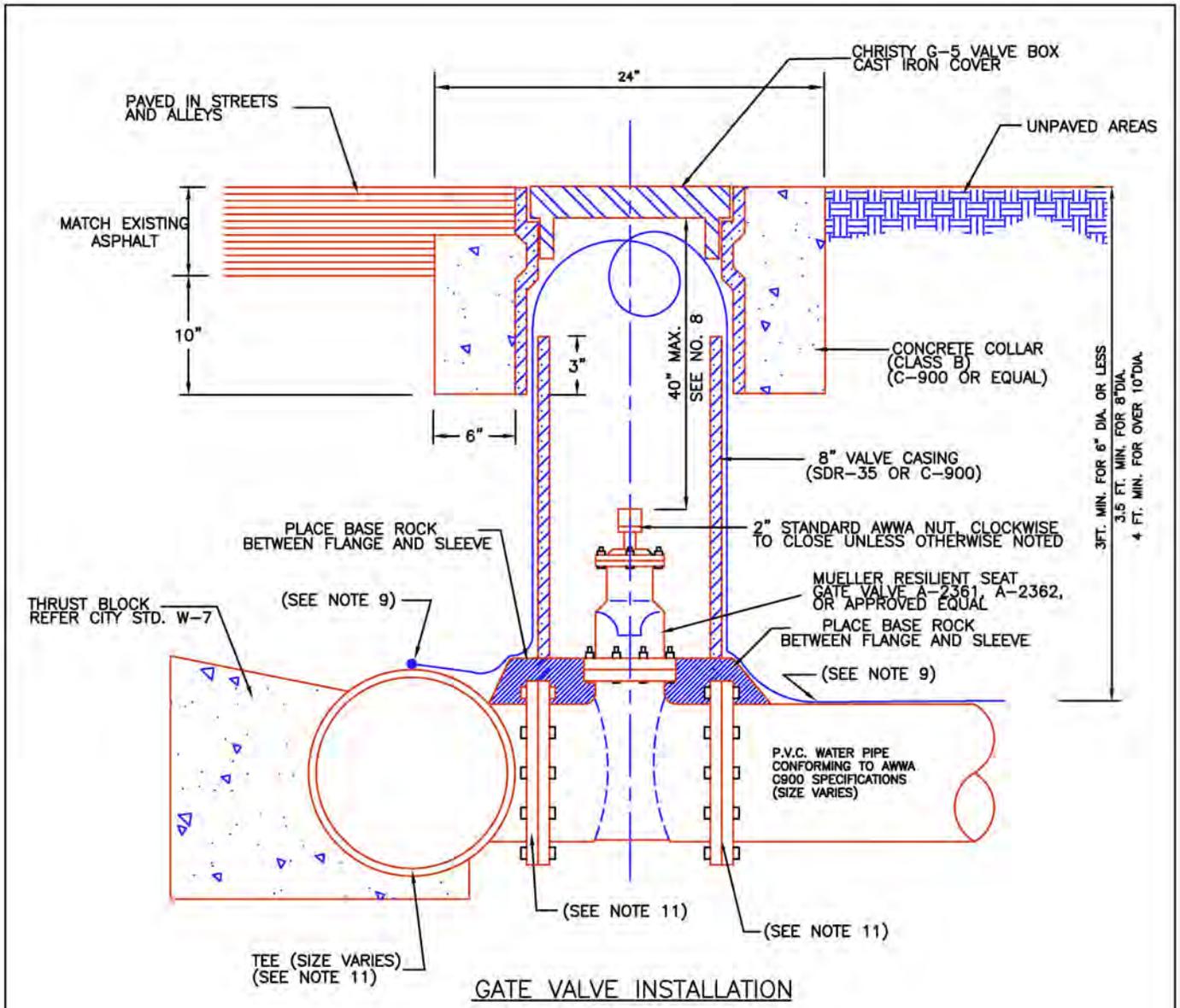
REVISED:  
SEPT. 2019

REF. STD. DWG.:  
N/A

TYPICAL FIRE HYDRANT  
MARKER LOCATIONS

CITY OF REEDLEY

W-2

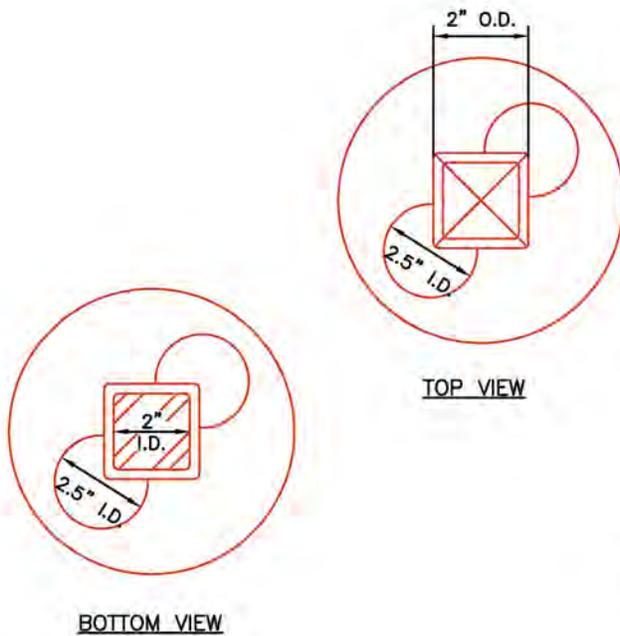


**GATE VALVE INSTALLATION**

**NOTES:**

1. CAST IRON COVER SHALL BE LABELED "WATER".
2. FULL DEPTH COLLAR SHALL BE INSTALLED IN DIRT AREAS ONLY.
3. VALVE CASING MAY BE PVC PIPE, SDR 35, OR C900.
4. VALVE FITTINGS SHALL BE FLANGED FITTINGS AS SPECIFIED ON THE PLANS.
5. NOMINAL DIAMETER OF VALVE SHALL EQUAL NOMINAL DIAMETER OF PIPE.
6. VALVE BOX SHALL BE CLEANED AND THE OPERATOR NUT VISIBLE AND OPERATIONAL PRIOR TO ACCEPTANCE OF WORK.
7. TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
8. IF DISTANCE FROM THE VALVE BOX COVER TO THE OPERATING NUT EXCEEDS 40 INCHES AN APPROVED EXTENSION MAST SHALL BE INSTALLED. REFER TO W-3A
9. SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NON-METALLIC PIPE AND HELD IN PLACE AT 5 FOOT INTERVALS BY DUCT OR PLUMBERS TAPE AND CONNECTED TO ALL VALVES AND FITTINGS.
10. STAINLESS STEEL MECHANICAL JOINT TAPPING SLEEVE MAY BE USED WITH EXISTING INSTALLATION AFTER APPROVAL BY THE CITY ENGINEER.
11. MECHANICAL FLANGE JOINTS TO BE USED ON ALL FITTINGS.

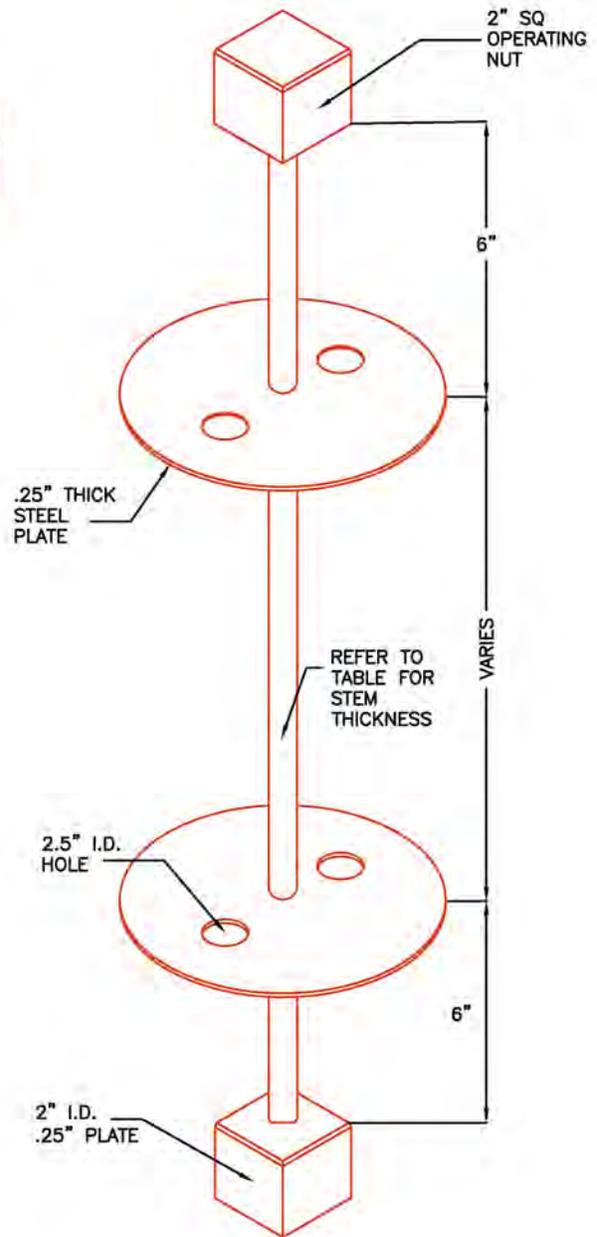
	SCALE: NOT TO SCALE	<h1>GATE VALVE</h1>	<h2>CITY OF REEDLEY</h2>
	REVISED: OCT. 2019		<h1>W-3</h1>
	REF. STD. DWG.: W-3A, W-7		



VALVE SIZE (INCHES)	MINIMUM EXTENSION STEM DIAMETER (INCHES)
2	3/4
3 & 4	7/8
6	1
8	1 1/8
10 & 12	1 1/4
14	1 3/8
16 & 18	1 1/2
20, 24, 30 & 36	1 3/4
42, 48 & 54	2

**NOTES:**

1. AN EXTENSION MAST IS REQUIRED IF DISTANCE FROM VALVE BOX COVER TO TOP OF OPERATING NUT EXCEEDS 40"
2. MAST SHALL BE CONSTRUCTED OF SOLID STEEL.
3. 2 HOLES AT 2.5" DIAMETER SHALL BE DRILLED IN EACH DISK IN ORDER TO PROVIDE VISUAL CONFORMATION THAT THIS IS AN EXTENSION MAST AND NOT THE TOP OF A VALVE.
4. CONNECTION FROM EXTENSION STEM TO OPERATING NUT TO VALVE SHALL WITHSTAND A PULL FORCE OF 300 FT-LBS WITHOUT DAMAGE.
5. COAT EXTENSION STEM PER CITY OF REEDLEY STANDARD SPECIFICATION. (NEEDS TO BE UPDATED)
6. REFER TO TABLE FOR STEM THICKNESS.
7. TOP OF FABRICATED EXTENSION SHALL BE 6"-12" FROM FINISHED GRADE.



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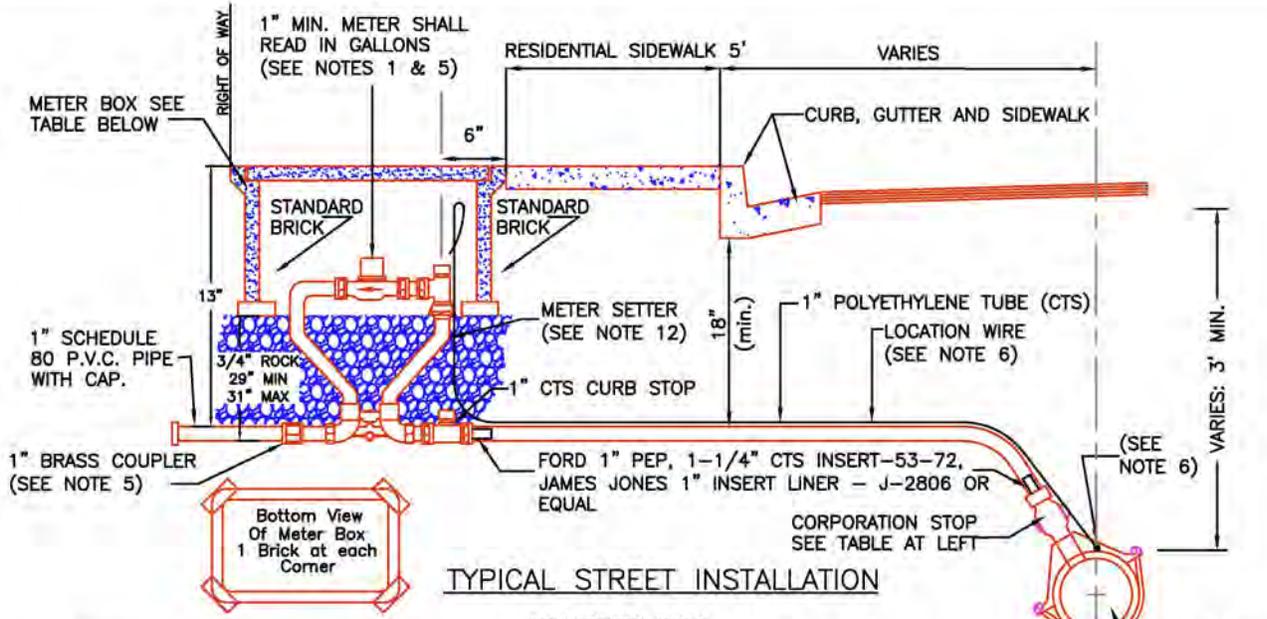
REVISED:  
OCT. 2019

REF. STD. DWG.:  
W-3

**EXTENSION MAST FOR  
WATER VALVES**

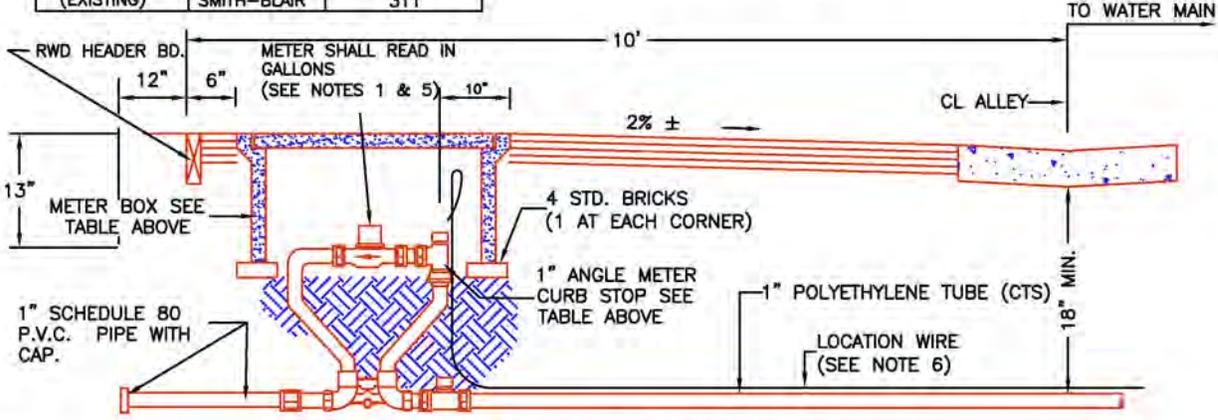
*CITY OF REEDLEY*

**W-3A**



TYPICAL STREET INSTALLATION

NON-TRAFFIC AREAS			TRAFFIC AREAS AND DRIVEWAYS (SEE NOTE 11)		
MANUFACTURER	CURB STOP	CORP. STOP	MANUFACTURER	METER BOX	LID
JONES	J - 1927W	J - 3403	CHRISTY	B 16 D	D30
WATER MAIN	MANUFACTURER	SERVICE SADDLE	MANUFACTURER	METER BOX	LID
ASTM C900 PVC PIPE	ROMAX	1015	CHRISTY	B 16 C	C30
	SMITH-BLAIR	315			
	JONES	J-996R w/ I.P. THREADS			
AC PIPE (EXISTING)	JONES	J - 940			
	SMITH-BLAIR	311			



TYPICAL ALLEY INSTALLATION

NOTES:

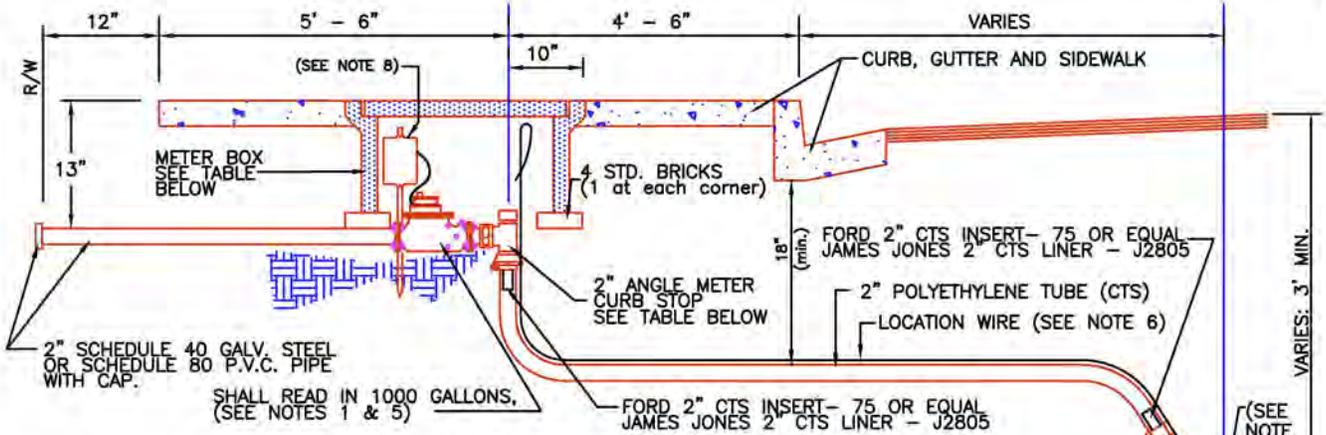
- METERS SHALL BE PURCHASED FROM THE CITY OF REEDLEY AND INSTALLED BY THE CONTRACTOR
- VALVE BOXES SHALL BE BROUGHT TO FINISH GRADE PRIOR TO ACCEPTANCE OF WORK.
- THE INSIDE OF THE VALVE BOXES SHALL BE CLEANED SUCH THAT THE METER, METER STOPS ARE ACCESSIBLE AND OPERATIONAL PRIOR TO THE ACCEPTANCE OF THE WORK. DIRT & DEBRIS SHALL BE REMOVED 2" BELOW WATER METER.
- TRADE NAMES ARE SPECIFIED AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
- NO GALVANIZED PIPE FITTINGS ARE TO BE USED IN METER ASSEMBLY INSTALLATION.
- SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NON-METALLIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBERS TAPE AND CONNECTED TO ALL VALVES AND FITTINGS.
- IN A RESIDENTIAL SUBDIVISION THE WATER SERVICE ASSEMBLY SHALL BE LOCATED AT THE CENTER OF THE LOT.
- NO PLUMBING PUTTY ALLOWED ON ANY FITTING.
- TOP OF METER MUST BE AT LEAST 5" BELOW BOTTOM OF METER BOX LID.
- THE CITY'S RESPONSIBILITY FOR A WATER SERVICE ENDS AT THE WATER METER COUPLING. THE CITY IS NOT RESPONSIBLE FOR THE CUSTOMER SHUT-OFF VALVE, OTHER VALVES OR PIPING LOCATED ON THE CUSTOMER'S SIDE OF THE METER.
- METER BOXES LOCATED IN THE DRIVEWAY MUST FIRST BE APPROVED BY THE CITY ENGINEER.
- 1" METER SETTER WITH FULL PORTED BALL TYPE METER STOP. MUELLER B-2404-2 OR EQUAL.
- ALL METALLIC PIPES AND FITTINGS SHALL BE ENCASED WITH 8 MIL POLYETHYLENE TAPE SO THAT NO SOIL IS IN CONTACT WITH THE PIPES OR FITTINGS.



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OCT. 2019  
REF. STD. DWG.:  
N/A

ONE INCH WATER SERVICE & ASSEMBLY

CITY OF REEDLEY  
W-4



TYPICAL STREET INSTALLATION

MANUFACTURER	CURB STOP	CORPORATION STOP
JAMES JONES	J-4202	J-1935
FORD	BF63-777W-1DR7-G	FB1101-7-1DR7-G

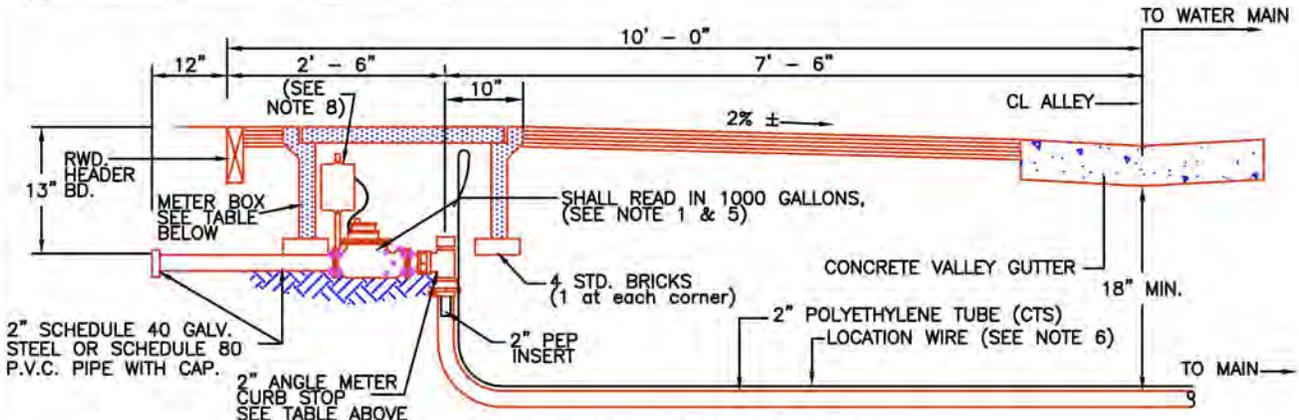
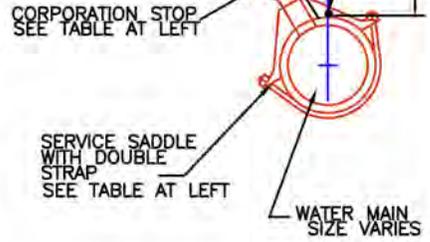
NON-TRAFFIC AREAS & STANDARD ALLEY LOCATIONS

MANUFACTURER	METER BOX	CONC. LID
CHRISTY	B 16 D, OPTION P	D30

WATER MAIN	MANUFACTURER	SERVICE SADDLE
ASBESTOS CEMENT PIPE (EXISTING)	JAMES JONES	J - 948
	SMITH-BLAIR	313
ASTM C900 PVC PIPE	ROMAX	202 S
	SMITH-BLAIR	317
	JAMES JONES	J-996R w/ I.P. THREADS

TRAFFIC AREAS AND DRIVEWAYS

MANUFACTURER	METER BOX	STEEL LID
CHRISTY	B 16 D, OPTION P	C30



TYPICAL ALLEY INSTALLATION

NOTES:

- METERS SHALL BE PURCHASED FROM THE CITY OF REEDLEY.
- VALVE BOXES SHALL BE BROUGHT TO PROPER GRADE PRIOR TO ACCEPTANCE OF WORK.
- THE INSIDE OF THE VALVE BOXES SHALL BE CLEANED SUCH THAT THE METER, METER STOPS ARE ACCESSIBLE AND OPERATIONAL PRIOR TO THE ACCEPTANCE OF THE WORK.
- TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
- DIELECTRIC FITTING REQUIRED BETWEEN CURB STOP AND GALVANIZED STEEL PIPE HOUSE SERVICE.
- SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NON-METALLIC PIPE AND HELD IN PLACE AT 6 FT. INTERVALS BY DUCT OR PLUMBERS TAPE AND CONNECTED TO ALL VALVES AND FITTINGS.
- INSTALL METER WITH METER CONNECTION ADAPTERS.
- RADIO TRANSMITTER SHALL BE MOUNTED (LABEL SIDE FACING UP) INSIDE METER BOX ON A 3/4" X 24" SCH.40 PVC STAKE USING ZIP TIES (2) ON TOP & BOTTOM. TRANSMITTER SHALL BE MOUNTED ON CUSTOMER SIDE OF BOX, 1" BELOW BOTTOM OF BOX LID. LOGO ON TRANSMITTER SHALL BE FACING THE STREET/ALLEY.
- NO PLUMBING PUTTY ALLOWED ON ANY FITTING.
- NO GALVANIZED PIPE FITTINGS ARE TO BE USED IN METER ASSEMBLY INSTALLATION.
- TOP OF METER MUST BE AT LEAST 5" BELOW BOTTOM OF METER BOX LID.
- THE CITY'S RESPONSIBILITY FOR A WATER SERVICE ENDS AT THE WATER METER COUPLING. THE CITY IS NOT RESPONSIBLE FOR THE CUSTOMER SHUT-OFF VALVE, OTHER VALVES OR PIPING LOCATED ON THE CUSTOMER'S SIDE OF THE METER.

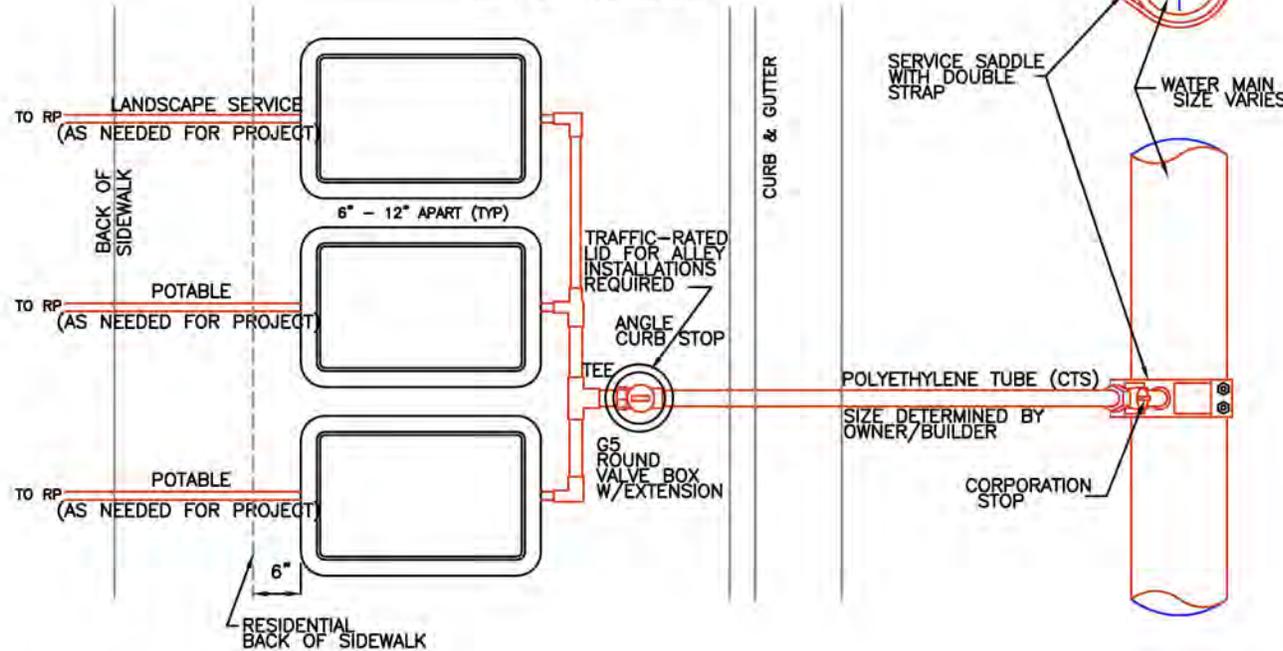
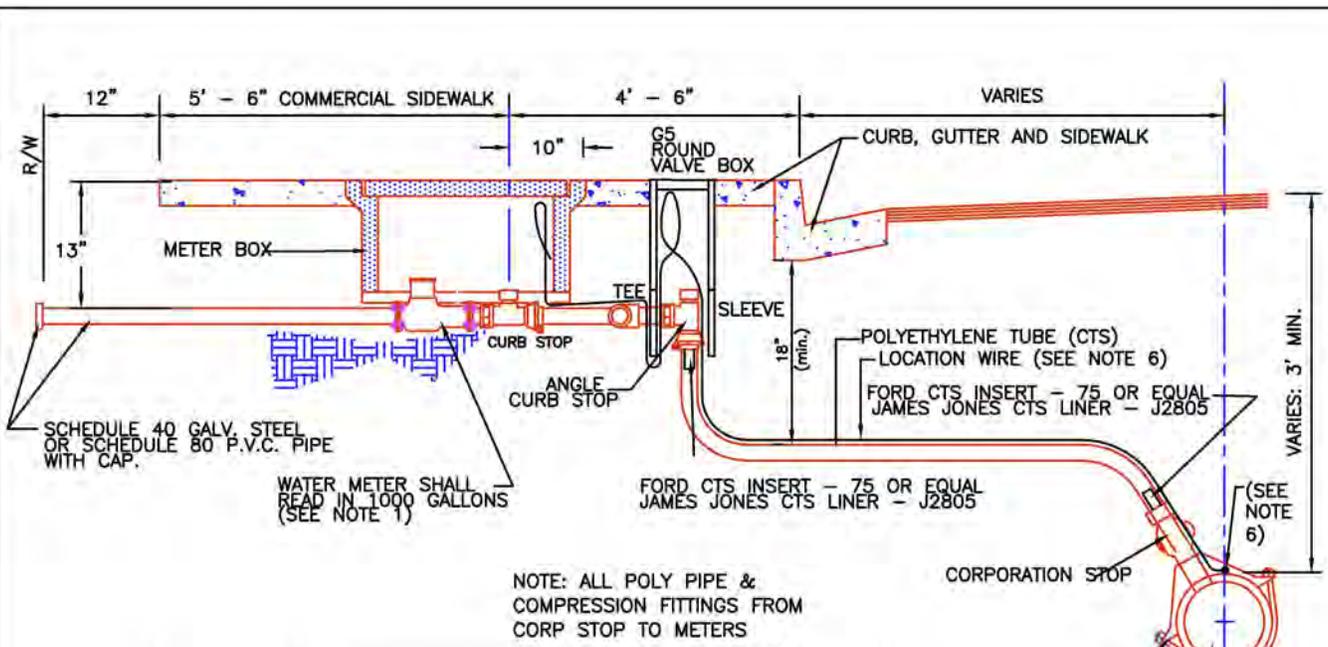


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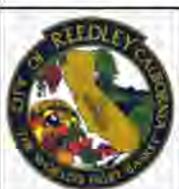
TWO-INCH WATER SERVICE ASSEMBLY

CITY OF REEDLEY

W-5



- NOTES:**
- METERS SHALL BE PURCHASED FROM THE CITY OF REEDLEY.
  - VALVE BOXES SHALL BE BROUGHT TO PROPER GRADE PRIOR TO ACCEPTANCE OF WORK.
  - THE INSIDE OF THE VALVE BOXES SHALL BE CLEANED SUCH THAT THE METER AND METER STOPS ARE ACCESSIBLE AND OPERATIONAL PRIOR TO THE ACCEPTANCE OF THE WORK.
  - TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
  - DIELECTRIC FITTING REQUIRED BETWEEN CURB STOP AND GALVANIZED STEEL PIPE HOUSE SERVICE.
  - SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NON-METALLIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBERS TAPE AND CONNECTED TO ALL VALVES AND FITTINGS.
  - NO PLUMBING PUTTY ALLOWED ON ANY FITTING.
  - FOR 2" METERS OR LARGER, RADIO TRANSMITTER SHALL BE MOUNTED (LABEL SIDE FACING UP) INSIDE METER BOX, ON A 3/4" X 24" SCH. 40 PVC STAKE.
  - MANIFOLDS ACCOMMODATING 2" OR LARGER METERS MUST BE APPROVED BY CITY ENGINEER.



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REF. STD. DWG.:

## WATER SERVICE MANIFOLD ASSEMBLY

*CITY OF REEDLEY*  
**W-6**

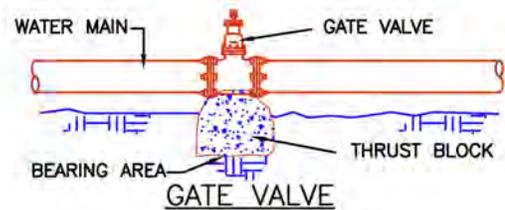
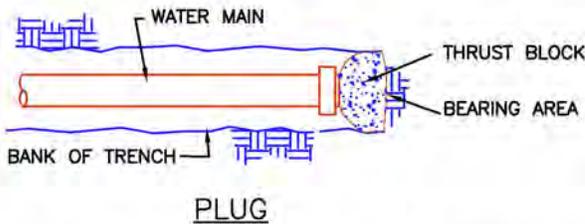
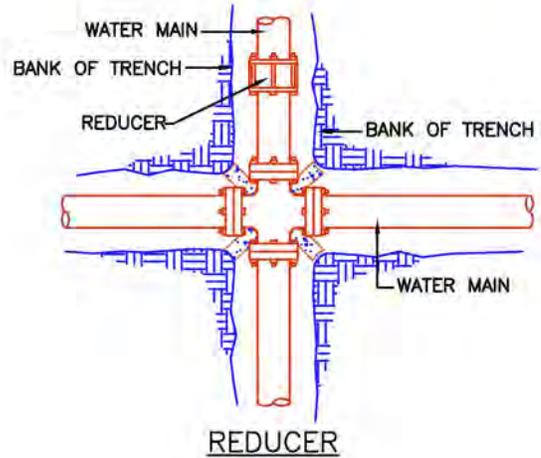
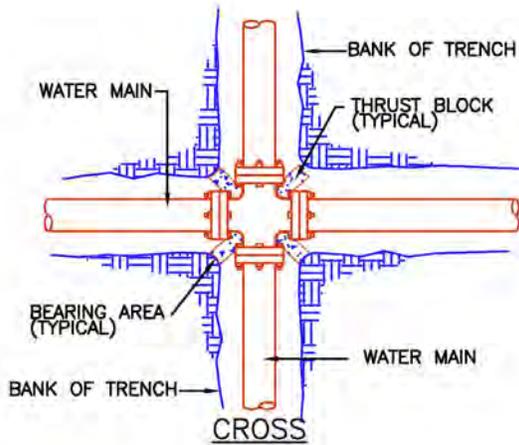
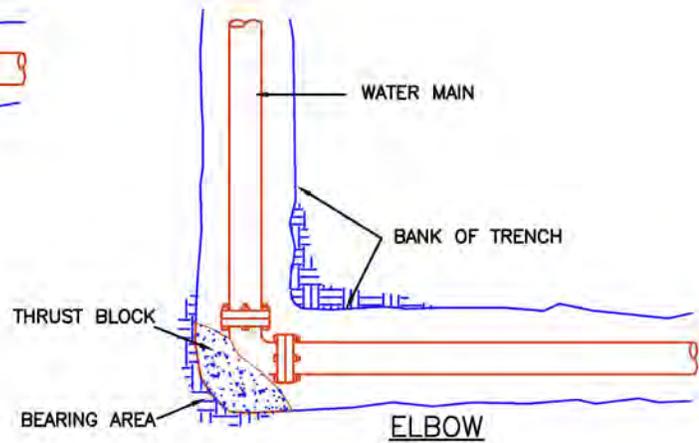
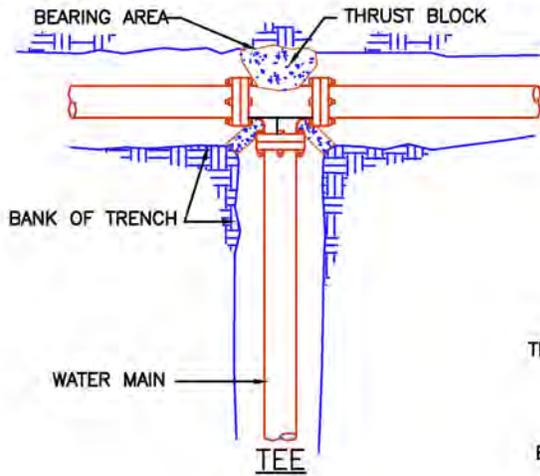


TABLE OF BEARING AREAS\* REQUIRED (IN SQUARE FEET)

PIPE DIAMETER	6"	8"	10"	12"
CROSS, TEE, ELBOW, OR PLUG.	3	5	8	12
90° BEND	4	7	12	16
45° BEND	2	3	5	6
22.5° BEND	1	2	3	3
VALVE	0	0	0	9
CROSS W/PLUG	4	7	12	16

\* AREAS GIVEN FOR CLASS 150 PIPE OF PRESSURE OF 150 P.S.I. IN SOIL WITH 2,000 P.S.F. CAPACITY. INSTALLATION USING DIFFERENT PIPE, TEST PRESSURE, AND/OR SOIL TYPES SHOULD ADJUST AREAS ACCORDINGLY, SUBJECT TO APPROVAL OF CITY ENGINEER.

NOTES:

1. ENGINEER TO COMPUTE BEARING AREAS FOR CASES NOT COVERED HEREIN.
2. CONCRETE FOR THRUST BLOCKS SHALL BE CLASS "B" CONCRETE (5 SACK MINIMUM.)
3. MINIMUM THICKNESS OF THRUST BLOCKS TO BE 6 INCHES.
4. THRUST BLOCK TO BE POURED AGAINST UNDISTURBED SOIL.
5. THRUST BLOCKS SHALL BE POURED A MINIMUM OF 5 DAYS BEFORE PRESSURIZING THE SYSTEM.
6. ALL PIPE IN CONTACT WITH CONCRETE SHALL BE WRAPPED WITH PLASTIC TO A THICKNESS OF 20 MIL



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OCT. 2019  
REF. STD. DWG.:

CONCRETE THRUST  
BLOCKS

CITY OF REEDLEY

W-7

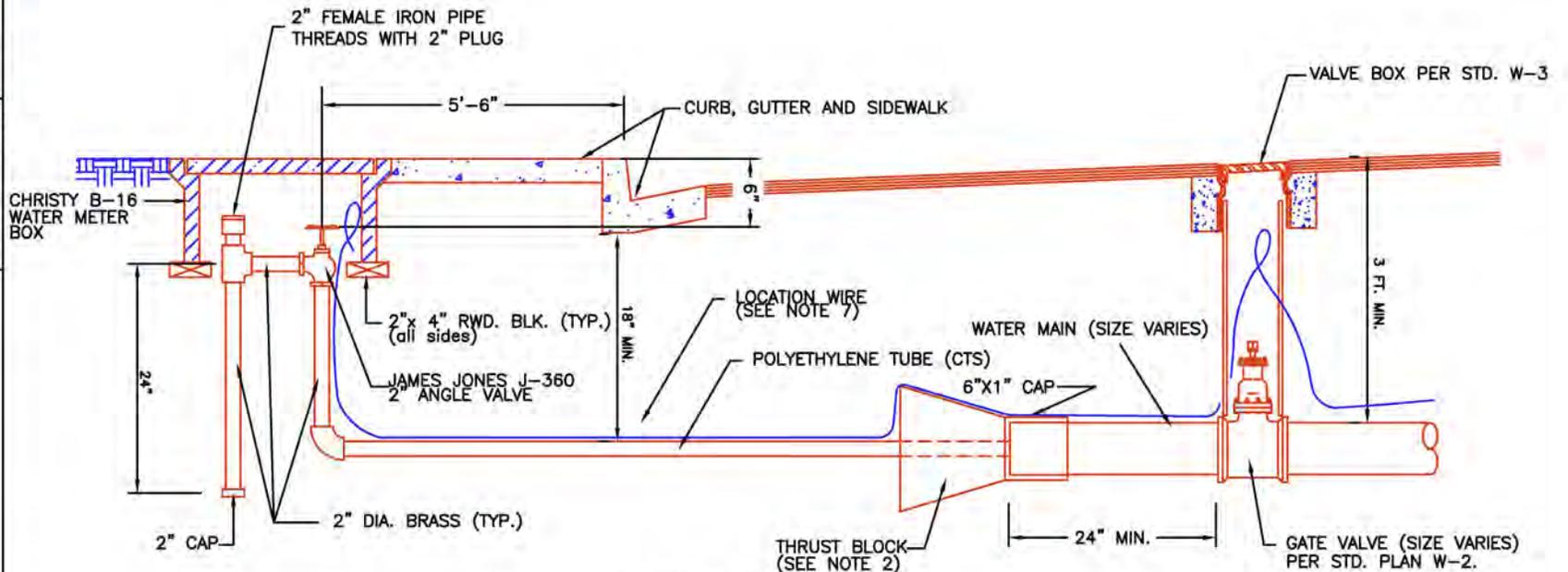


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OCT. 2019  
REF. STD. DWG.:  
W-2, W-3, W-4

2" BLOW-OFF ASSEMBLY

CITY OF REEDLEY

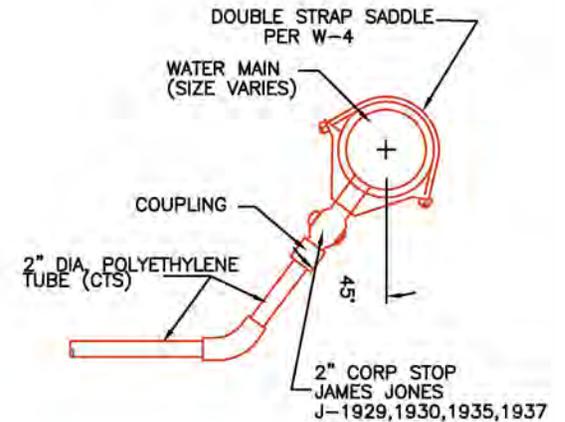
W-8

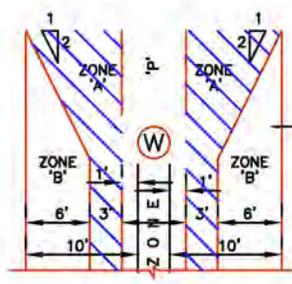


TYPICAL INSTALLATION

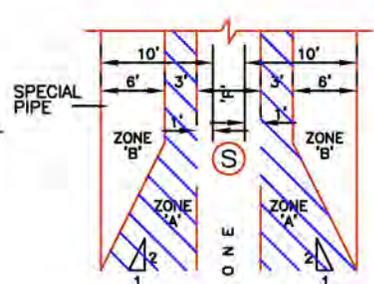
NOTES:

1. ALTERNATE CONNECTION TO BE INSTALLED ONLY WHEN ALLOWED IN THE SPECIAL PROVISION BY THE CITY ENGINEER.
2. THE 2" PIPE ENCASED WITH THE CONCRETE THRUST BLOCK SHALL BE PAINTED WITH RUST RESISTANT PAINT AND WRAPPED WITH PLASTIC TAPE TO A THICKNESS OF 20 MILS.
3. WATER VALVE CASING AND VALVE BOX AND LID SHALL BE INCLUDED IN ASSEMBLY WHEN INSTALLED AS A TYPICAL INSTALLATION.
4. NO SERVICE SHALL BE LOCATED BETWEEN WATER VALVE AND THE END OF THE WATER MAIN.
5. BLOW-OFF NOT ALLOWED ON CUL-DE-SAC.
6. VALVE BOXES SHALL BE BROUGHT TO PROPER GRADE PRIOR TO ACCEPTANCE OF WORK.
7. SINGLE STRAND 14 GA. COPPER WIRE TO BE LAID ALONG TOP OF NONMETALLIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBERS TAPE AND CONNECTED TO ALL VALVES AND FITTINGS.

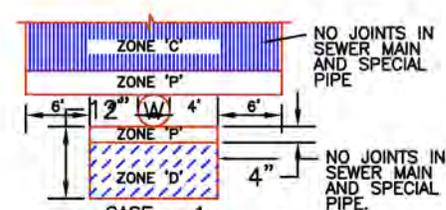




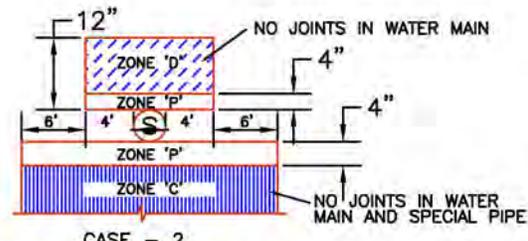
CASE - 1  
PARALLEL CONSTRUCTION



CASE - 2  
PARALLEL CONSTRUCTION



CASE - 1  
PERPENDICULAR CONSTRUCTION



CASE - 2  
PERPENDICULAR CONSTRUCTION

**SPECIAL CONSTRUCTION REQUIREMENTS**

**CASE 1: NEW SEWER BEING INSTALLED - NEW OR EXISTING WATER MAIN**

IF A NEW SEWER IS CONSTRUCTED WITHIN ZONE A, B, C, OR D OF A PROPOSED OR EXISTING WATER MAIN, THE FOLLOWING SPECIAL REQUIREMENTS WILL APPLY FOR THE SEWER.

- | <b>ZONE</b> | <b>SPECIAL REQUIREMENTS</b>  |
|-------------|--|
| A.          | SEWER LINES WILL NOT BE PERMITTED IN THIS ZONE WITHOUT SPECIAL PERMISSION FROM THE SWRCB AND THE DDW   |
| B.          | A SEWER LINE PLACED PARALLEL TO A WATER MAIN SHALL BE CONSTRUCTED OF EXTRA-STRENGTH VITRIFIED CLAY PIPES WITH COMPRESSION JOINTS OR CLASS 4000, OR POLY (VINYL CHLORIDE) PIPE WITH RUBBER RING JOINTS; OR REINFORCED CONCRETE PRESSURE PIPE WITH REINFORCED CONCRETE COLLARS AROUND THE JOINTS WHICH COLLARS SHALL HAVE A MINIMUM THICKNESS OF 6" AND A MINIMUM LENGTH ALONG THE PIPE OF 6" ON EITHER SIDE OF THE JOINT; OR CAST IRON PIPE WITH COMPRESSION JOINTS.  |
| C OR D.     | A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF CLASS 150 OR STRONGER CAST IRON PIPE WITH HOT DIP BITUMINOUS COATING AND APPROVED MECHANICAL JOINTS; OR A CONTINUOUS SECTION OF CLASS 200 POLY(VINYL CHLORIDE) PIPE; OR REINFORCED CONCRETE PRESSURE PIPE CENTERED OVER THE PIPE BEING CROSSED; OR ANY SEWER PIPE ENCASED WITHIN A CONTINUOUS STEEL CASING SHALL HAVE A THICKNESS OF NOT LESS THAN 1/2" AND ALL VOIDS BETWEEN THE SEWER LINE AND THE CASING PRESSURE GROUTED WITH SAND-CEMENT GROUT; OR (ZONE-D ONLY) ANY SEWER PIPE SEPARATED BY A REINFORCED CONCRETE BLANKET AS SHOWN IN STANDARD PLAN NO. W-10. |
| P.          | PROHIBITED ZONE  |

**CASE 2: NEW WATER MAIN BEING INSTALLED - EXISTING SEWER**

IF A PROPOSED WATER MAIN WILL BE LOCATED WITHIN ZONE A, B, C, OR D, THE FOLLOWING SPECIAL REQUIREMENTS WILL APPLY FOR THE PROPOSED WATER MAIN.

- | <b>ZONE</b> | <b>SPECIAL REQUIREMENTS</b>   |
|-------------|---|
| A.          | NO WATER MAIN SHALL BE CONSTRUCTED WITHOUT PERMISSION FROM THE DEPARTMENT OF PUBLIC HEALTH.   |
| B.          | IF THE SEWER PARALLELING THE WATER MAIN DOES NOT MEET THE CASE-1, ZONE-B REQUIREMENTS, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING; OR CLASS 200, TYPE II OR CLASS 200 PRESSURE RATED POLY(VINYL CHLORIDE) PIPE OR EQUIVALENT.   |
| C.          | IF THE SEWER CROSSING THE WATER MAIN DOES NOT MEET THE CASE-1, ZONE-C REQUIREMENTS, THE WATER MAIN SHALL HAVE NO JOINTS IN ZONE-C AND BE CONSTRUCTED OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING; OR CLASS 200 PRESSURE RATED POLY(VINYL CHLORIDE) PIPE OR EQUIVALENT AND THE SEWER SHALL BE ENCASED WITH REINFORCED CONCRETE AS SHOWN IN STANDARD PLAN W-10.                  |
| D.          | IF THE SEWER CROSSING THE WATER MAIN DOES NOT MEET THE REQUIREMENTS FOR ZONE-D, CASE-1, THE WATER MAIN SHALL HAVE NO JOINTS WITHIN FOUR (4') FEET FROM EITHER SIDE OF THE SEWER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING; OR CLASS 200 PRESSURE RATED POLY(VINYL CHLORIDE) PIPE OR EQUIVALENT; OR DIPPED AND WRAPPED 1/2" THICK WELDED STEEL PIPE. |
| P.          | PROHIBITED ZONE   |

**NOTES:**

1. ALL DIMENSIONS ARE FROM THE OUTSIDE OF THE WATER MAIN TO THE OUTSIDE OF THE SEWER LATERAL OR MAIN.
2. COMPRESSION JOINTS ARE RUBBER RING OR GASKET JOINTS.
3. MECHANICAL JOINTS ARE BOLTED JOINTS.

**SITUATIONS ENCOUNTERED**

CASE-1 NEW SEWER LINE, NEW OR EXISTING WATER MAIN.

CASE-2 NEW WATER MAIN, EXISTING SEWER LINE.

FOR CASE-1, THE ALTERNATE CONSTRUCTION CRITERIA APPLY TO THE SEWER LINE.

FOR CASE-2, THE ALTERNATE CONSTRUCTION CRITERIA MAY APPLY TO EITHER OR BOTH THE WATER MAIN OR SEWER LINE.

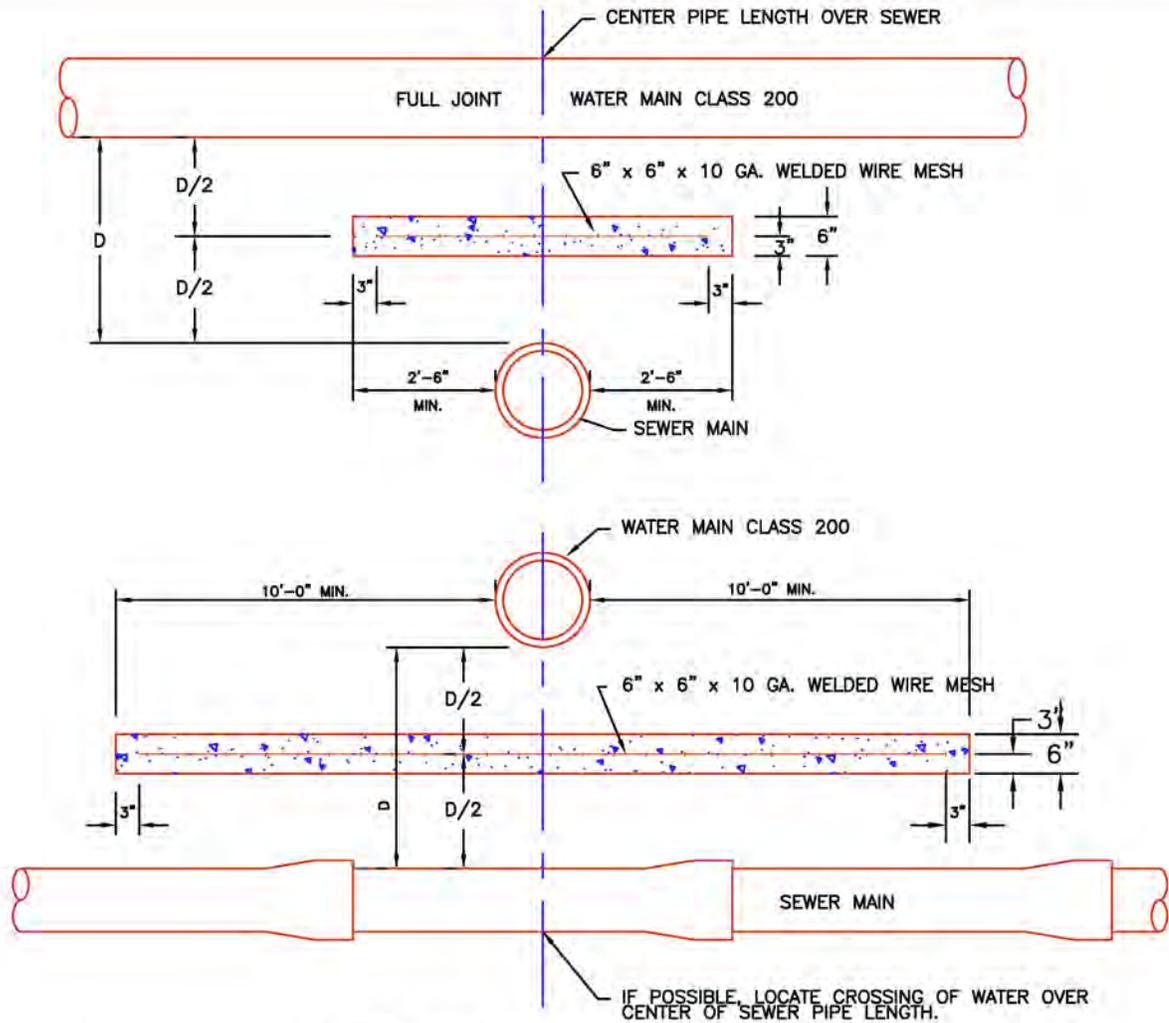


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REVISED:  
SEPT. 2019  
REF. STD. DWG.:

**SPECIAL CONSTRUCTION  
REQUIREMENTS FOR  
SEWER AND WATER  
SEPARATION**

*CITY OF REEDLEY*

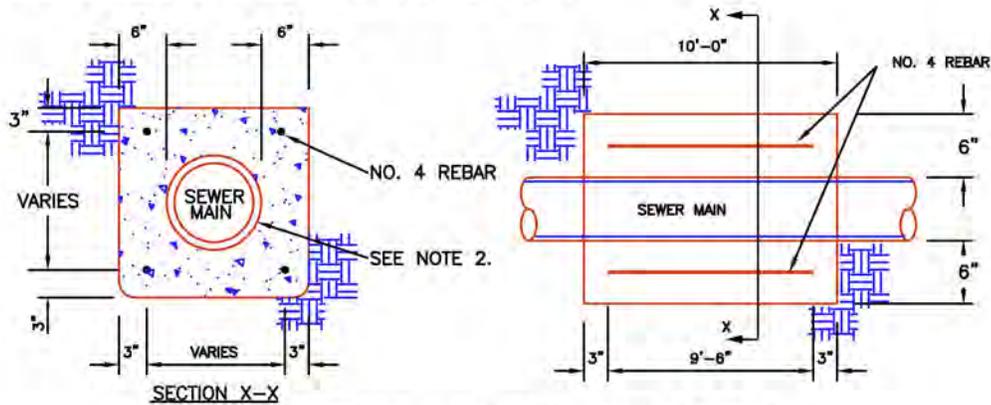
**W-9**



**REINFORCED CONCRETE BLANKET**

**NOTES:**

1. CONCRETE SHALL BE CLASS "B" (5 SACK CEMENT / C.Y. CONCRETE)



**REINFORCED CONCRETE ENCASMENT**

**NOTES:**

1. CONCRETE SHALL BE CLASS "B" (5 SACK CEMENT / C.Y. CONCRETE)
2. WRAP SEWER MAIN WITH 15 lb. FELT.

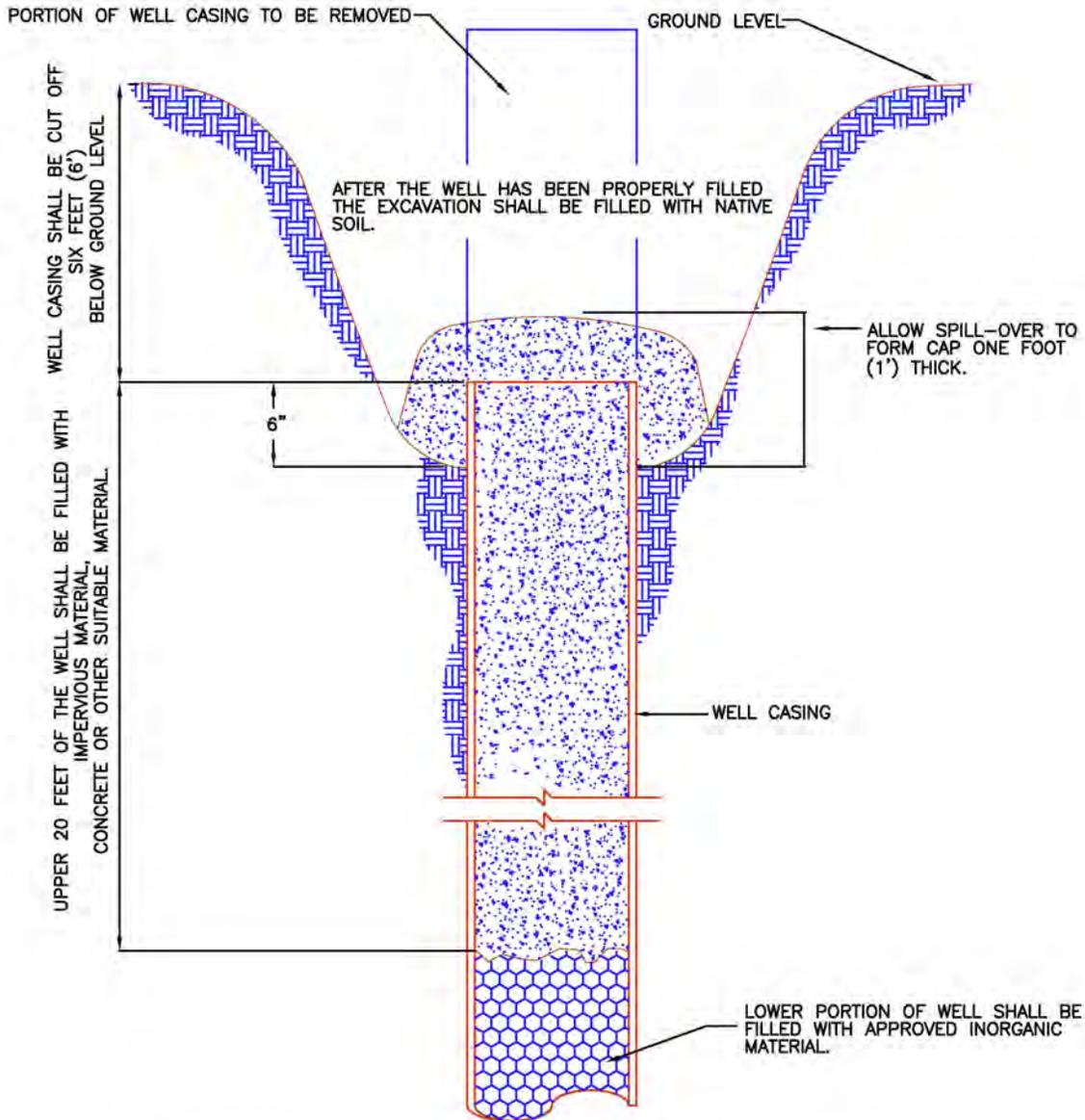


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

**CONCRETE BLANKET /  
REINFORCED CONCRETE  
ENCASMENT FOR SEWER  
AND WATER SEPERATION**

*CITY OF REEDLEY*

**W-10**



**REQUIREMENTS FOR DESTRUCTION OF WELLS IN URBAN AREAS**

**NOTES:**

1. DESTRUCTION OF ABANDONED WELL SHALL BE PER FRESNO COUNTY HEALTH DEPARTMENT SPECIFICATIONS.
2. DESTRUCTION OF ABANDONED WELL SHALL BE PERFORMED BY A PERSON WHO POSSESSES AN ACTIVE C-57 CONTRACTORS LICENSE.
3. A WELL ABANDONMENT PERMIT SHALL BE OBTAINED FROM THE COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO PERFORMANCE OF WORK.
4. UPPER 20' OF CASED WELL OR ENTIRE LENGTH OF TEST WELL OR UNCASD WELL SHALL BE FILLED IN ONE CONTINUOUS POUR WITH CONCRETE OR GROUT OR OTHER MATERIAL AS DEFINED IN "WATER WELL STANDARDS" STATE DEPARTMENT OF WATER RESOURCES BULLETIN #74 AND INSPECTED PRIOR TO COVERING.
5. THE EXPOSED WELL AND SURROUNDING EXCAVATION SHALL BE COVERED DURING ALL PERIODS OF INACTIVITY WITH A SUITABLE COVER SUFFICIENTLY ANCHORED TO PREVENT HAZARD TO THE PUBLIC AND/OR CONTAMINATION OF THE WELL



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OCT. 2019  
REF. STD. DWG.:

**WATER WELL  
ABANDONMENT**

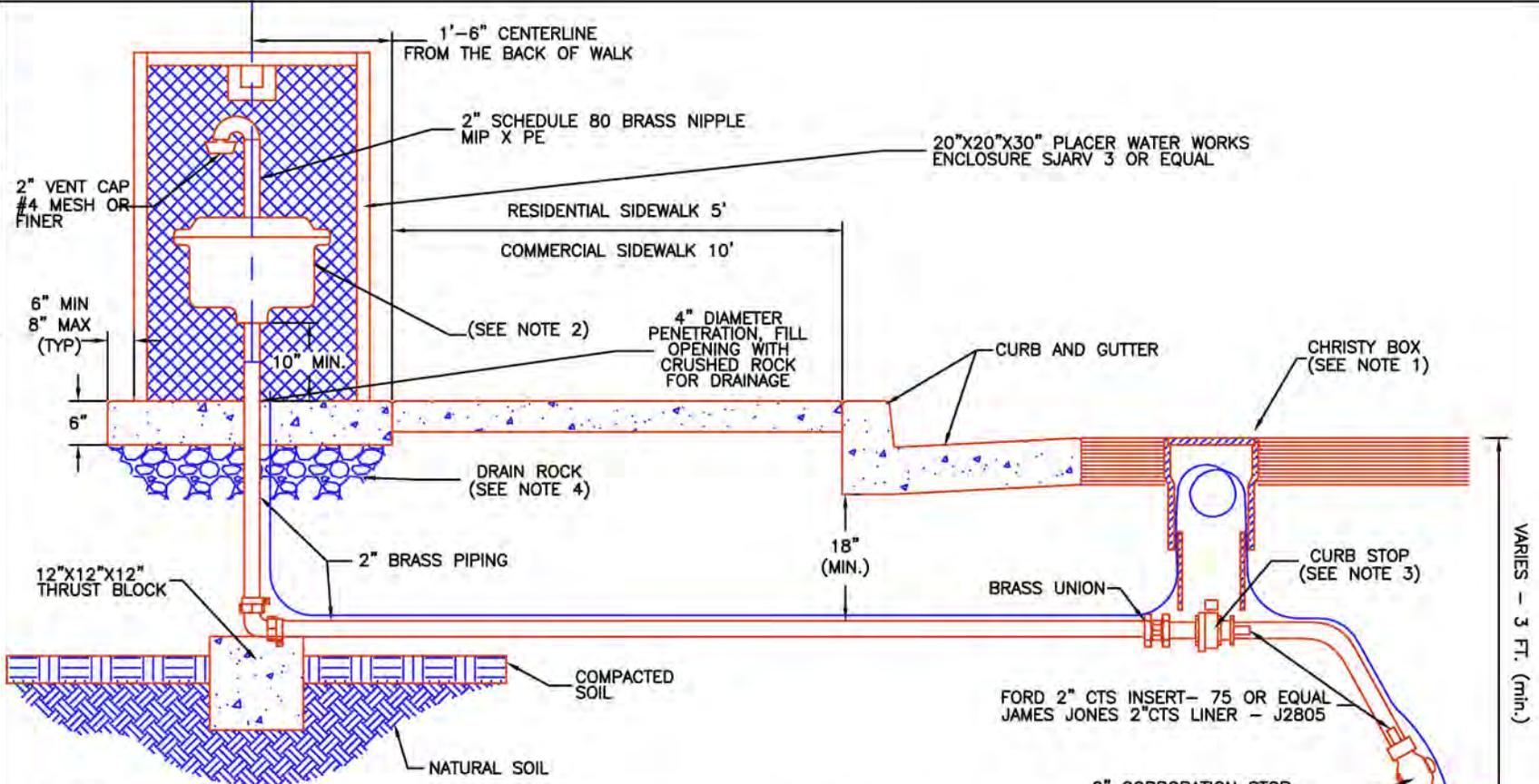
*CITY OF REEDLEY*

**W-11**



SCALE: NOT TO SCALE  
 REVISED: OCT. 2019  
 REF. STD. DWG.: W-3

2" AIR-RELIEF ASSEMBLY



NOTES:

1. CHRISTY G-5 VALVE BOX WITH CAST IRON LID REFER TO W-3
2. INSTALL AIR VACUUM VALVE (AVV), OR CUSTOM AIR RELEASE VALVE (CARV) APCO 145C OR EQUAL (SEE NOTE 5).
3. 2" CURB STOP, FORD BF63-777W-1DR7-G OR JAMES JONES J-1939W.
4. 3" DEEP CRUSHED ROCK OR CLASS 2 AB SOIL AS DIRECTED BY THE CITY ENGINEER.
5. TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
6. LOCATION OF TAP AND ASSEMBLY SHALL BE DETERMINED IN THE FIELD BY THE CITY ENGINEER.
7. SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NONMETALLIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBER TAPE, CONNECTED TO ALL VALVES AND FITTINGS.
8. USE TEFLON PLUMBER'S TAPE ON ALL THREADED PIPE FITTINGS.
9. ALL BRASS PIPE, VALVE OR FITTINGS SHALL BE WRAPPED IN 8MIL POLYETHYLENE TAPE (MINIMUM).
10. VALVE BOX SHALL BE BROUGHT TO PROPER GRADE PRIOR TO ACCEPTANCE OF WORK.
11. THE INSIDE OF THE VALVE BOX SHALL BE CLEANED SUCH THAT THE CURB STOP AND METER ARE ACCESSIBLE AND OPERATIONAL PRIOR TO ACCEPTANCE OF WORK.

2" CORPORATION STOP  
 FORD FB1101-7-1DR7-G  
 JAMES JONES J-1935

LOCATION WIRE  
 (SEE NOTE 7)

SERVICE SADDLE  
 WITH DOUBLE STRAP  
 (SEE TABLE)

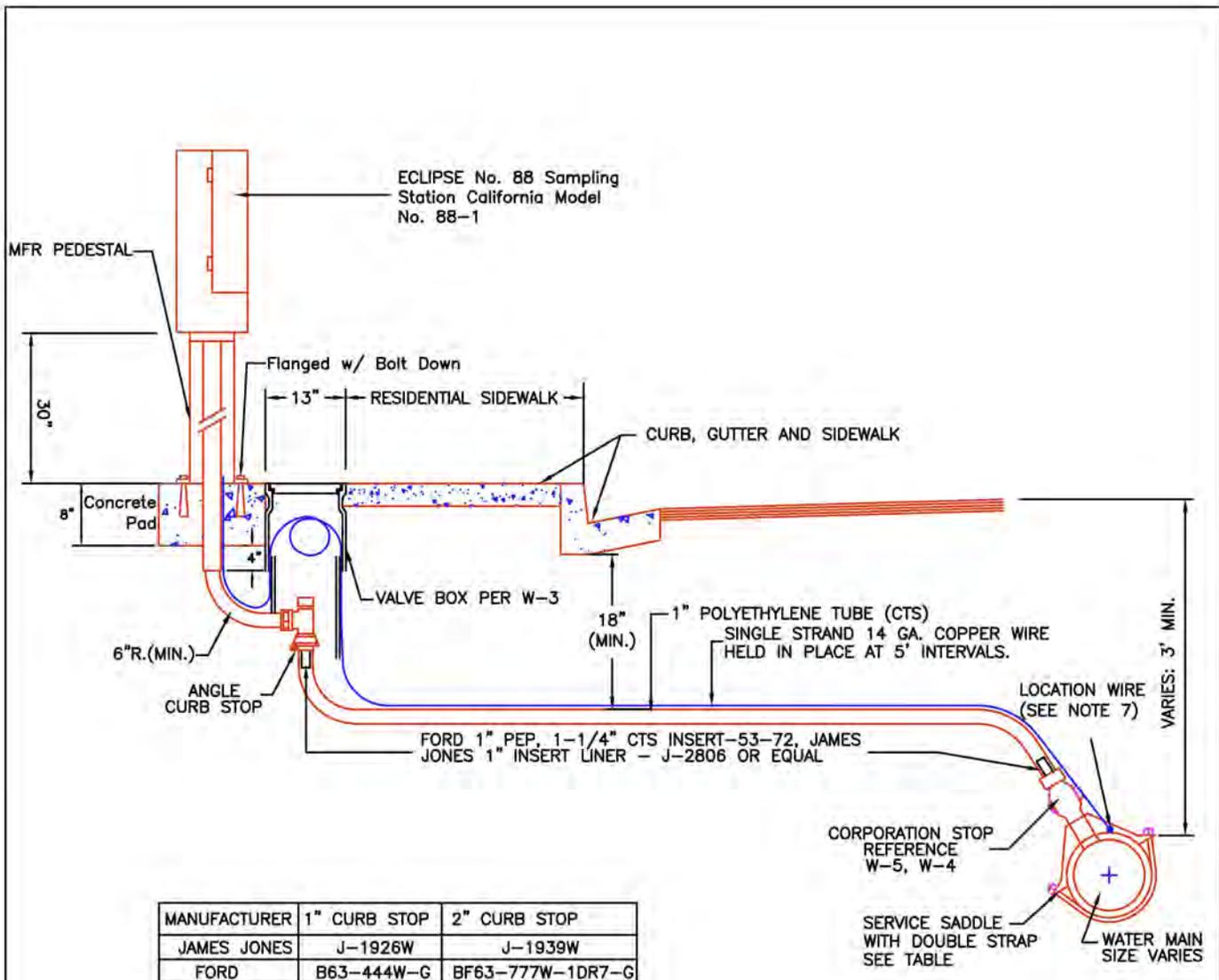
SERVICE SADDLE TABLE

WATER MAIN	MANUFACTURER	SERVICE SADDLE
ASTM C900 PVC PIPE	ROMAX	202 S
	SMITH - BLAIR	317

W-12

CITY OF REEDLEY

VARIES - 3 FT. (min.)



**NOTES:**

1. TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
2. DIELECTRIC FITTING REQUIRED BETWEEN CURB STOP AND GALVANIZED STEEL PIPE.
3. ALTERNATE CONNECTION TO BE INSTALLED ONLY WHEN ALLOWED IN THE SPECIAL PROVISIONS OR BY THE CITY ENGINEER.
4. CONCRETE SHALL BE CLASS B - 6 SACK MIX.
5. LOCATION SHALL BE DETERMINED IN FIELD BY CITY ENGINEER.
6. VALVE BOXES SHALL BE BROUGHT TO PROPER GRADE PRIOR TO ACCEPTANCE OF WORK.
7. SINGLE STRAND 14GA. COPPER WIRE TO BE LAID ALONG TOP OF NON-METALLIC PIPE & HELD IN PLACE AT 5 FT. INTERVALS BY DUCT TAPE AND CONNECTED TO ALL VALVES & FITTINGS.
8. SAMPLING STATION SHALL BE PAINTED W/GLIDDEN #554 DEEP GREEN EXTERIOR ENAMEL OR EQUAL AS APPROVED BY THE CITY ENGINEER.



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:  
W-3, W-4, W-5

**WATER SAMPLING STATION**

*CITY OF REEDLEY*

**W-13**



SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
W-3, W-7, W-17

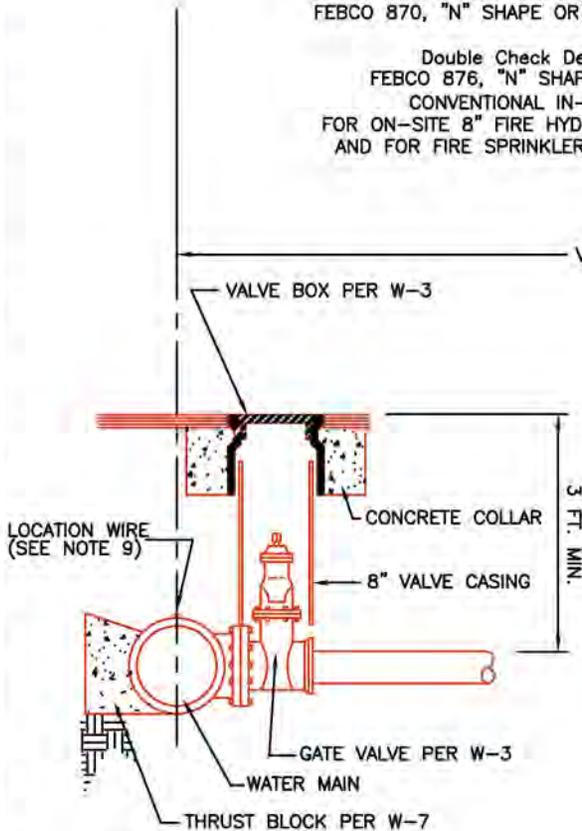
DOUBLE CHECK DETECTOR  
CHECK ASSEMBLY  
APPROVED FOR FIRE  
SERVICE ONLY

CITY OF REEDLEY

W-14

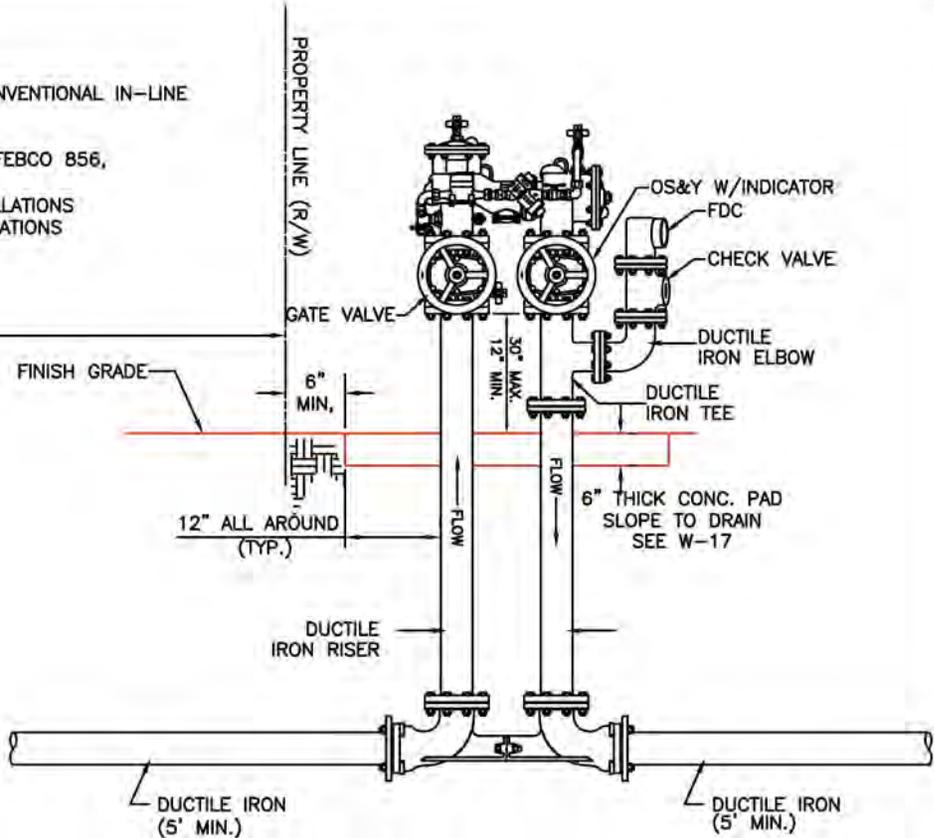
Double Check Valve Assembly  
FEBCO 870, "N" SHAPE OR FEBCO 850, CONVENTIONAL IN-LINE

Double Check Detector Assembly  
FEBCO 876, "N" SHAPE (SHOWN) OR FEBCO 856,  
CONVENTIONAL IN-LINE OR EQUAL  
FOR ON-SITE 8" FIRE HYDRANT RUN INSTALLATIONS  
AND FOR FIRE SPRINKLER SYSTEM INSTALLATIONS



**NOTES:**

1. APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED ON EACH SERVICE LINE TO A CUSTOMER'S ON-SITE FIRE SYSTEM INCLUDING ONSITE FIRE HYDRANT(S).
2. REDUCED PRESSURE BACKFLOW ASSEMBLY SHALL BE LISTED ON THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH'S MOST RECENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
3. ALL MATERIALS, VALVES, AND FITTINGS THAT ARE TO COME IN CONTACT WITH POTABLE WATER SHALL BE ANSI/NSF 61 CERTIFIED
4. CAST IRON COVER SHALL BE MARKED "WATER".
5. TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.



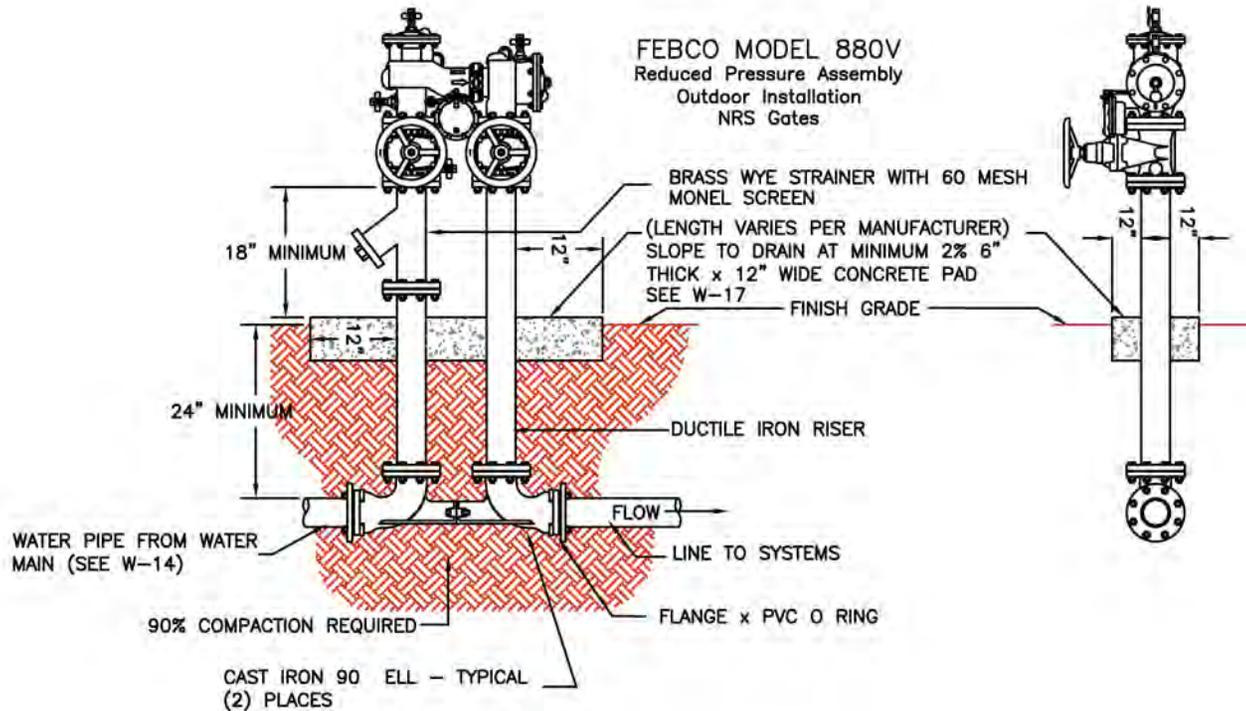
6. WATER VALVE SHALL BE APPROVED GATE VALVE AS PER W-3
7. GATE VALVE SHALL BE FLANGED TO TEE IN MAIN.
8. DIMENSIONS OF CONCRETE PAD TO BE DETERMINED BY THE CITY ENGINEER FOR EACH JOB.
9. SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NONMETALIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBER TAPE, CONNECT TO ALL VALVES AND FITTINGS.
10. P.V.C. WATER MAIN SHALL CONFORM TO AWWA C900 SPECIFICATIONS.
11. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C110 SPECIFICATIONS.
12. DOUBLE CHECK DETECTOR BACKFLOW PREVENTOR SHALL BE INSTALLED BY A LICENSED PLUMBING CONTRACTOR.
13. ALL BURIED METAL SHALL BE WRAPPED WITH 8 MIL. POLYETHYLENE ENCASUREMENT SO THAT NO SOIL IS IN CONTACT WITH METAL.



SCALE:  
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OCT. 2019  
REF. STD. DWG.:  
W-14, W-17

**BACKFLOW INSTALLATION  
REDUCE PRESSURE  
(R.P.) VALVE**

**CITY OF REEDLEY  
W-15**



**NOTES:**

1. REDUCED PRESSURE BACKFLOW ASSEMBLY SHALL BE LISTED ON THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH'S MOST RECENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
2. ALL MATERIALS, VALVES, AND FITTINGS THAT ARE TO COME IN CONTACT WITH POTABLE WATER SHALL BE ANSI/NSF 61 CERTIFIED.
3. EQUIPMENT TO BE INSTALLED AT A MINIMUM OF 24" FROM ANY STRUCTURES OR HARDSCAPING.
4. ALL ABOVE GROUND ASSEMBLY SHALL RECEIVE (2) COATS OF RED PRIMER AND (1) COAT EXTERIOR ENAMEL - COLOR AS SELECTED BY LANDSCAPE ARCHITECT
5. WHEN UNIT IS NEXT TO A STRUCTURE (ie. WALL, BUILDING, ETC.) MOUNT TEST COCKS ON OPEN OR NON-STRUCTURE SIDE.
6. APPROVED BACKFLOW PRESSURE REDUCER ASSEMBLY SHALL BE INSTALLED ON EACH SERVICE LINE TO A CUSTOMER'S SYSTEM AT OR NEAR THE PROPERTY LINE.
7. TRADE NAMES ARE SPECIFIED HEREIN AS A STANDARD OF ACCEPTABLE QUALITY. EQUIPMENT OF EQUAL QUALITY MAY BE USED AFTER APPROVAL BY THE CITY ENGINEER.
8. DIMENSIONS OF CONCRETE PAD TO BE DETERMINED BY THE CITY ENGINEER FOR EACH JOB.
9. SINGLE STRAND 14 GAUGE COPPER WIRE TO BE LAID ALONG TOP OF NONMETALIC PIPE AND HELD IN PLACE AT 5 FT. INTERVALS BY DUCT OR PLUMBER TAPE, CONNECTED TO ALL VALVES, FITTINGS & HYDRANT ASSEMBLIES.
10. P.V.C. WATER MAIN SHALL CONFORM TO AWWA C900 SPECIFICATIONS.
11. METER AND R.P. VALVE SHALL BE INSTALLED BY A LICENSED PLUMBING CONTRACTOR.
12. CONCRETE SHALL BE CLASS 'B' - 5 SACK MIX.

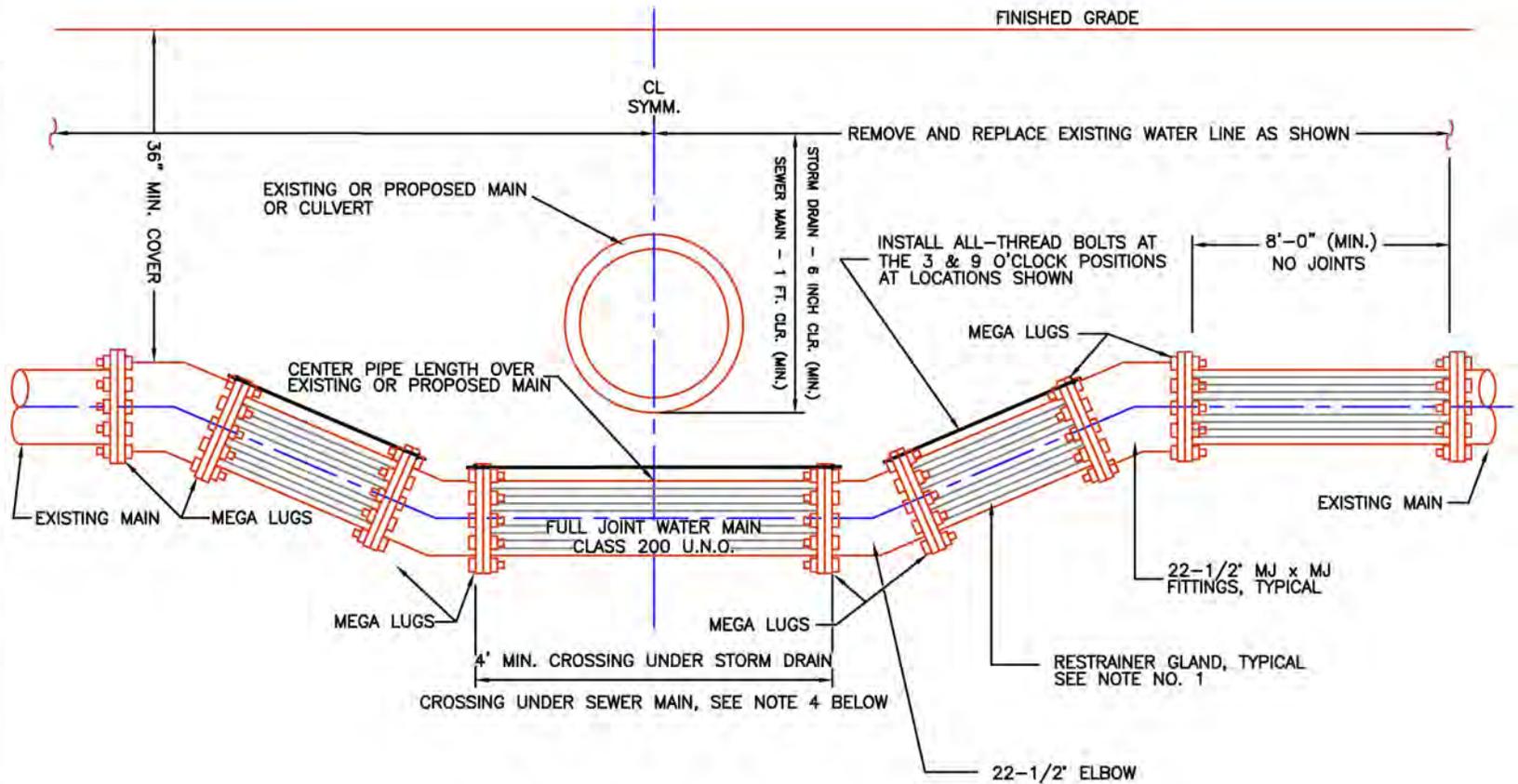


SCALE:  
NOT TO SCALE  
REVISED:  
SEPT. 2019  
REF. STD. DWG.:  
W-7, W-9, W-10

**CONSTRUCTION REQUIREMENTS FOR LOWERING WATER MAINS**

**CITY OF REEDLEY**

**W-16**



**NOTES:**

1. INSTALL RESTRAINER GLANDS AS SHOWN PER AWWA SPECIFICATION C600-87 ENCASE IN 8 MIL. FILM.
2. SEE WATER MAIN STANDARDS, W-7, W-9 & W-10 FOR DETAILS NOT SHOWN.
3. DISINFECT AND TEST ASSEMBLY PRIOR TO REPLACING TRENCH PAVING.
4. REFER TO W-9 & W-10 FOR SPECIAL CONSTRUCTION REQUIREMENTS FOR SEWER AND WATER SEPARATION.
5. LOWERING WATER MAINS SHALL REQUIRE APPROVAL BY THE CITY ENGINEER.
6. ALL FITTINGS SHALL BE DIP.

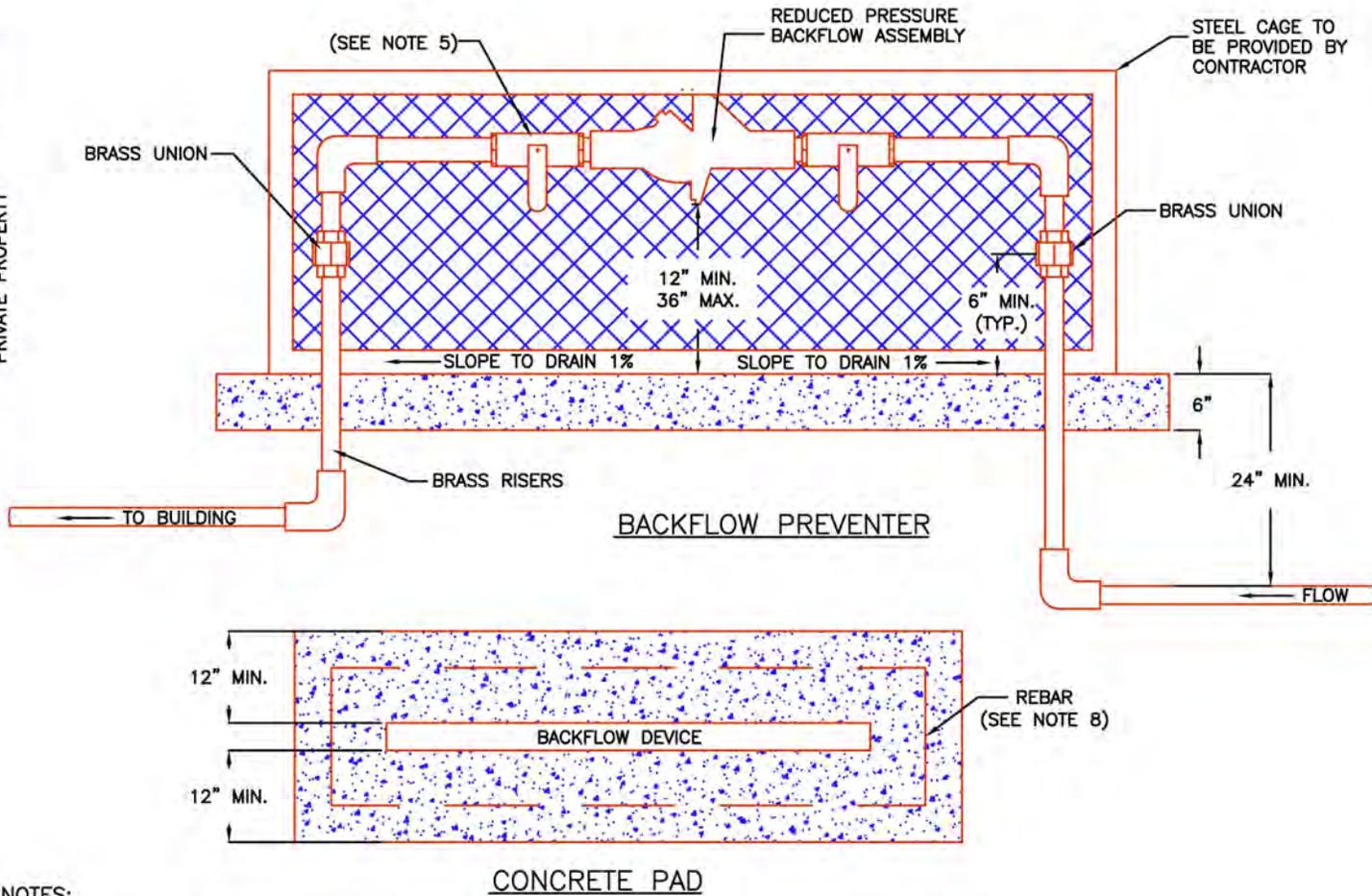


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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
N/A

**REDUCED PRESSURE  
BACKFLOW PREVENTER  
1" TO 2"**

**CITY OF REEDLEY  
W-17**

PUBLIC UTILITY EASEMENT  
PRIVATE PROPERTY



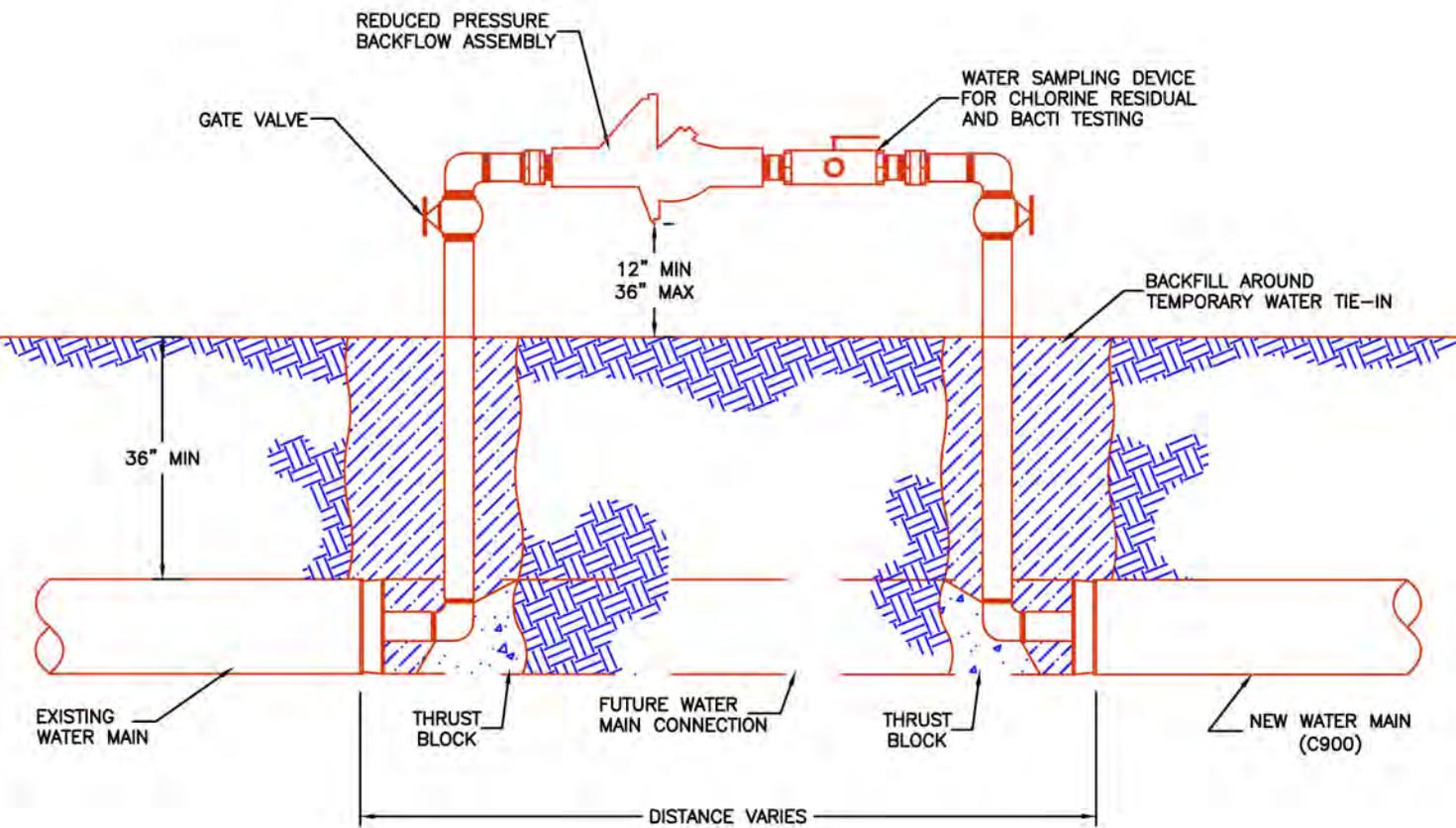
**NOTES:**

1. REDUCED PRESSURE BACKFLOW ASSEMBLY SHALL BE LISTED ON THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH'S MOST RECENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
2. ALL PIPES SHALL BE LEAD-FREE BRASS. ALL BURIED PIPES SHALL BE WRAPPED WITH A MINIMUM OF 8 MIL., POLYETHYLENE ENCASEMENT.
3. ALL MATERIALS, VALVES, AND FITTINGS THAT ARE TO COME IN CONTACT WITH POTABLE WATER SHALL BE ANSI/NSF 61 CERTIFIED.
4. BACK FLOW ASSEMBLY SHALL BE LOCATED WITHIN 5' OF THE WATER METER.
5. BRONZE BODIED RESILIENT SEATED BALL VALVE. MINIMUM RATED OPERATING PRESSURE, 175 PSI.
6. BOLLARDS MAY BE REQUIRED ON REQUEST BY THE CITY AND SHALL BE PROVIDED BY THE CONTRACTOR.
7. CHRISTY FREEZE BLANKET OR EQUIVALENT SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE FITTED TO THE APPROPRIATE VALVE SIZE.
8. A 6" THICK CONCRETE PAD IS REQUIRED FOR ALL WATER PROTECTION DEVICES. 4 #4 REBAR REINFORCEMENT REQUIRED. MINIMUM OF 1ft. CLEARANCE ON ALL SIDES OF THE DEVICE AND AS DIRECTED BY THE CITY ENGINEER.



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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
N/A

TEMPORARY WATER MAIN  
TIE-IN

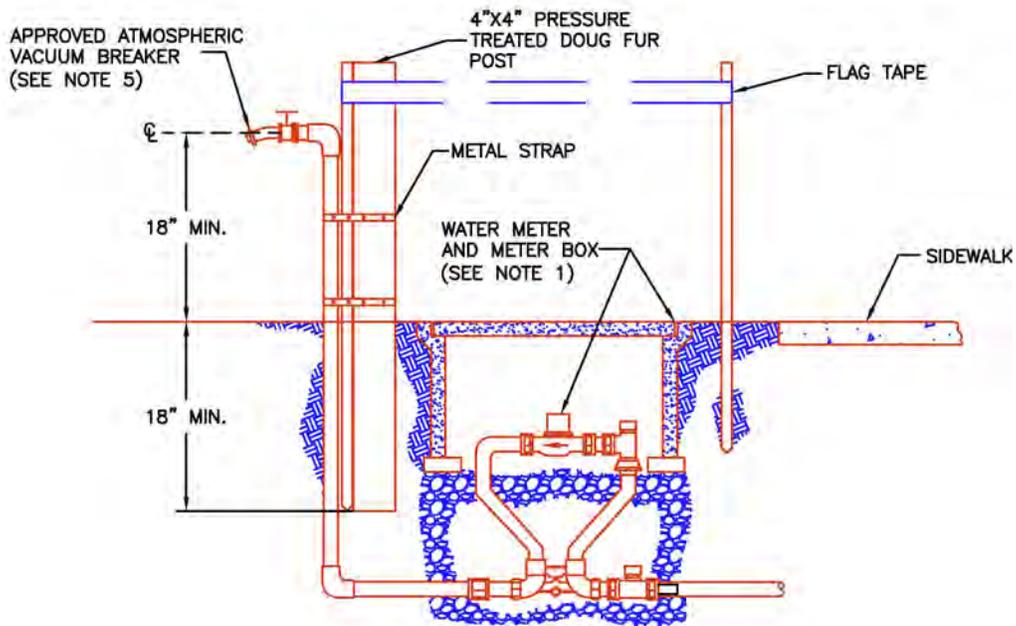


NOTES:

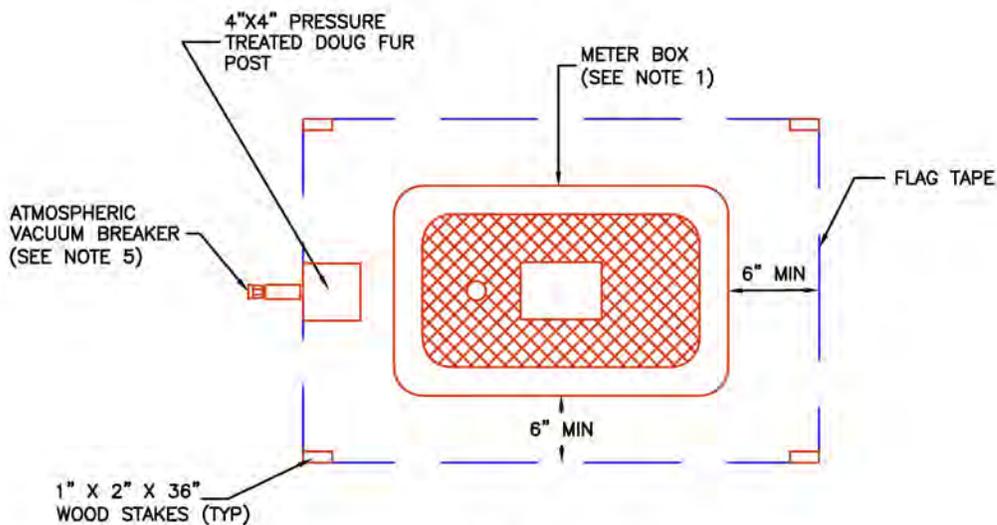
1. SHALL BE INSTALLED ONLY AFTER APPROVAL BY THE CITY OF REEDLEY.
2. REDUCED PRESSURE BACKFLOW ASSEMBLY SHALL BE LISTED ON THE STATE OF CALIFORNIA'S DEPARTMENT OF HEALTH AND SERVICES MOST RECENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
3. THRUST BLOCKS TO BE APPROVED BY THE CITY ENGINEER.
4. ALL PIPE THREADS SHALL BE WRAPPED WITH TEFLON TAPE.

W-18

CITY OF REEDLEY



ELEVATION VIEW



PLAN VIEW

NOTES:

1. METER BOX AND METER SHALL BE INSTALLED AS PER CITY STANDARD W-4.
2. METER BOXES SHALL BE KEPT CLEAN AND FREE OF DEBRIS AT ALL TIMES.
3. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES TO THE METER BOX DURING CONSTRUCTION.
4. FLAG TAPE SHALL HAVE A DISTANCE OF 6" MINIMUM FROM THE METER BOX AND SHALL BE WRAPPED AROUND EACH OF THE 4 WOODEN STAKES IN ORDER TO DELINEATE THE LIMITS OF THE METER BOX PROTECTION.
5. ATMOSPHERIC VACUUM BREAKER SHALL BE APPROVED BY THE CITY OF REEDLEY BEFORE USE.



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OCT. 2019  
REF. STD. DWG.:  
W-4

**METER BOX CONNECTION  
AND TEMPORARY  
CONSTRUCTION WATER**

*CITY OF REEDLEY*

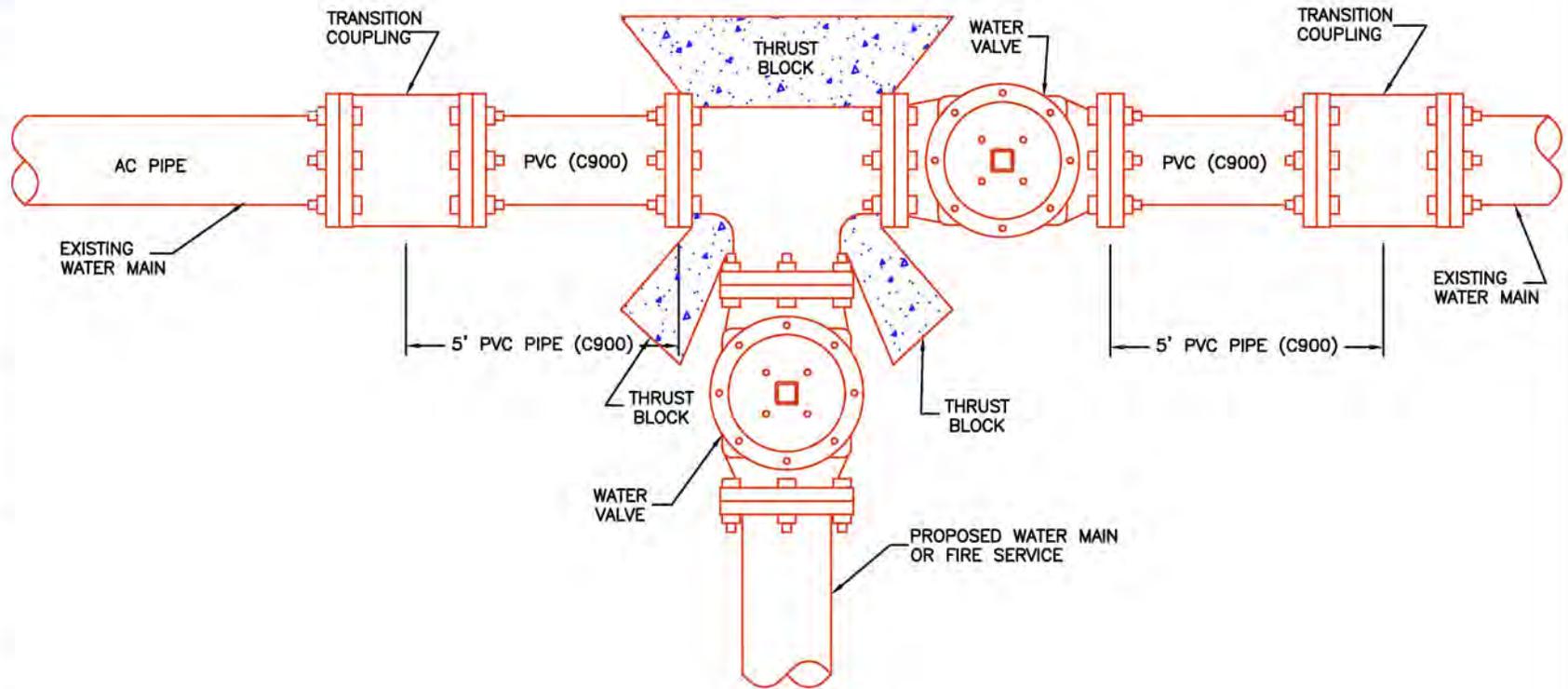
**W-19**



SCALE:  
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REVISED:  
OCT. 2019  
REF. STD. DWG.:  
W-7

CUT IN DETAIL FOR  
WATER MAIN  
(AC PIPE)

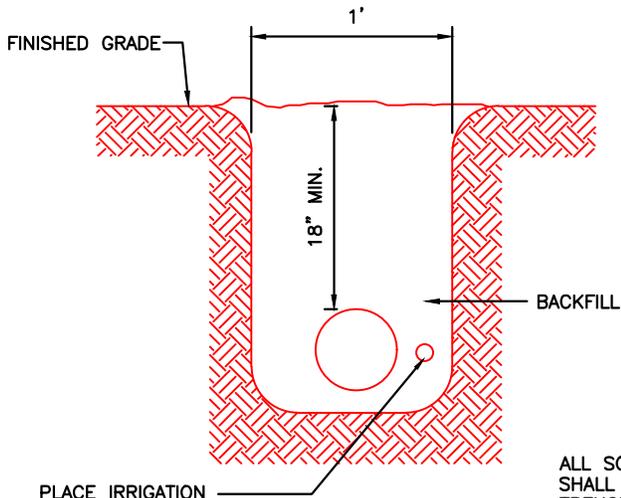
CITY OF REEDLEY  
W-20



**NOTES:**

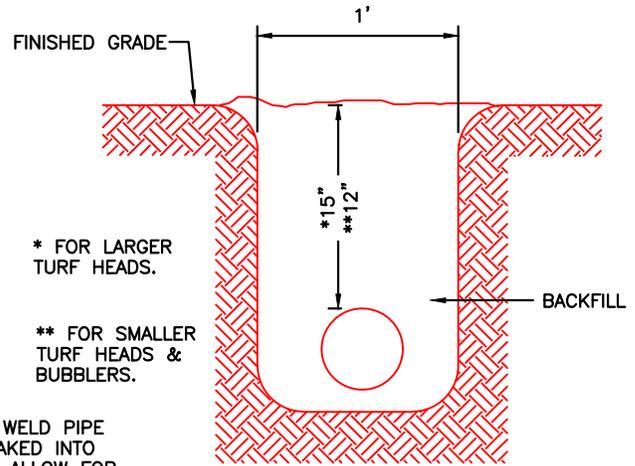
1. ALL PIPES, VALVES, AND FITTINGS THAT ARE TO COME INTO CONTACT WITH POTABLE WATER SHALL BE ANSI/NSF-61 CERTIFIED.
2. MECHANICAL JOINTS TO BE USED ON ALL FITTINGS.
3. SUMP SHALL BE DUG UNDER CUT IN LOCATION SO THAT WHEN WATER IS BEING PUMPED FROM THE EXISTING LINE NO WATER CAN RE-ENTER THE LINE.
4. CHLORINATE IN ACCORDANCE WITH AWWA STANDARDS.
5. SPRAY EXISTING PIPE, ALL FITTINGS AND VALVES WITH A SOLUTION OF SUPER CHLORINATED WATER PRIOR TO INSTALLATION.
6. THRUST BLOCKS SHALL BE INSTALLED AS PER W-7.
7. ALL METAL FITTINGS SHALL BE WRAPPED WITH 8MIL POLYETHYLENE ENCASEMENT (MINIMUM).





PLACE IRRIGATION CONTROL WIRES NEAR THE MAIN BUNDLE AND TAPED AT 10 FT. INTERVALS. LOCATE WIRES AT THE 3 O'CLOCK POSITION.

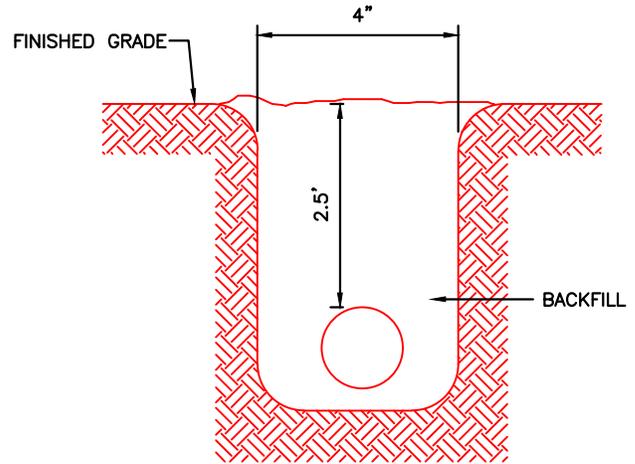
MAIN LINE



\* FOR LARGER TURF HEADS.  
\*\* FOR SMALLER TURF HEADS & BUBBLERS.

ALL SOLVENT WELD PIPE SHALL BE SNAKED INTO TRENCHES TO ALLOW FOR EXPANSION AND CONTRACTION

LATERAL LINE



ELECTRICAL CONDUIT

**NOTES:**

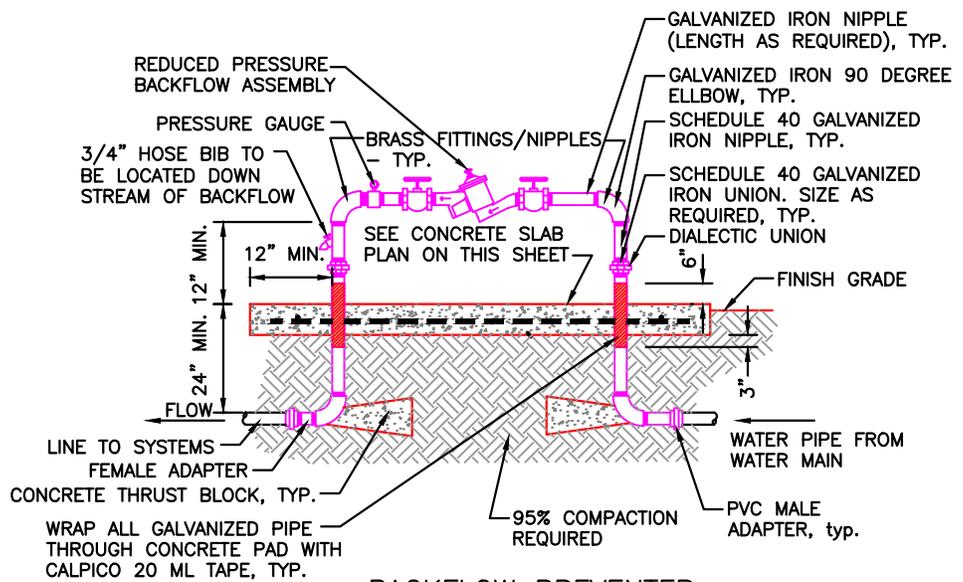
1. ALL ELECTRICAL WIRING AND WATER LINES SHALL BE INSTALLED 2.5 FT. DEEP IN A SCHEDULE 40 PVC CONDUIT WHEN CROSSING ROADWAYS OR UNDER ANY HARD SURFACE.
2. IF MORE THAN ONE LINE IS INSTALLED PER TRENCH, PROVIDE 0.5 FT. HORIZONTAL AND VERTICAL SEPARATION.
3. ALL PVC SOLVENT (GLUE) SHALL BE #711 (PRIMER IS REQUIRED ON MAIN LINE ONLY).
4. LANDSCAPE AND IRRIGATION IMPROVEMENTS WITHIN THE DEDICATED STREET RIGHT-OF-WAY MAY REQUIRE AN ENCROACHMENT PERMIT. CHECK WITH PUBLIC WORKS DEPARTMENT FOR REQUIREMENTS.
5. WHERE OPEN STREET CUTS ARE REQUIRED TO INSTALL VARIOUS IRRIGATION AND/OR WIRES, ALL BACKFILL, COMPACTING AND FINAL SURFACE PATCH WITHIN THE CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH CITY STANDARD ST-46 OR AS DIRECTED BY THE CITY ENGINEER.
6. WHEN THERE IS A CHANGE IN FITTED DIRECTION, ALL IRRIGATION MAIN LINES LARGER THAN 2" IN DIAMETER (PRESSURE LINES) SHALL BE SECURED WITH THRUST BLOCKS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, CITY STD. W-7 AND AS DIRECTED BY THE CITY ENGINEER.
7. ALL IRRIGATION LATERAL LINES SHALL BE SCHEDULE 40 PVC.
8. ALL IRRIGATION MAIN LINES 2" IN DIAMETER AND LESS SHALL BE SCHEDULE 40 PVC. IRRIGATION MAIN LINES GREATER THAN 2" IN DIAMETER SHALL BE PVC SCHEDULE 40 OR APPROVED EQUAL BY THE CITY ENGINEER.
9. ANY AND ALL CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.
10. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST APPROVED EDITION OF THE UNIFORM PLUMBING CODE, MANUFACTURE'S RECOMMENDATIONS AND AS DIRECTED BY THE CITY ENGINEER.
11. ALL MATERIAL USED SHALL BE NEW AND FREE FROM IMPERFECTIONS.
12. SEE APPROVED LANDSCAPE AND IRRIGATION PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBER, SIZE, QUANTITY, MANUFACTURER, AND PERFORMANCE REQUIREMENTS.



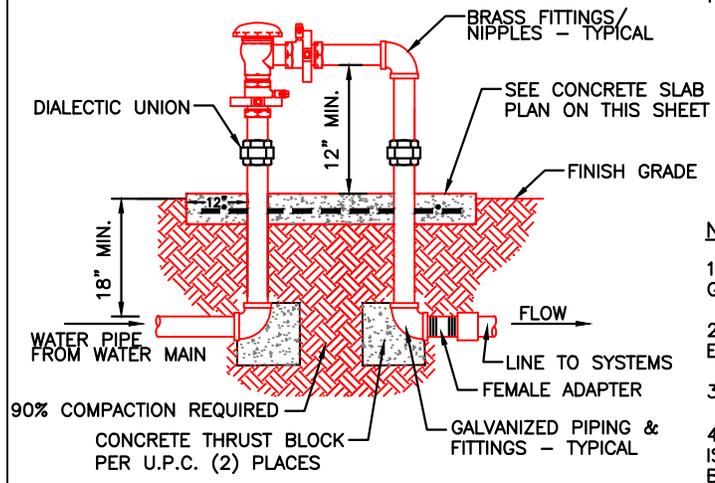
SCALE:  
NOT TO SCALE  
REVISED:  
OCT. 2019  
REF. STD. DWG.:  
ST-46 & W-7

**CONDUIT AND  
IRRIGATION PIPING,  
TRENCHING & BACKFILL**

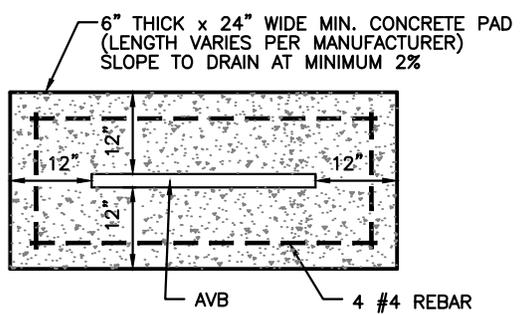
*CITY OF REEDLEY*



**BACKFLOW PREVENTER**  
TO BE USED FOR CONSTRUCTION WATER ALSO



**PRESSURE VACUUM BREAKER**



**CONCRETE SLAB PLAN**  
REQUIRED ON ALL ASSEMBLIES

**NOTES:**

1. EXCEPT AS NOTED, ALL PIPING AND FITTINGS SHALL BE GALVANIZED UNLESS APPROVED BY THE CITY ENGINEER.
2. USE TEFLON TAPE ON ALL THREADED JOINTS OR APPROVED EQUAL BY THE CITY ENGINEER.
3. ALL MATERIALS SHALL BE NEW AND FREE FROM IMPERFECTIONS.
4. FOR LESS THAN A 2" LANDSCAPE SERVICE, IF WATER PRESSURE IS NOT AVAILABLE A FEBCO 766 PRESSURE VACUUM BREAKER MAY BE UTILIZED WITH APPROVAL BY THE CITY ENGINEER.
5. SEE APPROVED LANDSCAPE AND IRRIGATION PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBERS, SIZES, QUANTITY, MANUFACTURER'S, AND PERFORMANCE REQUIREMENTS.
6. ALL TRANSITIONS FROM GALVANIZED PIPE TO PVC SHALL BE CONSTRUCTED WITH SCHEDULE 40 FEMALE ADAPTER OR APPROVED EQUAL BY THE CITY ENGINEER.
7. A 6" THICK CONCRETE (4000 PSI) SLAB IS REQUIRED FOR ALL WATER PROTECTION DEVICES. 4 #4 REBAR REINFORCEMENT REQUIRED. MINIMUM CLEARANCE SHALL BE 1 FT. ON ALL SIDES OF THE DEVICE AND AS DIRECTED BY THE CITY ENGINEER.
8. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST ACCEPTED EDITION ON THE UNIFORM PLUMBING CODE, MANUFACTURE'S RECOMMENDATION, AND AS DIRECTED BY THE CITY ENGINEER.
9. ANY AND ALL CHANGES SHALL BE APPROVED BY THE CITY ENGINEER BEFORE CONSTRUCTION.
10. BEFORE ACCEPTANCE OF WORK BY THE CITY, THE BACKFLOW PREVENTER SHALL BE TESTED AND CERTIFIED BY A LICENSED BACKFLOW PLUMBER. CERTIFICATION SHALL BE DELIVERED TO THE CITY ENGINEER.



SCALE:  
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OCT. 2019  
REF. STD. DWG.:

**POTABLE WATER  
PROTECTION**

*CITY OF REEDLEY*



SCALE:  
NOT TO SCALE

REVISED:  
OCT. 2019

REF. STD. DWG.:  
L-3

# LANDSCAPE IRRIGATION BACKFLOW ENCLOSURE

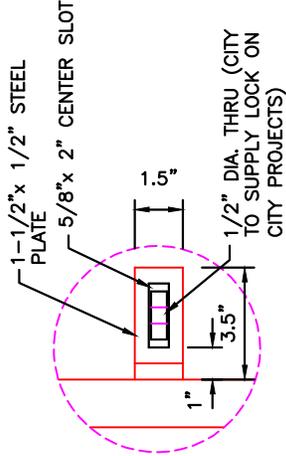
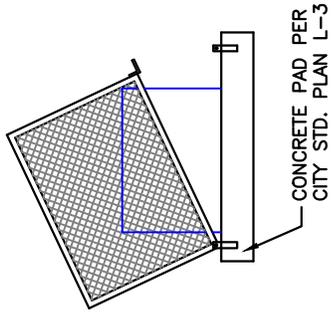
CITY OF REEDLEY

L-4

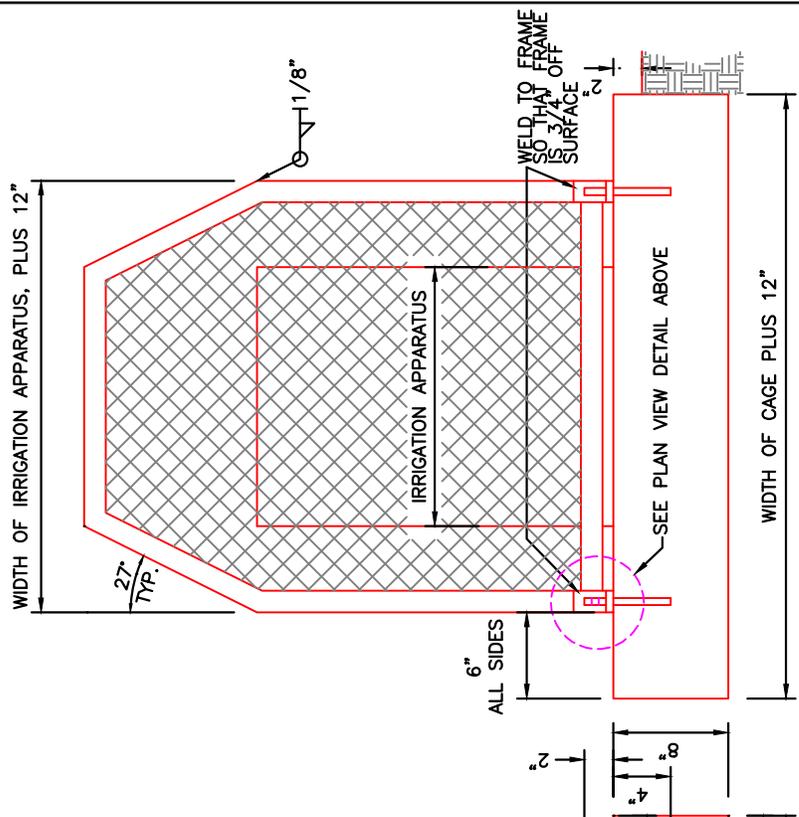
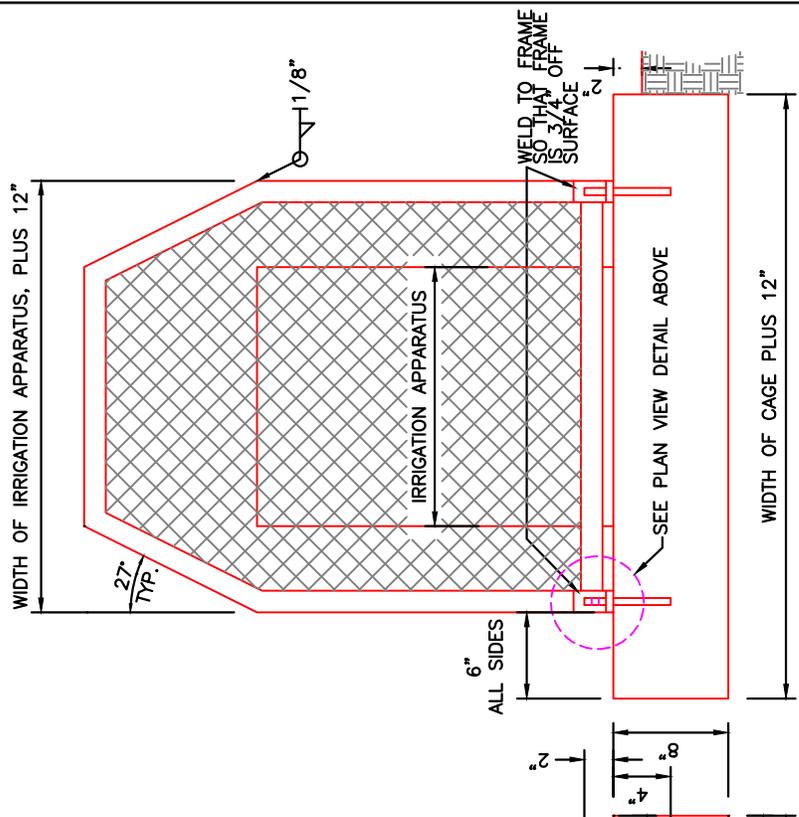
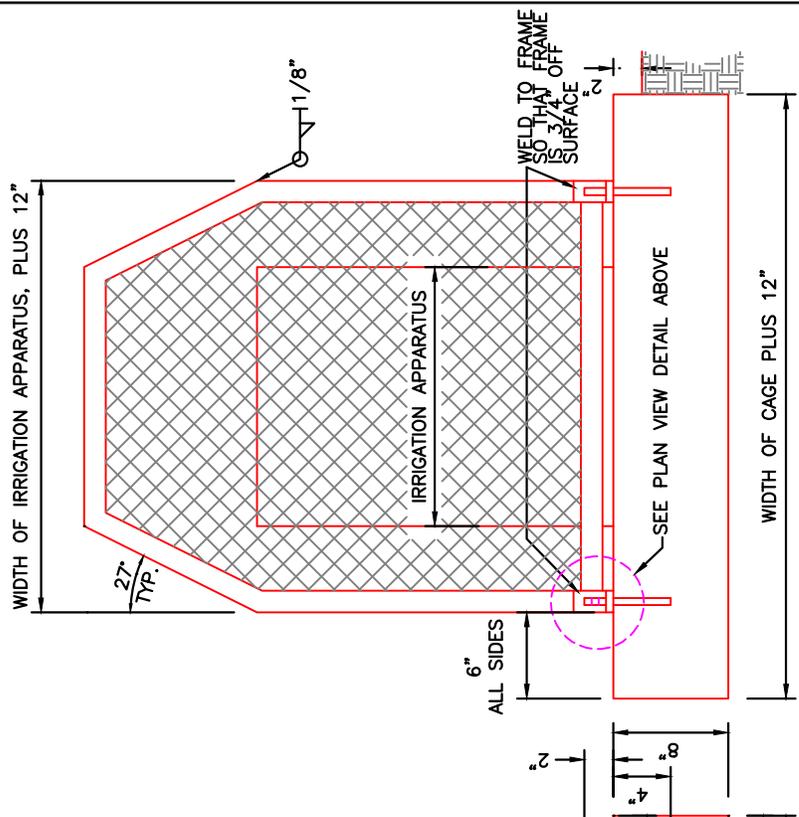
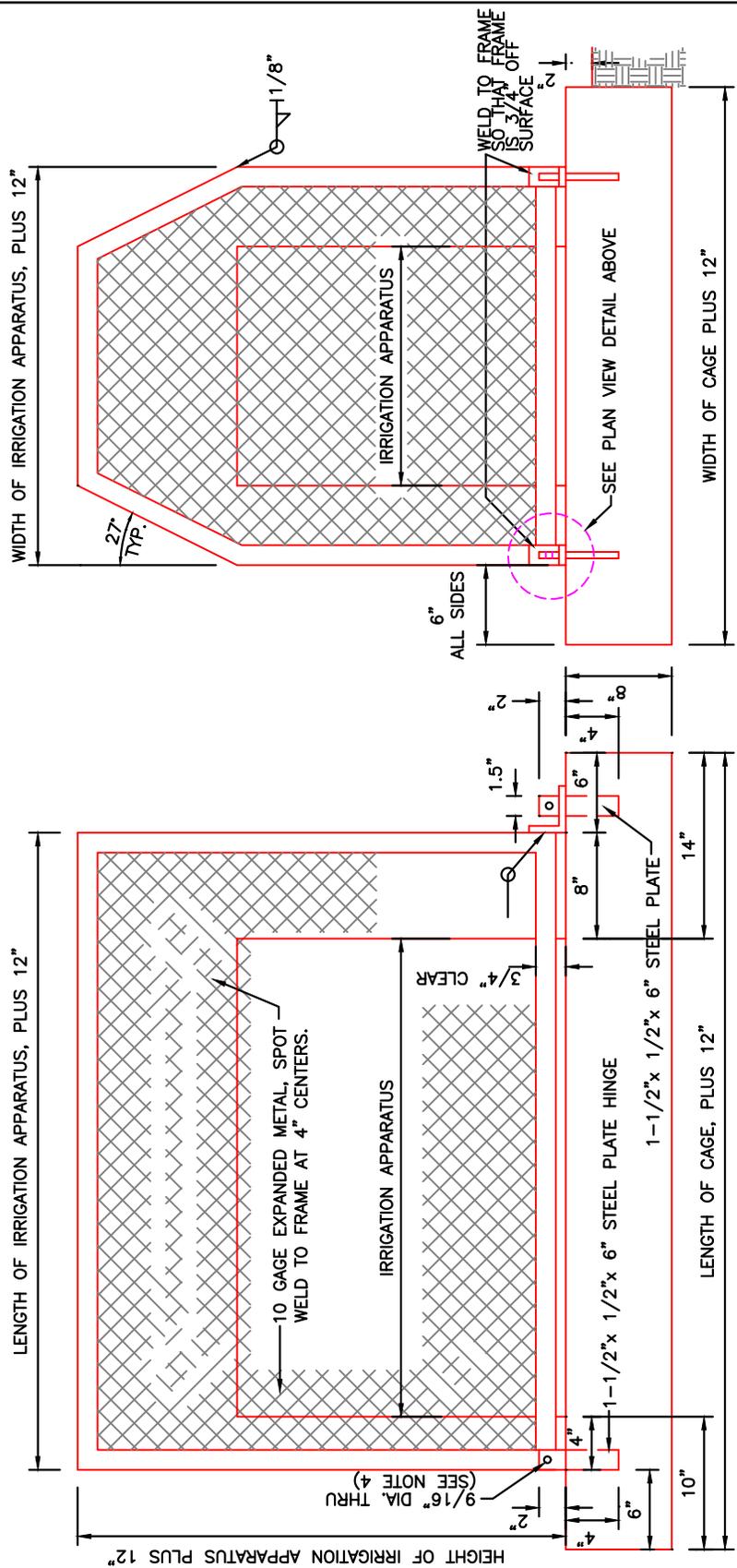
**NOTES:**

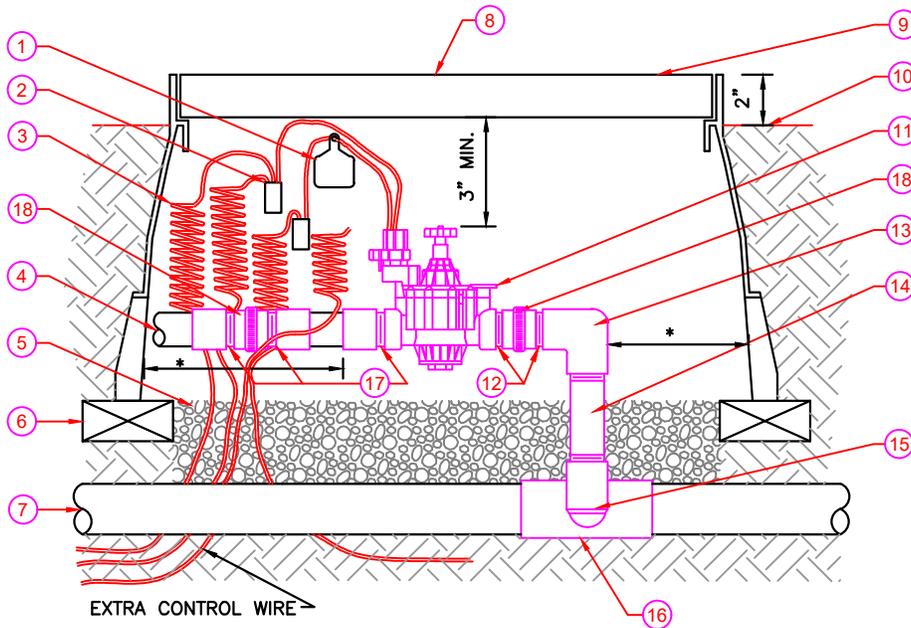
1. PAINT ALL METAL SURFACES WITH 2 COATS DARK GREEN ENAMEL OVER A PRIMER BASE.
2. FRAME CONSTRUCTED OF 1 1/2" BY 1 1/2" BY 1 1/2" ANGLE IRON.
3. CONCRETE SHALL BE CLASS "B" (5 SACK).
4. 1/2"x 2" HEX CAP SCREW, GRADE 2 WITH 2 NUTS EACH.
5. PREFABRICATED SINGLE-LIFT OR DOUBLE-LIFT BACKFLOW ENCLOSURES AVAILABLE FROM NATIONAL WATERWORKS, 2651 E. BYRD AVE., #101, FRESNO, CA 93706 PHONE 559-237-7488, FAX 559-237-6423, SEE TABLES BELOW FOR SIZING.

SIZING FOR SINGLE-LIFT ENCLOSURES			SIZING FOR DOUBLE-LIFT ENCLOSURES						
VALVE SIZE	PART #	WIDTH	LENGTH	HEIGHT	VALVE SIZE	PART #	WIDTH	LENGTH	HEIGHT
1"	BFE-100	12"	30"	24"	2-1/2"	BFE-250	24"	60"	36"
1-1/2"	BFE-200	18"	42"	30"	3"	BFE-400	30"	72"	42"
2"	BFE-200	18"	42"	30"	4"	BFE-400	30"	72"	42"
					6"	BFE-600	30"	84"	42"



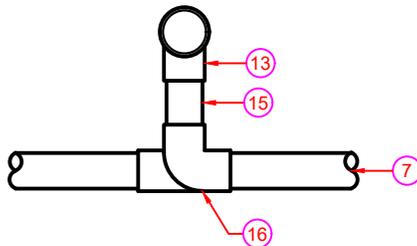
PLAN VIEW DETAIL





EXTRA CONTROL WIRE →

REMOTE CONTROL VALVE – GLOBE



PLAN VIEW

- 1 INTERNAL IDENTIFICATION TAG
- 2 WATERPROOF CONNECTION (1 OF 2)
- 3 30" OF COILED WIRE
- 4 PVC LATERAL PIPE
- 5 3" Min. DEPTH OF 3/4" GRAVEL (WASHED)
- 6 BRICK SUPPORT (1 OF 4)
- 7 PVC MAINLINE PIPE
- 8 VALVE BOX IDENTIFICATION TAG (ENGRAVED)
- 9 PLASTIC VALVE BOX (SEE NOTE 3 BELOW)
- 10 FG
- 11 REMOTE CONTROL VALVE
- 12 PVC SCH.80 NIPPLE (CLOSE)
- 13 PVC SCH.40 ELL
- 14 PVC SCH.80 NIPPLE (LENGTH AS REQUIRED)
- 15 SCH.80 NIPPLE (2" LENGTH) & SCH.40 ELL
- 16 PVC SCH.40 TEE OR ELL
- 17 PVC SCH.40 MALE ADAPTER
- 18 PVC UNION

\* 5 X THE DIAMETER OF THE PIPE

CONTROL WIRING SHALL BE DIRECT BURIAL AWG-UF TYPE; "HOT" WIRE NOT SMALLER THAN AWG NO. 14; COMMON WIRE NOT SMALLER THAN AWG NO. 12.

CONTROL WIRE SIZE

NOTES:

1. USE TEFLON TAPE ON ALL THREADED JOINTS OR APPROVED EQUAL BY CITY ENGINEER.
2. ALL NIPPLES SHALL BE SCHEDULE 80 PVC. ALL FITTINGS SHALL BE SCHEDULE 40 PVC.
3. ALL IRRIGATION CONTROL VALVES SHALL BE PLACED IN A PLASTIC IRRIGATION CONTROL VALVE BOX WITH TOP OF VALVE BOX EVEN WITH FINISHED GRADE IN TURF AND 2-INCHES ABOVE FINISHED GRADE IN PLANTER AREA. THE FOLLOWING PLASTIC VALVE BOX AND LID ARE DEEMED ACCEPTABLE. ANY DEVIATION FROM THE ACCEPTED BOX AND LID BELOW MUST BE APPROVED BY THE CITY ENGINEER.  
  
CHRISTY FL9T FIBRELYTE LID  
FL9 FIBRELYTE BOX
4. INSTALLATION OF EXTRA IRRIGATION CONTROL WIRE FROM IRRIGATION CONTROL CLOCK TO REMOVE CONTROL VALVE IS REQUIRED FOR EACH MANIFOLD (BUNDLE OF VALVES). EXTRA WIRE SHALL BE A DIFFERENT COLOR THAN THE ONE USED TO OPERATE VALVES.
5. ALL IRRIGATION CONTROL WIRES (CONTROL AND COMMON) SHALL BE U.L. SINGLE STRAND COPPER WIRE, TAPED AND BUNDLED AT 10 FT. INTERVALS AND PLACED NEAR THE IRRIGATION MAINLINE AT 3 O'CLOCK POSITION.
6. ALL WIRE CONNECTIONS SHALL BE WATERPROOF AND APPROVED BY THE CITY ENGINEER. SPLICES WILL NOT BE ALLOWED UNLESS APPROVED BY THE CITY ENGINEER. THE APPROVED SPLICES WILL REQUIRE THE USE OF A SPLICE BOX.
7. MAINTAIN 2 FT. SEPARATION BETWEEN REMOTE CONTROL VALVES (CENTERLINE TO CENTERLINE) WHEN MORE THAN ONE VALVE IS INSTALLED IN THE SAME LOCATION.
8. WHERE POSSIBLE, LOCATE VALVES IN THE PLANTER AREAS.
9. ALL IRRIGATION INSTALLATIONS SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST APPROVED EDITION OF THE UNIFORM PLUMBING CODE, MANUFACTURER'S RECOMMENDATIONS, AND AS DIRECTED BY THE CITY ENGINEER.
10. ALL MATERIALS USED SHALL BE NEW AND FREE FROM DEFECTS.
11. ANY AND ALL CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.
12. SEE APPROVED LANDSCAPE PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBERS, SIZE, QUANTITY, MANUFACTURER'S AND PERFORMANCE REQUIREMENTS.

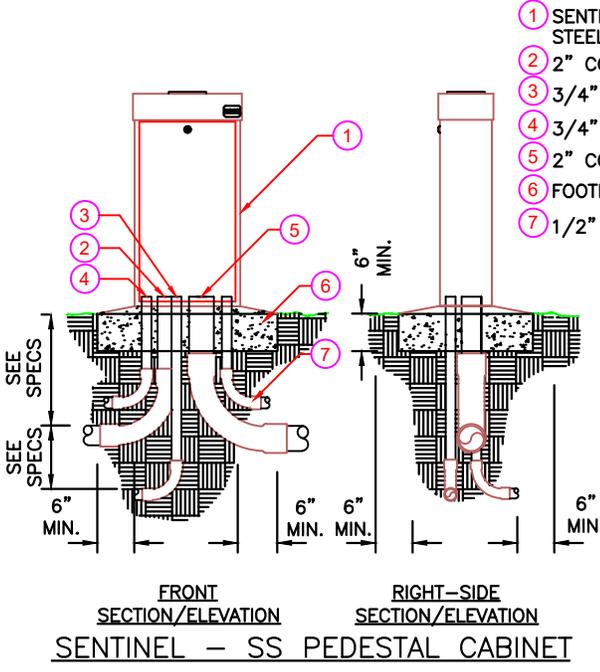


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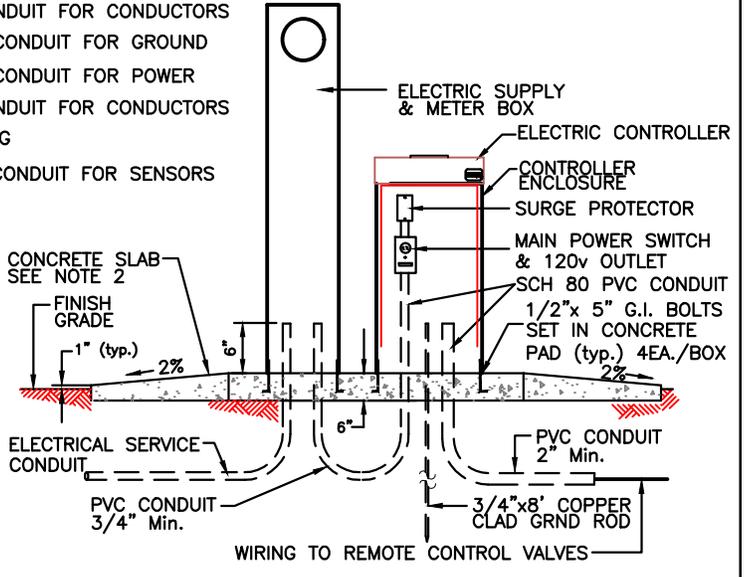
REMOTE CONTROL VALVE

CITY OF REEDLEY

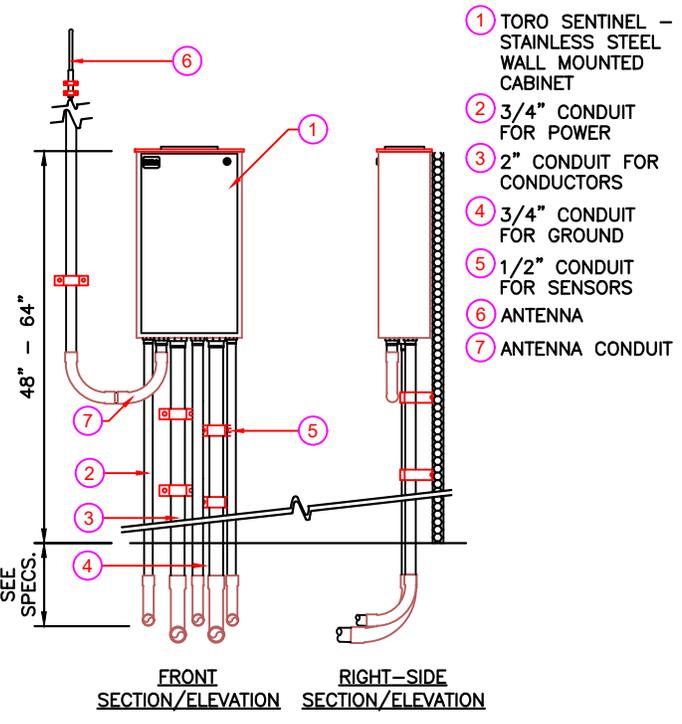
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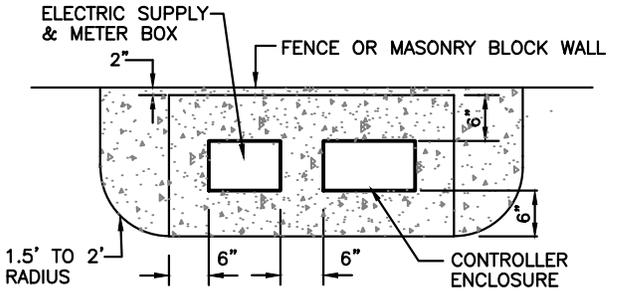
FRONT SECTION/ELEVATION  
RIGHT-SIDE SECTION/ELEVATION  
**SENTINEL - SS PEDESTAL CABINET**



**ELECTRIC CONTROLLER & SERVICE**



FRONT SECTION/ELEVATION  
RIGHT-SIDE SECTION/ELEVATION  
**SENTINEL - SS WALL MOUNTED CABINET**  
SEE NOTE 7



**PLAN VIEW OF CONTROLLER & SERVICE**

- NOTES:**
1. USE SCHEDULE 80 PVC CONDUIT WITHIN ENCLOSED PEDESTAL, SLOPE CONDUIT TO DRAIN 1/8-INCH PER 1 FT.
  2. CONSTRUCT 6" CLASS 'B' (PER SECTION 10 OF CITY STANDARD SPECIFICATIONS) CONCRETE SLAB AS REQUIRED TO RECEIVE THE PEDESTAL MOUNTED IRRIGATION CONTROL CLOCK. COMPACT 6" BASE TO 90% RELATIVE DENSITY PRIOR TO PLACEMENT OF CONCRETE SLAB.
  3. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS.
  4. SEE APPROVED LANDSCAPE/IRRIGATION PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBERS, SIZE, QUANTITIES, MANUFACTURER'S, AND PERFORMANCE REQUIREMENTS.
  5. ANY AND ALL CHANGES FROM THIS STANDARD SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY TYPE OF CONSTRUCTION.
  6. CONTROLLER TO BE PROPERLY GROUNDED PER NATIONAL ELECTRICAL CODE, ARTICLE 250, AND LOCAL REGULATIONS.
  7. TORO SENTINEL STAINLESS STEEL WALL MOUNTED CABINET MAY BE INSTALLED WITH CITY ENGINEER APPROVAL.

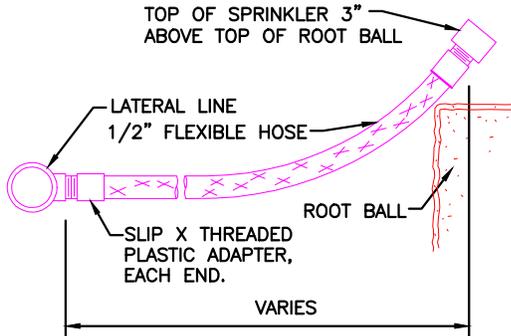


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**ELECTRIC CONTROLLER AND SERVICE**

*CITY OF REEDLEY*

**NOTE:**  
NO NATIVE SOIL ON TOP OF ROOT BALL



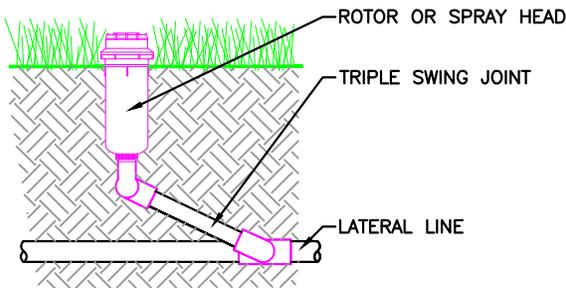
SHRUB BUBBLER

**NOTES:**

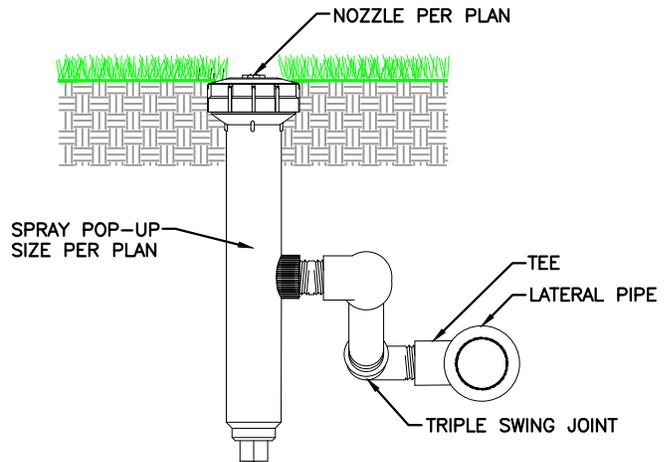
1. USE TEFLON TAPE TAPE ON ALL THREADED JOINTS OR APPROVED EQUAL BY CITY ENGINEER.
2. ALL RISERS AND NIPPLES SHALL BE SCHEDULE 80 PVC.
3. ALL FITTINGS SHALL BE SCHEDULE 40 PVC.
4. ALL LATERALS SHALL BE SCHEDULE 40 PVC OR AS NOTED ON THE LANDSCAPE/IRRIGATION PLANS.
5. WHERE IRRIGATION HEADS ARE INSTALLED WITHIN EMBANKMENTS, A DRAIN VALVE OR CHECK VALVE IS REQUIRED TO PREVENT EROSION. CHECK VALVES AND DRAIN VALVES SHALL BE INSTALLED AT LOCATIONS AS PRESCRIBED BY THE SPECIFIC FIELD CONDITIONS AND SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO USE AND PLACEMENT.
6. ALL POP-UP HEADS SHALL BE 1-INCH FROM CONCRETE AND ASPHALT AREAS. ALL LARGE RADIUS IRRIGATION HEADS (PART CIRCLE) SHALL BE 4-INCHES FROM CONCRETE AND ASPHALT AREAS. HEIGHT OF POP-UP HEADS SHALL BE AS FOLLOWS:  
4-INCHES FOR LAWN AREAS  
1 FOOT FOR SHRUBS  
1 FOOT FOR GROUND COVERS
7. WHERE PART CIRCLE IRRIGATION HEADS ADJACENT TO A BUILDING WALL, LOCATE IRRIGATION HEAD 1 FT. FROM FACE OF BUILDING WALL TO BACK OF IRRIGATION HEAD.
8. SWING JOINTS SHALL BE ALLOWED ON ALL IRRIGATION HEADS EVEN WHERE NOT REQUIRED.
9. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST EDITION OF THE UNIFORM PLUMBING CODE, MANUFACTURER'S RECOMMENDATION AND AS DIRECTED BY THE CITY ENGINEER.
10. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS.
11. SEE APPROVED LANDSCAPE/IRRIGATION PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBERS, SIZE, QUANTITIES, MANUFACTURER'S, AND PERFORMANCE REQUIREMENTS.
12. ANY AND ALL CHANGES FROM THIS STANDARD SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY TYPE OF CONSTRUCTION.

**NOTES:**

1. INSTALL SPRINKLER HEAD FLUSH OR SLIGHTLY ABOVE FINISH GRADE IN TURF AREAS.
2. INSTALL SPRINKLER HEAD 2" ABOVE FINISH GRADE IN SHRUB AND GROUND COVER AREAS. DO NOT COVER WITH MULCH.



POP UP ROTOR IN TURF



POPUP-SPRAY

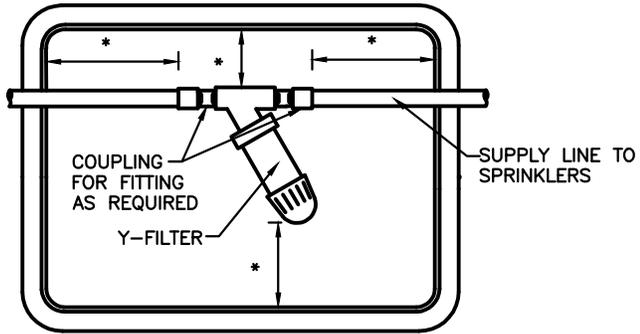


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**VARIOUS IRRIGATION HEADS**

*CITY OF REEDLEY*

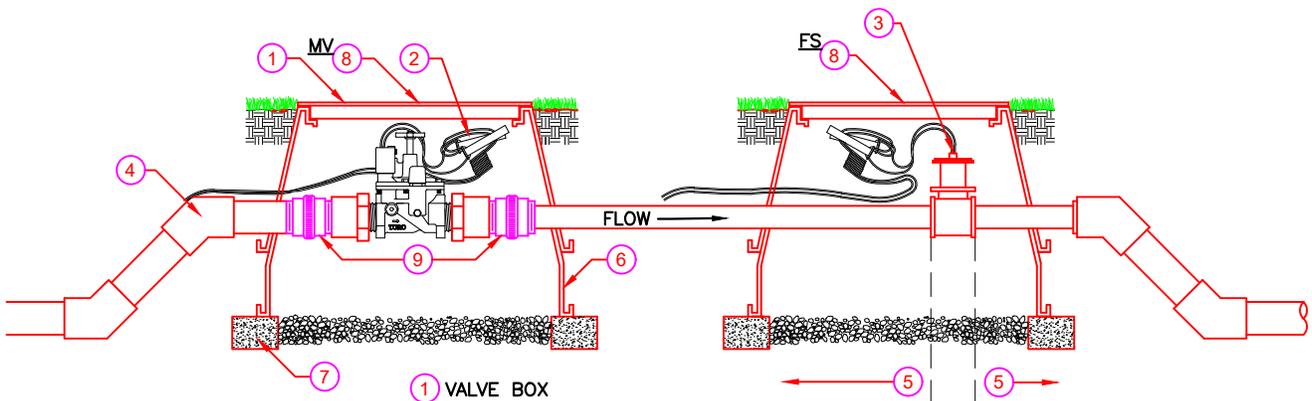
**L-7**



\* = 2" Min. CLEARANCE

PLAN VIEW

FILTER



- 1 VALVE BOX
- 2 CONDUCTORS
- 3 FLOW SENSOR
- 4 PVC ELL - 45 DEGREE
- 5 MIN. 10 X PIPE DIA. UPSTREAM  
MIN. 5 X PIPE DIA. DOWNSTREAM
- 6 EXTENTIONS AS NECESSARY
- 7 BRICK SUPPORT
- 8 VALVE BOX IDENTIFICATION TAG (ENGRAVED AS NOTED)
- 9 PVC UNION

MASTER VALVE - FLOW SENSOR



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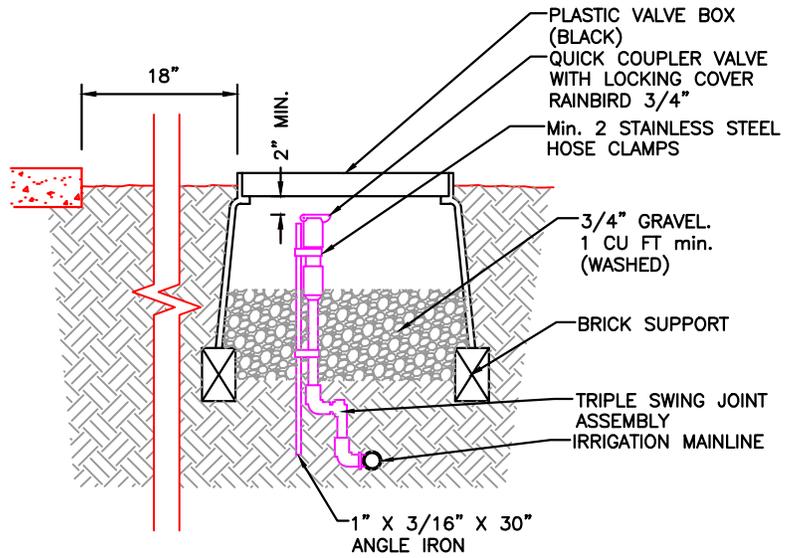
## FLOW SENSOR AND FILTER

CITY OF REEDLEY

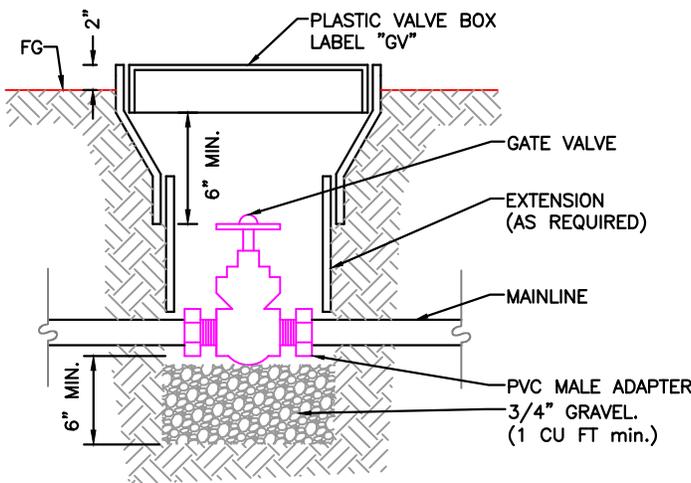
L-8

**NOTES:**

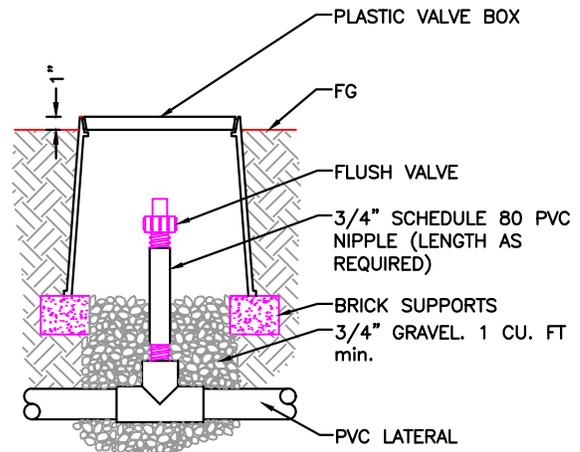
1. USE TEFLON TAPE ON ALL THREADED JOINTS OR AS APPROVED BY CITY ENGINEER.
2. ALL RISERS AND NIPPLES SHALL BE SCHEDULE 80 PVC.
3. ALL FITTINGS SHALL BE SCHEDULE 40 PVC.
4. ALL LATERALS SHALL BE SCHEDULE 40 PVC OR AS NOTED ON THE LANDSCAPE/IRRIGATION PLANS.
5. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST EDITION OF THE UNIFORM PLUMBING CODE, MANUFACTURER'S RECOMMENDATION AND AS DIRECTED BY THE CITY ENGINEER.
6. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS.
7. SEE APPROVED LANDSCAPE/IRRIGATION PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBERS, SIZE, QUANTITIES, MANUFACTURER'S, AND PERFORMANCE REQUIREMENTS.
8. ANY AND ALL CHANGES FROM THIS STANDARD SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY TYPE OF CONSTRUCTION.



**QUICK COUPLER**



**GATE VALVE**



**FLUSH VALVE**

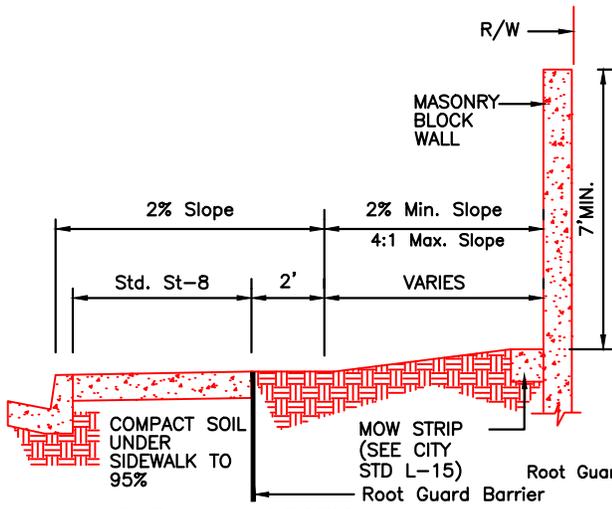


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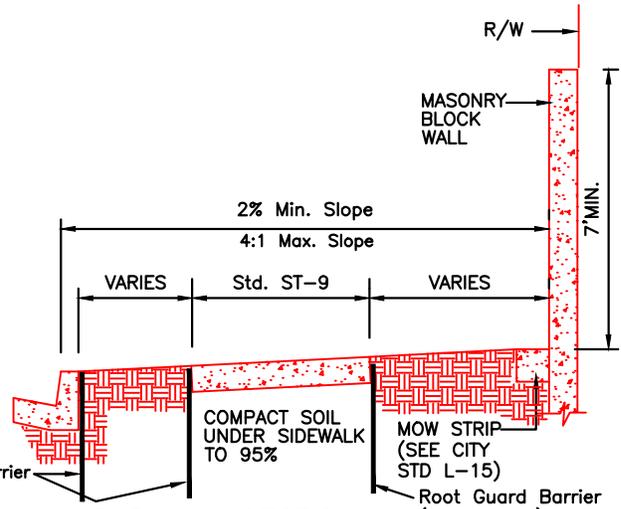
**QUICK COUPLER  
AND VALVES**

*CITY OF REEDLEY*

**L-9**

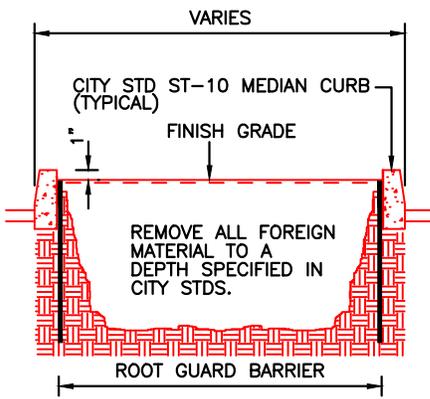


**PARKWAY SECTION**  
MONOLITHIC CURB, GUTTER AND SIDEWALK

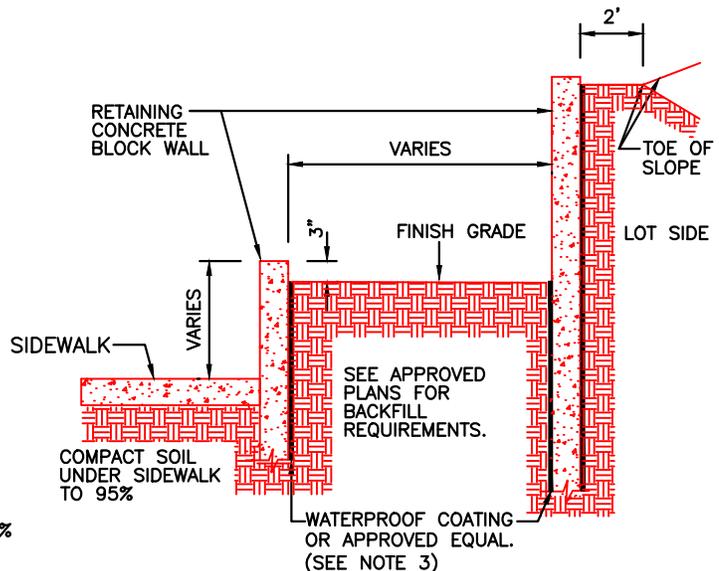


**PARKWAY SECTION**  
LANDSCAPE STRIPS, MEANDERING SIDEWALK

MASONRY BLOCK WALL MUST BE DESIGNED BY A QUALIFIED ENGINEER AND DESIGN SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL



**MEDIAN SECTION**



**WATER PROOFING**

(PLANTERS AND RETAINING WALLS)

ALL RETAINING WALLS MUST BE ENGINEERED AND CALCULATIONS SUBMITTED TO CITY ENGINEER FOR REVIEW AND APPROVAL.

**NOTES:**

1. PROVIDE POSITIVE DRAINAGE (2% MINIMUM TO 4% MAXIMUM) IN ALL LANDFILL AREAS.
2. 9-INCH CONCRETE MOW STRIP IS REQUIRED FOR ALL LAWN AREAS ADJACENT TO PROPOSED OR EXISTING WALL PER STANDARD PLAN L-15.
3. WHERE LOT GRADES ARE HIGHER THAN STREET GRADES, SIDE OF WALL WATER PROOFING IS REQUIRED.
4. IF CURBING AND OR CURB/GUTTER FOR LANDSCAPE CENTER MEDIANS ARE NOT EXISTING, SEE APPROVED CIVIL ENGINEERING DRAWINGS.
5. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST EDITION OF THE UNIFORM PLUMBING CODE, MANUFACTURER'S RECOMMENDATION AND AS DIRECTED BY THE CITY ENGINEER.
6. ANY AND ALL CHANGES FROM THIS STANDARD SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY TYPE OF CONSTRUCTION.

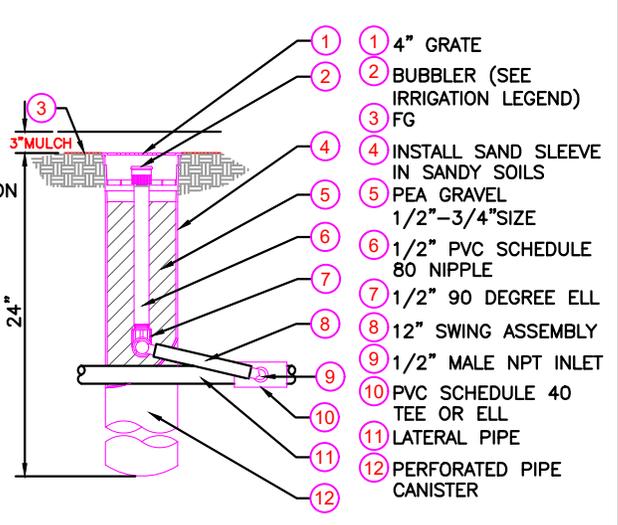
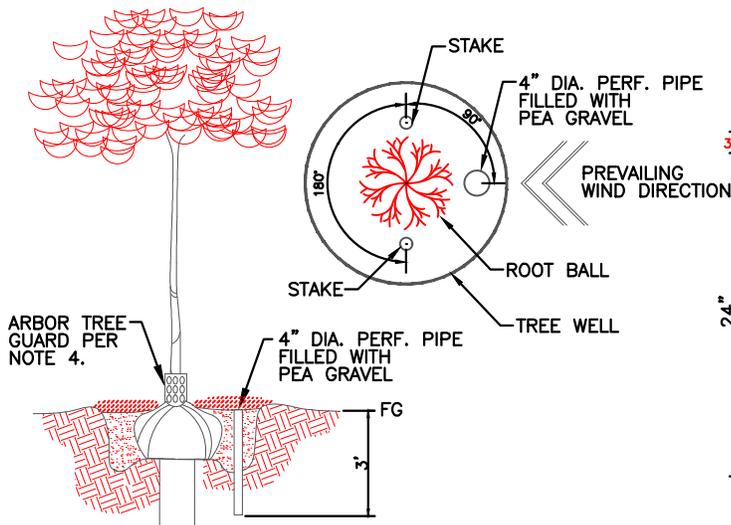


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**PARKWAY AND MEDIAN SECTION DETAILS**

*CITY OF REEDLEY*

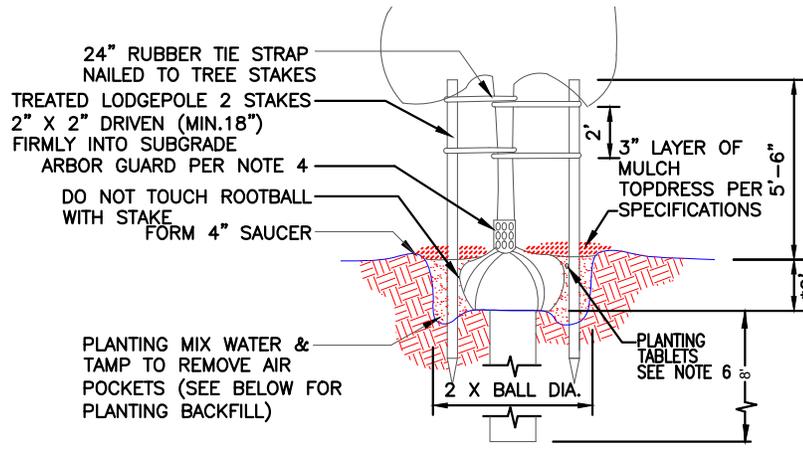
**L-10**



\*TREES LOCATED IN LANDSCAPED AREAS REQUIRE ONLY 1 BUBBLER. TREES LOCATED IN TURF AREAS\* NO BUBBLERS AREAS DO NOT REQUIRE BUBBLERS.

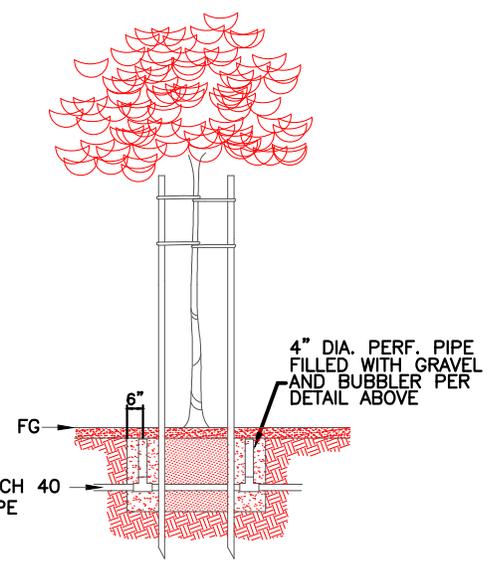
**TREE IRRIGATION**

**BUBBLER IN ROOT WATERING SYSTEM**



- A. TOP SUPPORT OF TREES SHOULD BE 6" ABOVE POINT WHERE TREE HEAD IS SELF SUPPORTING AND CLEAR OF BRANCHES.
- B. PLANTING DEPTH TO BE DICTATED BY POINT OF FIRST ROOT FLAIR (EXCLUDING ADVENTITIOUS ROOTS).
- C. ROOTBALL TO BE 1" ABOVE FINISHED GRADE BY END OF MAINTENANCE PERIOD.
- D. PLANTING BACKFILL MIX SHALL CONSIST OF 60 % NATIVE SOIL & 40 % NITROLIZED WOOD SHAVINGS.
- E. THE CONTRACTOR SHALL DRILL A 12" DIA. x 8' DEEP HOLE AT THE BOTTOM OF EACH PLANTING PIT, PENETRATING THROUGH THE HARDPAN TO LOOSE, FRIABLE SOIL.

**TREE PLANTING AND STAKING**



**TREE BUBBLER IN TREE WELL**

**NOTES:**

1. APPLY SOIL AMENDMENT AS PER SOIL TEST.
2. ALL TREES SHALL BE STAKED WITH NEW 2-INCH DIAMETER (PRESSURE TREATED) LODGE POLE PINE. REMOVE ORIGINAL TREE STAKES FROM ALL PLANT MATERIAL DELIVERED TO THE PROJECT SITE AND INSTALL NEW TREE STAKES.
3. CONSTRUCT MOUND AS REQUIRED TO SECURE PLANTS STABILITY DURING CONSTRUCTION INSTALLATION.
4. 6" MIN. ARBOR TREE GUARD OR APPROVED EQUAL IS REQUIRED AROUND ALL TREE TRUNKS PLANTED IN LAWN AREAS.
5. 10' LONG X 24" DEEP ROOT BARRIER IS REQUIRED AGAINST ALL HARD SURFACES WHEN THE TREE TRUNK IS 5 FT. OR LESS FROM ANY HARD SURFACE. CENTER ROOT BARRIER LENGTH ONTO TREE. TOP OF ROOT BARRIER SHALL BE 1/2" BELOW FINISHED GRADE.
6. PLANTING TABLET SHALL BE PLACED 2" BELOW FINISHED GRADE NEAR ROOT FOUNDATION AS FOLLOWS: 1 TABLET FOR 1 GALLON, 3 TABLETS FOR 5 GALLON, 6 TABLETS FOR 15 GALLON AND 9 TABLETS FOR 24" BOX.

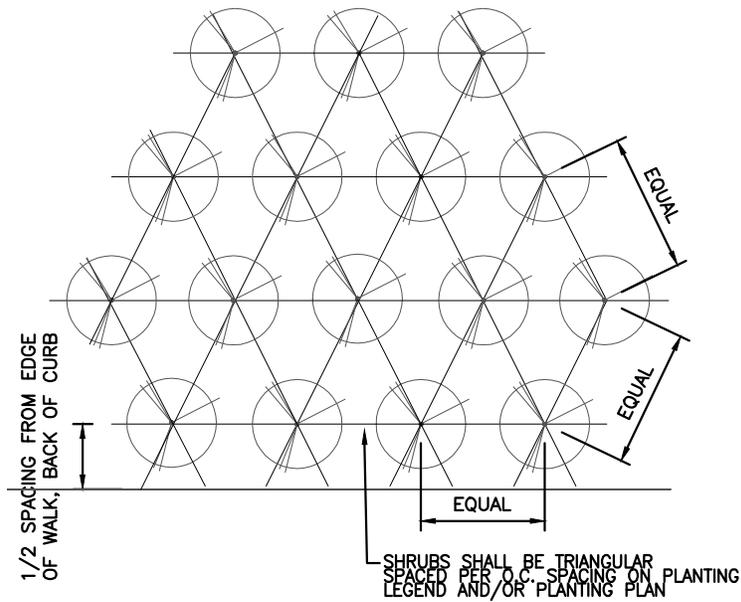


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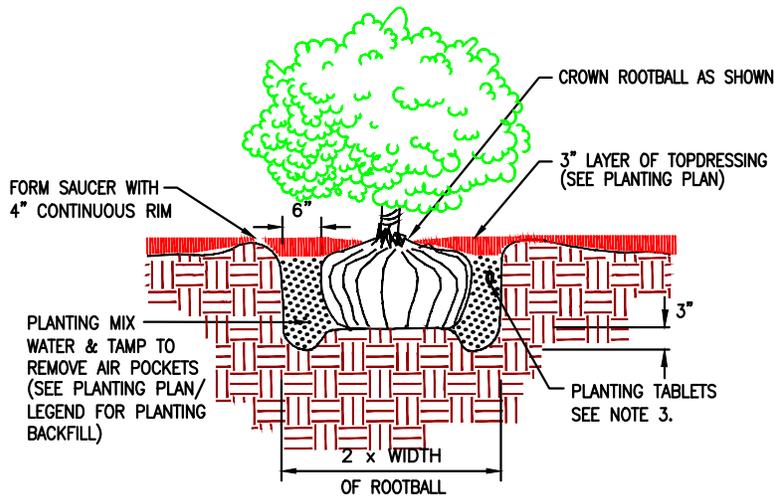
**TREE PLANTING AND IRRIGATION DETAILS**

*CITY OF REEDLEY*

**L-11**



**SHRUB SPACING**



**SHRUB PLANTING**

**NOTES:**

1. APPLY SOIL AMENDMENT AS PER SOIL TEST.
2. CONSTRUCT MOUND AS REQUIRED TO SECURE PLANTS STABILITY DURING CONSTRUCTION INSTALLATION.
3. PLANTING TABLET SHALL BE PLACED 2-INCHES BELOW FINISHED GRADE NEAR ROOT FOUNDATION AS FOLLOWS:
  - 1 - TABLET PER 1 GAL.
  - 3 - TABLETS PER 5 GAL.
  - 6 - TABLETS PER 15 GAL.
  - 9 - TABLETS PER 24-INCH BOX
4. ANY AND ALL DEVIATIONS FROM THIS STANDARD SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.
5. ALL LANDSCAPE PLANTING AND INSTALLATION SHALL BE IN ACCORDANCE WITH APPROVED SPECIFIC LANDSCAPE IRRIGATION CONSTRUCTION PLANS, AND AS DIRECTED BY THE CITY ENGINEER.

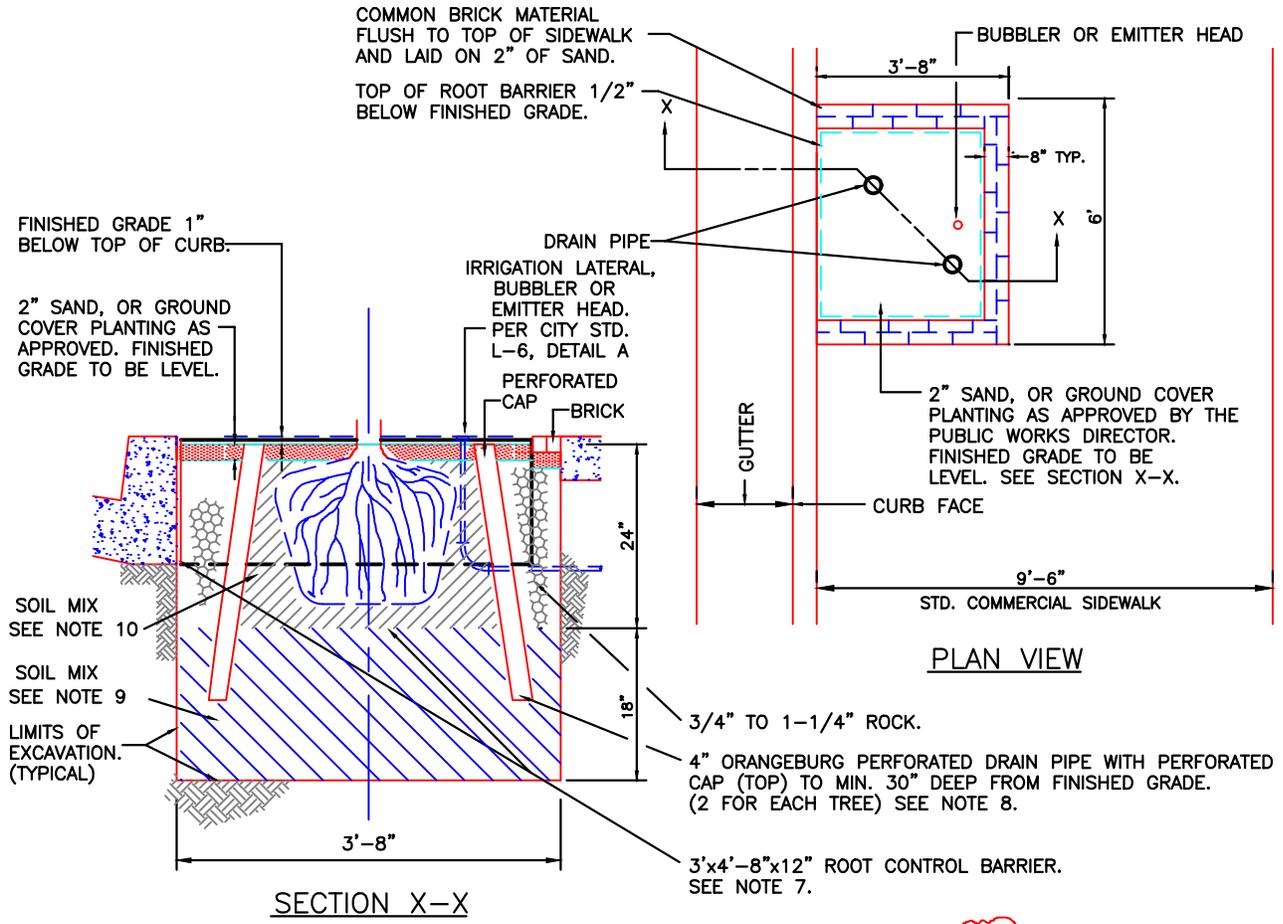


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**SHRUB PLANTING AND IRRIGATION DETAILS**

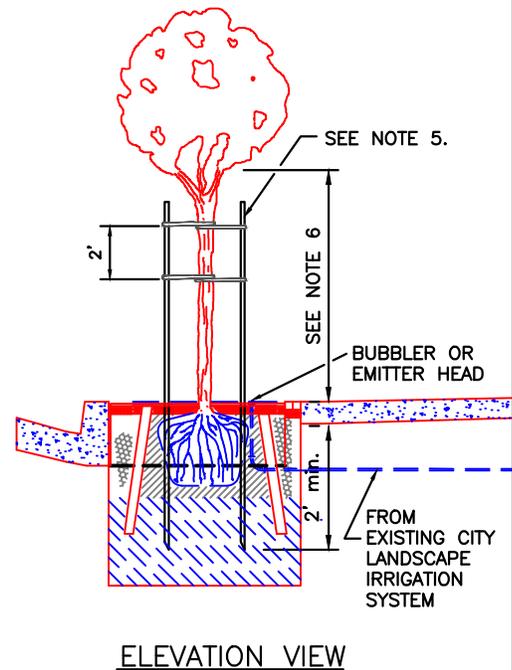
*CITY OF REEDLEY*

**L-12**



**NOTES:**

1. TREE VARIETY AND PLANTER SPACING TO CONFORM TO THE LIST OF APPROVED STREET TREES AND THE REQUIREMENTS OF THE CITY ENGINEER. ALL TREES PLANTED MUST HAVE STRONG CENTRAL LEADER.
2. INSTALLATION SUBJECT TO ENCROACHMENT PERMIT ISSUED BY THE PUBLIC WORKS DEPT.
3. IRRIGATION SYSTEM WITH DRIP EMITTER OR BUBBLER TO BE EXTENDED TO EACH TREE FROM CITY WATER SUPPLY.
4. TREE MAINTENANCE INCLUDING WATERING, FERTILIZING AND LEAF PICKUP TO BE THE RESPONSIBILITY OF THE DOWNTOWN STREETSCAPE COMMITTEE AND UNDER THE SUPERVISION OF THE PUBLIC WORKS DIRECTOR.
5. TREES SHALL BE SECURELY TIED TO STAKES 2"x2"x8' IN SIZE. REDWOOD OR TREATED FOUNDATION GRADE WOOD PLACED ON PRE-VAILING WINDWARD SIDE OF TREE WITH RUBBER TIE STRAPS.
6. MINIMUM VERTICAL CLEARANCE TO LOWEST:
  - a. LIMB OVERHANGING PARKING LANE = 14 FT.
  - b. LIMB OVERHANGING SIDEWALK = 7 FT.
7. ROOT CONTROL BARRIER SHALL BE #LB 12-2 AS MANUFACTURED BY DEEP ROOT, 345 LORTON AVE #103, BURLINGAME, CA, OR AS APPROVED BY THE CITY ENGINEER. VERTICAL ROOT DEFLECTING RIBS ON PANEL MUST FACE INWARD, TOWARD ROOT BALL. TOP EDGE OF BARRIER TO BE 1/2" BELOW GRADE.
8. FILL IN AROUND PERFORATED PIPE BELOW ROOT CONTROL BARRIER WITH 3/4" TO 1-1/4" ROCK TO 4" AROUND OUTSIDE PIPE.
9. SOIL MIX TO CONSIST OF SUITABLE NATIVE SOIL.
10. PLANTING BACKFILL MIX SHALL CONSIST OF 60% NATIVE SOIL & 40% NITROLIZED WOOD SHAVINGS.



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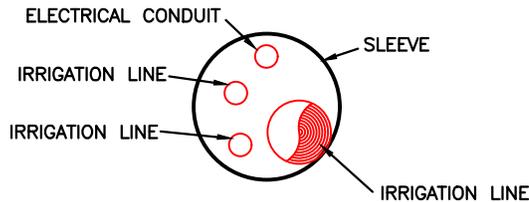
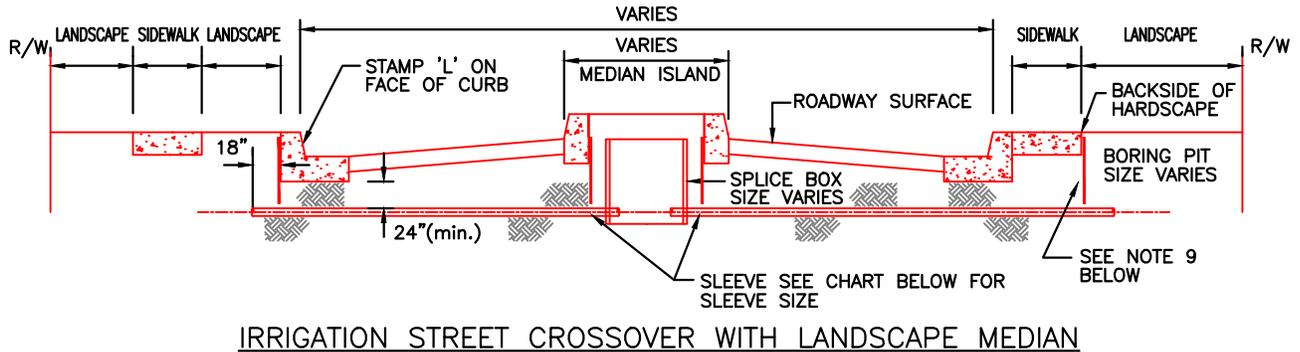
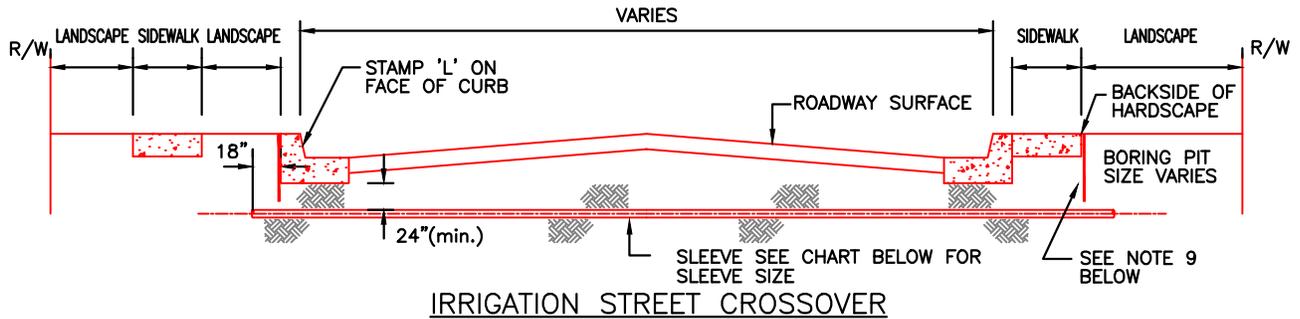
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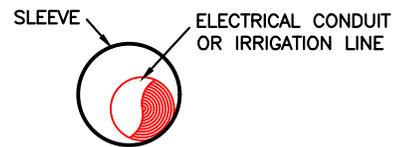
**DOWNTOWN  
STREETSCAPE TREE  
WELL STANDARD**

*CITY OF REEDLEY*

**L-13**



MORE THAN ONE PIPE PER SLEEVE



ONE PIPE PER SLEEVE

**IRRIGATION SLEEVE CHART**  
INCREASE SLEEVE SIZE AS REQUIRED PER THIS CHART FOR MORE THAN ONE PIPE PER SLEEVE

PVC PIPE SIZE	SLEEVE SIZE		
	UNDER 18 Ft.	OVER 18 Ft. UNDER 28 Ft.	OVER 28 Ft.
1/2"	1"	1-1/4"	1-1/2"
3/4"	1-1/4"	1-1/2"	2"
1"	1-1/2"	2"	2"
1"-1/4"	2"	2-1/2"	2-1/2"
1"-1/2"	2-1/2"	2-1/2"	3"
2"	3"	3"	3"
2-1/2"	3"	3"	4"
3"	4"	5"	5"
3-1/2"	5"	5"	6"
4"	5"	6"	6"
5"	6"	8"	8"
6"	8"	8"	8"

**NOTES:**

1. ALL PIPING AND FITTINGS SHALL BE SCHEDULE 40 PVC UNLESS APPROVED EQUAL BY THE CITY ENGINEER.
2. WHERE CONDUIT (SLEEVE ONLY) IS INSTALLED, ONE PULL WIRE OR ROPE SHALL BE INSTALLED. THE LENGTH OF WIRE OR ROPE SHALL EXTEND 6 FT. PAST EACH END OF THE CONDUIT. EACH CONDUIT (SLEEVE) SHALL BE CAPPED AT EACH END.
3. ALL MATERIAL USED SHALL BE NEW AND FREE FROM IMPERFECTIONS.
4. SEE APPROVED LANDSCAPE/IRRIGATION PLANS AND LEGENDS FOR SPECIFIC MODEL NUMBERS, SIZE, MANUFACTURER'S, AND PERFORMANCE REQUIREMENTS.
5. ALL TRANSITIONS FROM GALVANIZED PIPE TO PVC SHALL BE CONSTRUCTED WITH SCHEDULE 40 FEMALE ADAPTER OR APPROVED EQUAL BY THE CITY ENGINEER.
6. ALL IRRIGATION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARDS, THE LATEST EDITION OF THE UNIFORM PLUMBING CODE, MANUFACTURER'S RECOMMENDATIONS, AND AS DIRECTED BY THE CITY ENGINEER.
7. VERIFY ALL MEASUREMENTS AND SPECIFIC SITE CONDITIONS IN THE FIELD.
8. ROUTE PIPE(S) AS REQUIRED AS PER APPROVED LANDSCAPE/IRRIGATION PLANS.
9. INSTALL 2"x4"x24" REDWOOD STAKES AT EACH END OF SLEEVE AT HARDSCAPE. TOP OF REDWOOD STAKE 1-INCH BELOW TOP OF HARDSCAPE.
10. THE METHOD USED FOR BORING SHALL BE REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO START OF OPERATION.
11. ANY AND ALL CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

*"CONTRACTOR SHALL CONTACT UTILITY COMPANIES PRIOR TO BORING"*

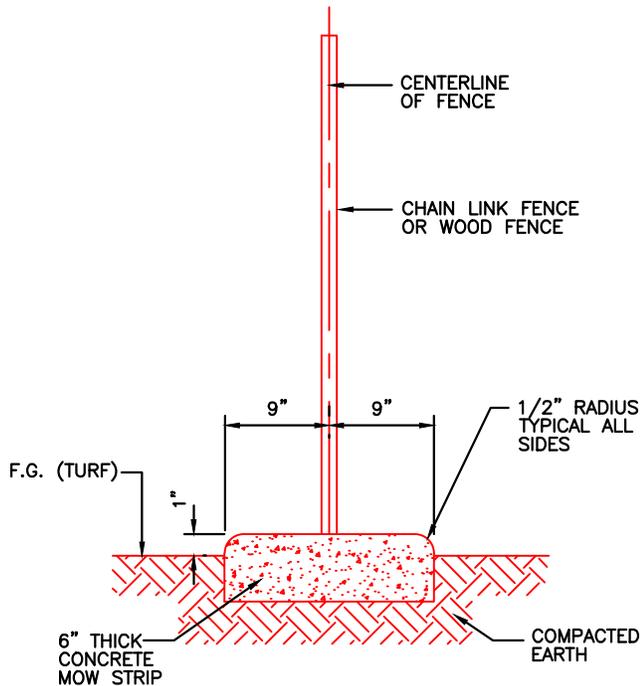


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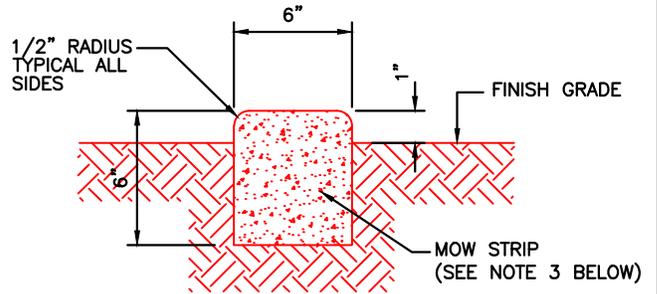
**IRRIGATION SLEEVE  
DETAILS**

*CITY OF REEDLEY*

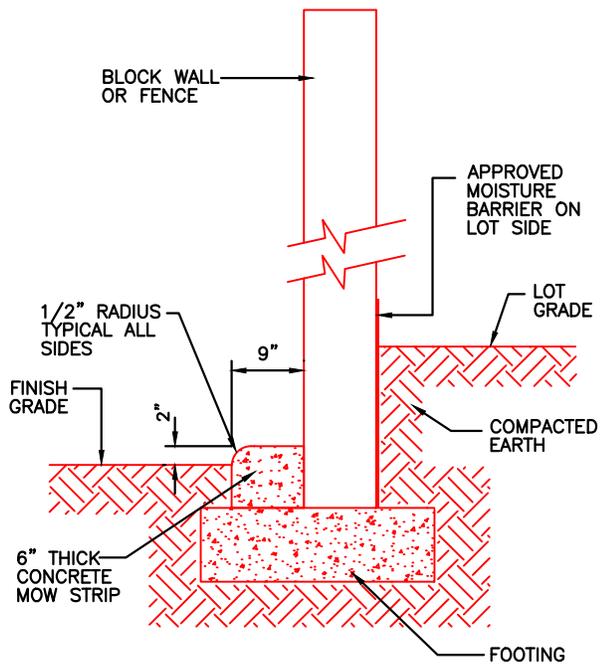
**L-14**



MOW STRIP AT FENCE



CONCRETE MOW STRIP



MOW STRIP AT WALL AND FENCE

**NOTES:**

1. CONSTRUCT A DEEP SCORE EXPANSION JOINT AT EVERY FENCE POST AND EVERY 15 FT. ON ALL CONCRETE SURFACES.
2. ALL AREAS TO RECEIVE CONCRETE SHALL BE COMPACTED TO 90% RELATIVE DENSITY FOR A DEPTH OF 0.5 FT. AS APPROVED BY THE CITY ENGINEER.
3. TOP OF MOW STRIP SHALL BE 1-INCH ABOVE FINISHED GRADE WHEN ADJACENT TO TURF AND 2-INCHES ABOVE FINISHED GRADE WHEN ADJACENT TO PLANTER.
4. WHERE THE GRADE ON THE LOT SIDE OF THE WALL IS HIGHER THAN THE GRADE ON THE STREET SIDE OF THE WALL, WATER PROOFING IS REQUIRED. SEE STANDARD PLAN L-10 FOR WATER PROOFING REQUIREMENTS.
5. ANY AND ALL CHANGES FROM THIS STANDARD DETAIL SHEET SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.
6. ALL CONCRETE SHALL BE CLASS 'B' IN ACCORDANCE WITH SECTION 16 OF THE CITY STANDARD SPECIFICATIONS AND AS APPROVED BY THE CITY ENGINEER.

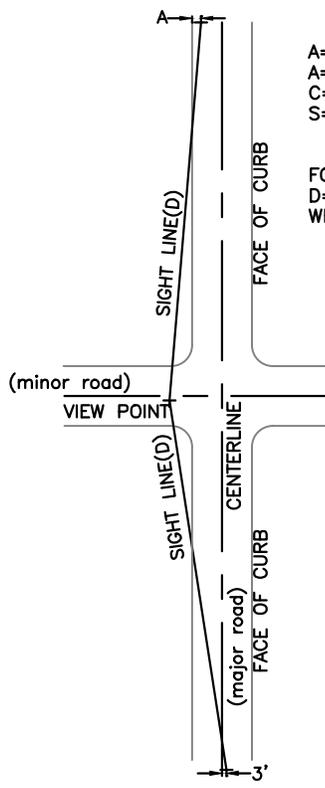


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L-10

**CONCRETE MOW STRIP  
DETAILS**

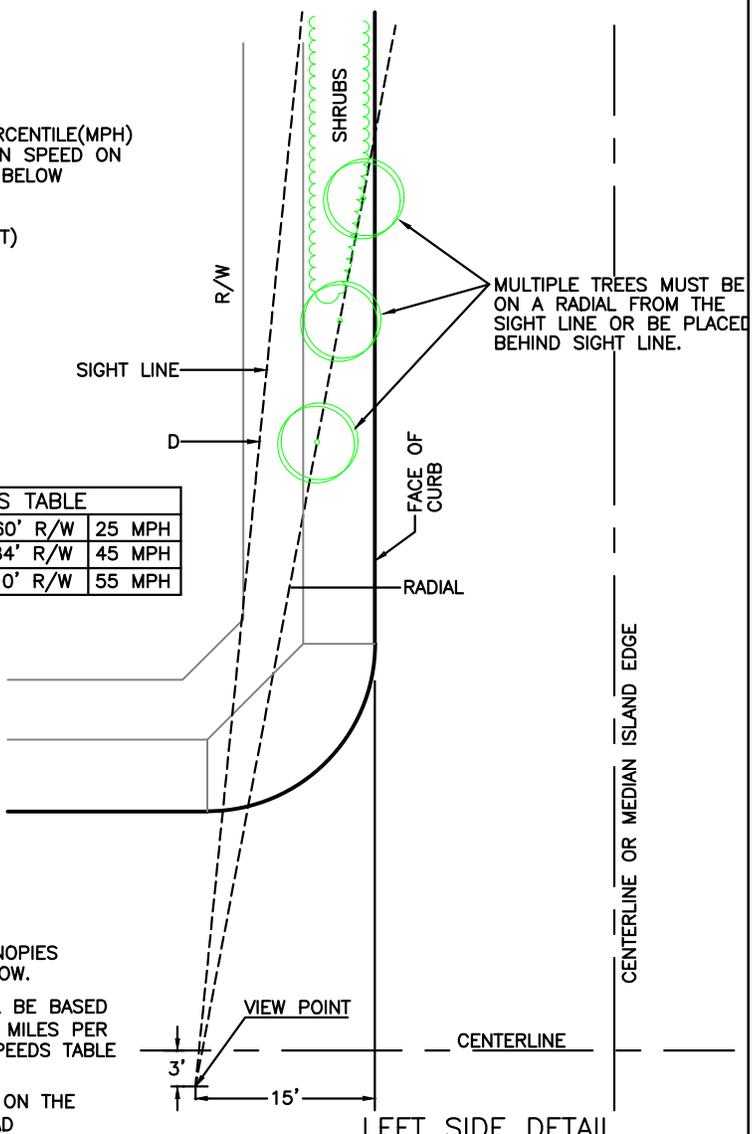
*CITY OF REEDLEY*

**L-15**



A=12' WITH PARKING  
 A= 6' WITHOUT PARKING  
 C=10- FEET/MPH  
 S=CRITICAL SPEED-85th PERCENTILE(MPH)  
 OR IF NOT KNOWN, DESIGN SPEED ON  
 THRU STREET PER TABLE BELOW  
 FORMULA:  
 $D=S \times C$   
 WHERE, D=SIGHT DISTANCE(FT)

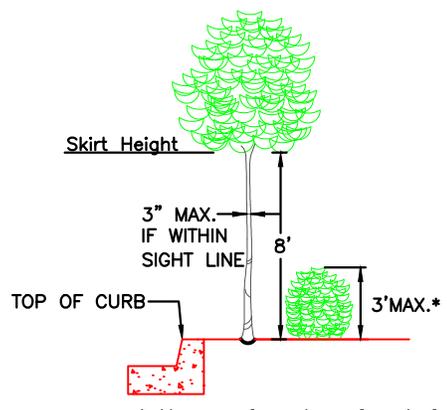
DESIGN SPEEDS TABLE		
LOCAL STREET	57-60' R/W	25 MPH
MAJOR COLLECTOR	84' R/W	45 MPH
MAJOR ARTERIAL	110' R/W	55 MPH



SIGHT DISTANCE DIAGRAM

NOTES:

1. TREES AND SHRUBS WITHIN SIGHT LINE AND TREE CANOPIES OVER SIDEWALKS SHALL CONFORM TO THE DETAIL BELOW.
2. SIGHT DISTANCE AT CONTROLLED INTERSECTIONS SHALL BE BASED ON A SIGHT DISTANCE EQUAL TO DESIGN SPEED(S) IN MILES PER HOUR MULTIPLIED BY A FACTOR OF 10. SEE DESIGN SPEEDS TABLE FOR VARIOUS STREET CLASSIFICATIONS.
3. CORNER SIGHT DISTANCE IS MEASURED FROM A POINT ON THE MINOR ROAD 15' FROM THE EDGE OF THE MAJOR ROAD PAVEMENT, AND 3' RIGHT OF THE LEFT EDGE OF THE LANE UNDER CONSIDERATION. SAID POINT IS VIEWED FROM A HEIGHT OF 3.5' ON THE MINOR ROAD TO A HEIGHT OF 4.25' ON THE MAJOR ROAD.
4. THE LOCATION OF THE OBJECT TO THE LEFT IS 12' FROM THE NEAREST EDGE OF THE MAJOR ROAD (6' WITH PARKING PROHIBITED). PARKING SHALL BE ASSUMED TO BE PROHIBITED ON MAJOR ARTERIAL STREETS OR AS DIRECTED BY THE CITY ENGINEER.
5. THE LOCATION OF THE OBJECT TO THE RIGHT IS TO BE MEASURED AT 1/2 THE MAJOR ROAD WIDTH PLUS 3' FROM THE NEAREST EDGE OF THE MAJOR STREET.
6. LANDSCAPING OVER 3' IN HEIGHT ABOVE TOP OF CURB SHALL NOT BE PLACED WITHIN THE LINE OF SIGHT. ALL LANDSCAPING MUST BE MAINTAINED AT A HEIGHT OF 3' OR LESS WITH THE EXCEPTION OF TREES.
7. TREES ARE PERMITTED IN THE LINE OF SIGHT FOR CONTROLLED INTERSECTIONS PROVIDED THAT THE SKIRT HEIGHT (BOTTOM OF FOLIAGE) IS MAINTAINED 8' ABOVE THE ADJACENT TOP OF CURB. IN THE EVENT MORE THAN 1 TREE IS PLACED IN THE SIGHT LINE AREA THEY MUST BE PLACED ON A RADIAL FROM THE VIEW POINT.
8. ANY AND ALL CHANGES FROM THIS STANDARD SHALL BE DESIGNED BY A TRAFFIC ENGINEER AND SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY TYPE OF CONSTRUCTION.



TREE HEIGHT DETAIL

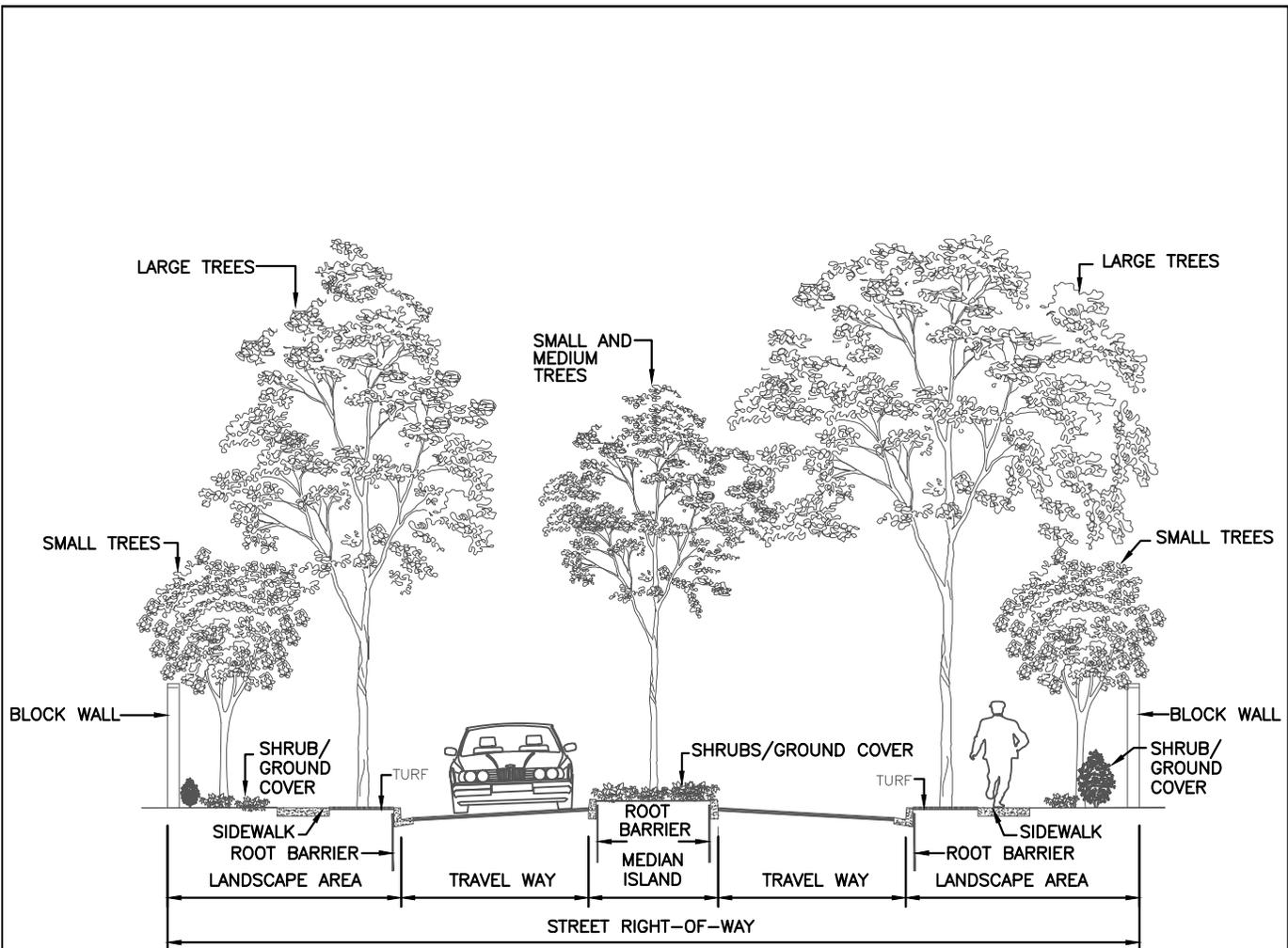


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**TYPICAL SIGHT DISTANCE  
 REQUIREMENTS FOR  
 CONTROLLED INTERSECTION  
 WITH LANDSCAPING**

*CITY OF REEDLEY*

**L-16**



LANDSCAPING SHALL BE PROVIDED ON MAJOR ARTERIAL, ARTERIALS AND COLLECTOR STREETS ON WHICH IS PLACED A REQUIREMENT FOR CONSTRUCTION OF MASONRY BLOCK WALLS, MEDIAN ISLANDS, OR OTHER SUCH AREAS AS REQUIRED BY THE CITY OF REEDLEY.

MAJOR ARTERIAL STREETS WILL REQUIRE A LANDSCAPE AREA WITH A MINIMUM WIDTH OF 21 FEET INCLUDING THE MASONRY BLOCK WALL BEHIND THE CITY STANDARD SIDEWALK.

ARTERIALS & COLLECTOR STREETS WILL REQUIRE A LANDSCAPED AREA WITH A MINIMUM WIDTH OF 17 FEET INCLUDING THE WIDTH OF THE MASONRY BLOCK WALL BEHIND THE CITY STANDARD SIDEWALK.



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## LANDSCAPING ON MAJOR ARTERIALS AND MAJOR COLLECTOR STREETS

*CITY OF REEDLEY*

**L-17**

## LARGE TREES

### Greater than 8-foot Planter Area

<i>Scientific name</i> Common name	<i>Tree well</i>	<i>Parkway</i>	<i>Spacing</i>	<i>Tree size</i>	<i>Street tree</i>	<i>Riparian/ Native</i>	<i>Park</i>
<i>Acer rubrum</i> 'Red Sunset' Red Maple 'Red Sunset'	4x4	6' - 8'	35' - 40'	large	X		X
<i>Ginkgo biloba</i> 'Autumn Gold' Ginkgo 'Autumn Gold'	4.5' x 4.5'	6' - 8'	25' - 30'	large	X		X
<i>Ginkgo biloba</i> 'Magyar' Ginkgo 'Magyar'	4.5' x 4.5'	6' - 8'	25' - 30'	large	X		X
<i>Ginkgo biloba</i> 'Saratoga' Ginkgo 'Saratoga'	4.5' x 4.5'	6' - 8'	25' - 30'	large	X		X
<i>Platanus acerfolia</i> 'Bloodgood' London Plant Tree	4'x4'	4' - 6'	35' - 40'	large	X		X
<i>Platanus racemosa</i> California Sycamore	5' x 5'	6' - 8'	35' - 40'	large		X	
<i>Quercus agrifolia</i> Coastal Live Oak	5' x 5'	6' - 8'	35' - 40'	large	X	X	X
<i>Quercus frainetto</i> Forest Green Oak	4' x 4"	5' - 8'	35' - 40'	large	X		X
<i>Quercus lobata</i> Valley Oak	5' x 5'	5' - 8'	35' - 40'	large	X	X	X
<i>Quercus muhlenbergii</i> Chinkapin oak	5' x 5'	6' - 8'	35' - 40'	large	X		X
<i>Quercus phellos</i> Willow oak	5' x 5'	6' - 8'	35' - 40'	large	X		X
<i>Quercus shumardii</i> Shumard Oak	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Quercus suber</i> Cork Oak	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Quercus virginiana</i> Southern Live Oak	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Quercus wislizenii</i> Interior Live Oak	5' x 5'	5' - 8'	35' - 40'	large	X	X	X
<i>Ulmus carpinifolia</i> x <i>U.</i> <i>parvifolia</i> Frontier elm	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Ulmus parvifolia</i> Chinese Elm 'Allee'	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Zelkova serrata</i> 'Green Vase' Green Vase Zelkova	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Zelkova serrata</i> 'Musashino' Musashino Zelkova	5' x 5'	5' - 8'	35' - 40'	large	X		X
<i>Zelkova serrata</i> 'Village Green' Village Green Zelkova	5' x 5'	5' - 8'	35' - 40'	large	X		X



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## LARGE STREET TREE

*CITY OF REEDLEY*

L-18

**MEDIUM TREES**  
**5-foot to 8-foot Planter Area**

<i>Scientific name</i> Common name	Tree well	Parkway	Spacing	Tree size	Street tree	Riparian/ Native	Park
<i>Acer buergerianum</i> Trident Maple	3' X 3'	3' - 6'	25' - 30'	medium	X	.	X
<i>Kochreuteria paniculata</i> Goldenrain	4.5' X 4.5'	4' - 6'	25' - 30'	medium	X	.	X
<i>Laurus nobilis 'Saratoga'</i> Laural Saratoga	3' X 3'	3' - 6'	25' - 30'	medium	X	.	X
<i>Magnolia 'Vulcan'</i> Vulcan Magnolia	3' X 3'	3' - 6'	15' - 20'	medium	X	.	X
<i>Magnolia 'Galaxy'</i> Galaxy Magnolia	3' X 3'	3' - 6'	15' - 20'	medium	X	.	X
<i>Nyssa sylvatica 'formi'</i> Tupelo'	4' X 4'	4' - 6'	25' - 30'	medium	X	.	X
<i>Pistacia Chinesis</i> Chinese Pistache	4' X 4'	4' - 6'	25' - 30'	medium	X	.	X
<i>Pistacia Chinesis</i> Chinese Pistache 'Keith Davey'	4' X 4'	4' - 6'	25' - 30'	medium	X	.	X
<i>Pyrus kawakami</i> Evergreen Pear	4' X 4'	4' - 6'	25' - 30'	medium	X	.	X
<i>Zelkova serrata 'Wireless'</i> Wireless zelkova	5' X 5'	5' - 8'	35' - 40'	medium	X	.	X



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**MEDIUM STREET TREE**

*CITY OF REEDLEY*

**L-19**

**SMALL TREES**  
**Less than 5-foot Planter Area**

<i>Scientific name</i> Common name	<i>Tree well</i>	<i>Parkway</i>	<i>Spacing</i>	<i>Tree size</i>	<i>Street tree</i>	<i>Riparian/ Native</i>	<i>Park</i>
<i>Cercis canadensis</i> Eastern Redbud	3' x 3'	2' - 4'	20' - 30'	small	X		X
<i>Cercis mexicana</i> Mexicana Redbud	3' x 3'	2' - 4'	20' - 30'	small	X		X
<i>Cercis canadensis</i> 'Oklahoma' Eastern Redbud 'Oklahoma'	3' x 3'	2' - 4'	20' - 30'	small	X		X
<i>Lagerstroemia indica</i> Crape myrtle	3' X 3'	3' - 6'	25'-30'	small	X		X
<i>Magnolia 'Rustica Rubra'</i> Rustica Rubra Magnolia	3' x 3'	3' - 6'	15' - 20'	small	X		X

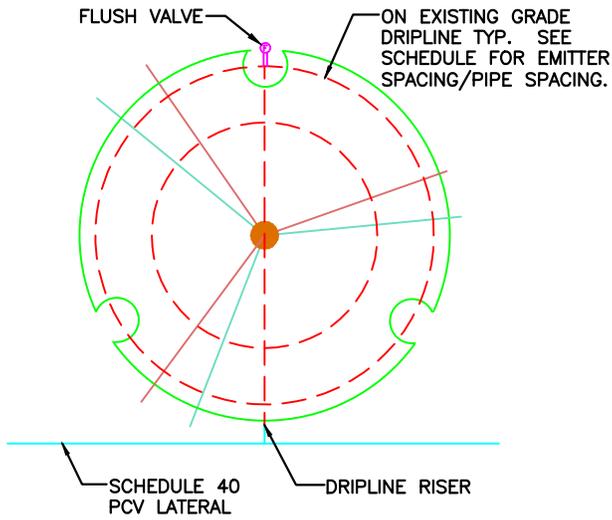


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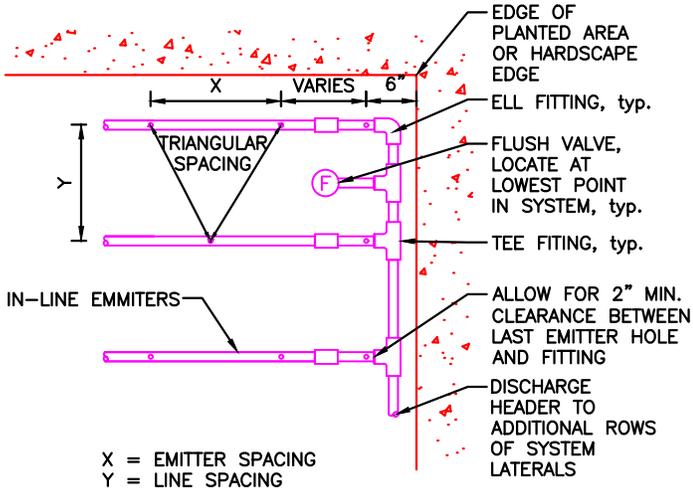
**SMALL STREET TREE**

*CITY OF REEDLEY*

**L-20**



AT GRADE DRIP LINE – EX TREE



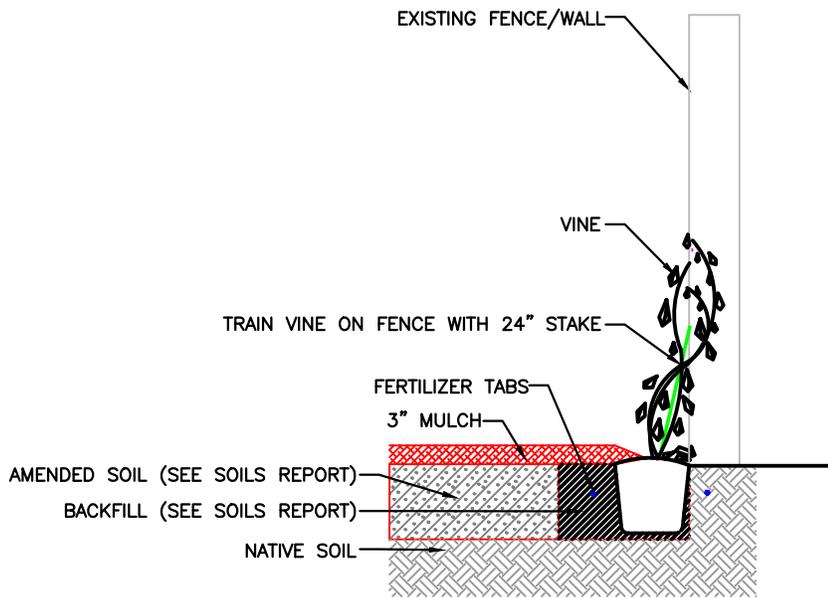
DRIP LINE LAYOUT



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**DRIP LINES**

*CITY OF REEDLEY*  
**L-21**



VINE PLANTING ON FENCE – AMENDED SOIL



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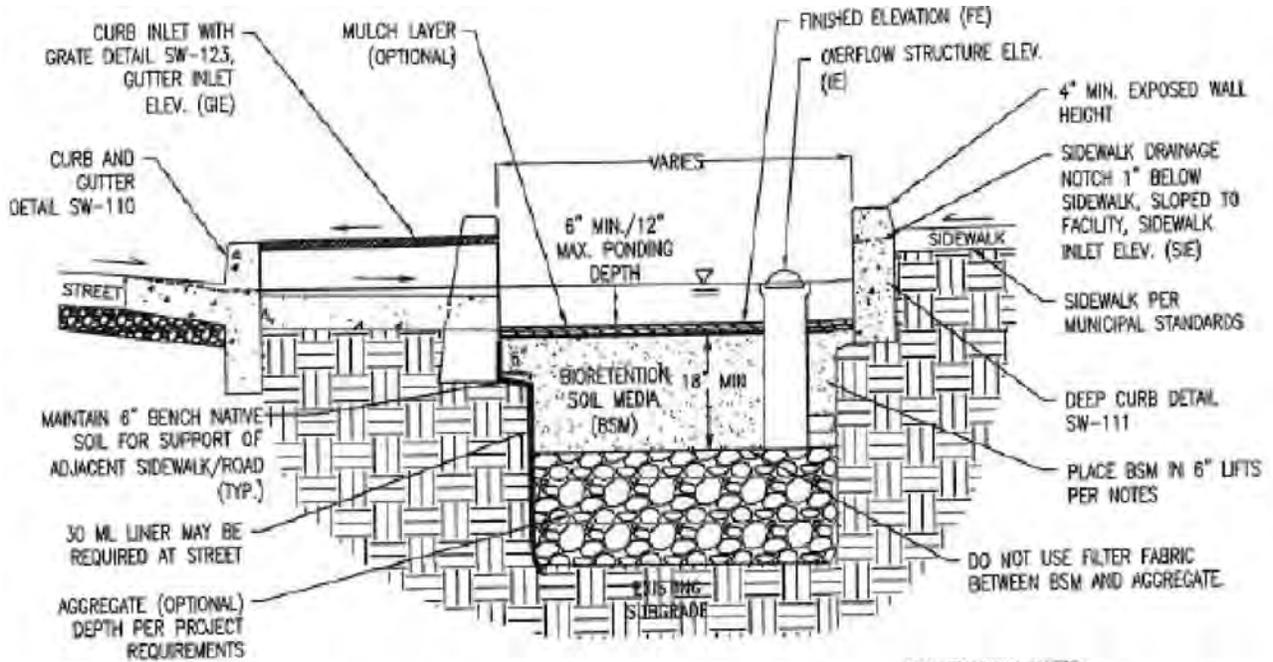
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VINE PLANTING

*CITY OF REEDLEY*

L-22



**DESIGN NOTES**

1. ADDITIONAL DESIGN GUIDANCE PROVIDED IN BIORETENTION TECHNICAL SPECIFICATIONS DOCUMENT.
2. OVERFLOW STRUCTURE REQUIRED FOR IN-LINE SYSTEMS WITHOUT OVERFLOW BYPASS, DETAIL SW-140.
3. PROVIDE SPOT ELEVATIONS AT INLETS ON CML PLANS (FE, OE, GIE, SIE). SEE DETAIL SW-120.
4. EDGE CONDITION WILL VARY FOR NEW AND RETROFIT PROJECTS. CURB, WALL, AND SIDEWALK DETAILS MAY BE MODIFIED FOR PROJECT BY CML AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY THE CITY ENGINEER.
5. IF CHECK DAMS ARE NEEDED, SEE CONCRETE CHECK DAM DETAIL SW-131.
6. PROVIDE MONITORING WELL IN EACH FACILITY, PER BIORETENTION TECHNICAL SPECIFICATIONS.
7. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3" DEEP LAYER OF 3/4" (NO. 4) OPEN-GRADED AGGREGATE.
8. BIORETENTION SOIL MEDIA (BSM) SPECIFICATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
9. PLANTING DESIGN AND IRRIGATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
10. MULCH (OPTIONAL) PER BIORETENTION TECHNICAL SPECIFICATIONS.
11. LOCATE ENERGY DISSIPATION COBBLE ONLY AS SPECIFIED IN INLET DETAILS - AVOID DECORATIVE USE.

**CONSTRUCTION NOTES**

1. SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM.
2. FACILITY EXCAVATION TO ALLOW FOR SPECIFIED SOIL AND MULCH DEPTHS TO ACHIEVE FINISHED ELEVATIONS ON CIVIL PLANS.
3. COMPACT EACH 6" LIFT OF BSM WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF WETTING, ALLOW TO DRY OVERNIGHT BEFORE PLANTING.
4. DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
5. KEEP HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.
6. LAYBACK SLOPE AS FLAT AS POSSIBLE UNTIL TOP WIDTH PRODUCES 1:1 SLOPE & 24" BOTTOM WIDTH. AS PLANTER GETS WIDER MAINTAIN 1:1 SLOPE AND INCREASE BOTTOM WIDTH WIDER THAN 24". ALTERNATIVE TRENCH WALL CONFIGURATIONS MAY BE PROPOSED BY THE PROJECT GEOTECHNICAL ENGINEER (I.E. VERTICAL SHORING, REINFORCED TRENCH SIDEWALL) THAT DON'T REQUIRE SIDEWALK SUPPORT FROM THE LIGHTLY COMPACTED BSM.

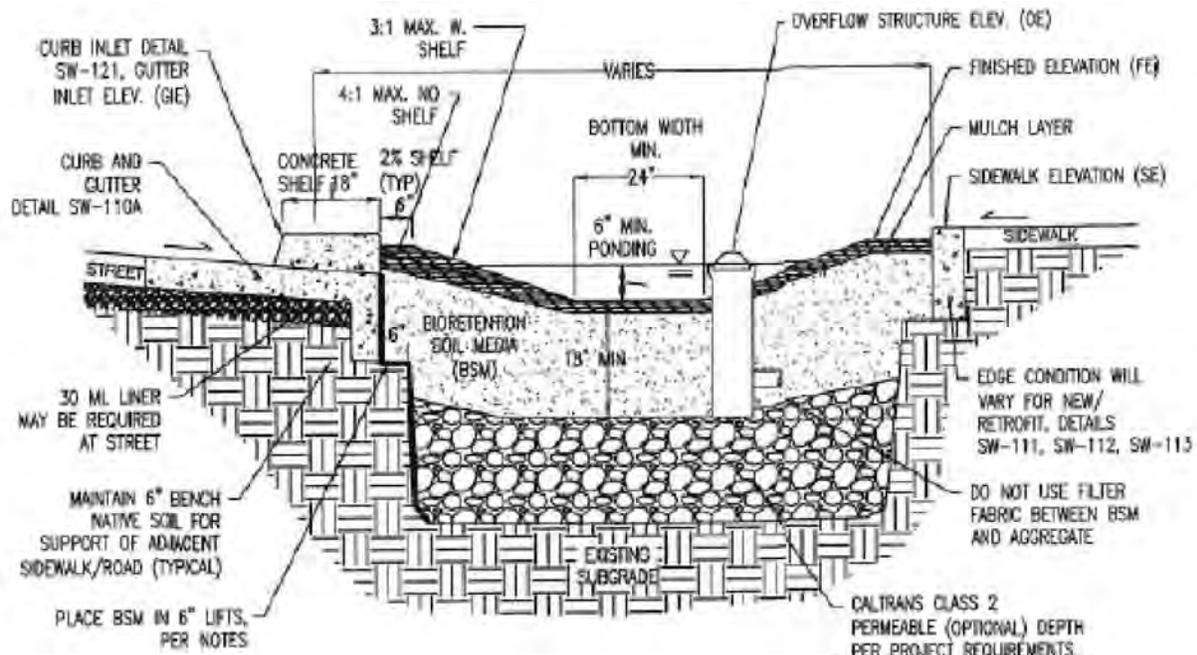


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**STREET BIORETENTION FACILITY**  
FLAT/PLANTER, ON-STREET PARKING,  
SIDEWALK, WITHOUT UNDERDRAIN

*CITY OF REEDLEY*

**LID-1**



**DESIGN NOTES**

1. ADDITIONAL DESIGN GUIDANCE PROVIDED IN BIORETENTION TECHNICAL SPECIFICATIONS DOCUMENT.
2. OVERFLOW STRUCTURE REQUIRED FOR IN-LINE SYSTEMS WITHOUT OVERFLOW BYPASS, DETAIL SW-140.
3. PROVIDE SPOT ELEVATIONS AT INLETS ON CIVIL PLANS (FE, OE, GIE, SE). SEE DETAIL SW-121.
4. MAX. LONGITUDINAL SLOPE 0.8% WITH CHECK DAMS. SEE DETAILS SW-130, SW-131.
5. EDGE CONDITION WILL VARY FOR NEW AND RETROFIT PROJECTS. CURB AND SIDEWALK DETAILS MAY BE MODIFIED FOR PROJECT BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY THE CITY ENGINEER.
6. PROVIDE MONITORING WELL IN EACH FACILITY, PER BIORETENTION TECHNICAL SPECIFICATIONS.
7. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3\"/>

**CONSTRUCTION NOTES**

1. SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM.
2. FACILITY EXCAVATION TO ALLOW FOR SPECIFIED SOIL AND MULCH DEPTHS TO ACHIEVE FINISHED ELEVATIONS ON CIVIL PLANS.
3. COMPACT EACH 6\"/>



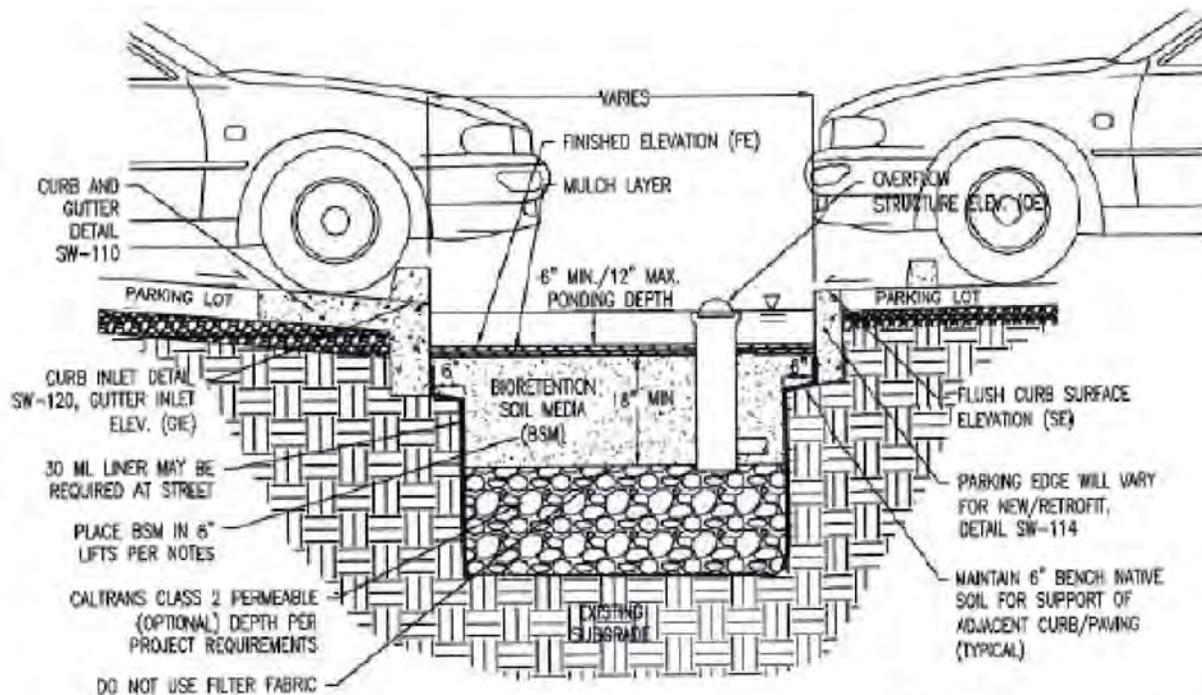
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**STREET BIORETENTION FACILITY**

SLOPE SIDED, ON-STREET PARKING SIDEWALK, WITHOUT UNDERDRAIN

*CITY OF REEDLEY*

**LID-2**



**DESIGN NOTES**

1. ADDITIONAL DESIGN GUIDANCE PROVIDED IN BIORETENTION TECHNICAL SPECIFICATIONS DOCUMENT.
2. OVERFLOW STRUCTURE REQUIRED FOR IN-LINE SYSTEMS WITHOUT OVERFLOW BYPASS, DETAIL SW-140.
3. PROVIDE SPOT ELEVATIONS AT INLETS ON CIVIL PLANS (FE, GE, GIE, SE). SEE DETAIL SW-120.
4. EDGE CONDITION WILL VARY FOR PARKING LOT PROJECTS. SEE PARKING LOT EDGE OPTIONS DETAILS, SW-114. CURB AND FLUSH EDGE DETAILS MAY BE MODIFIED FOR PROJECT BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY THE CITY ENGINEER.
5. IF CHECK DAMS ARE NEEDED, SEE CONCRETE CHECK DAM DETAIL SW-131.
6. PROVIDE MONITORING WELL IN EACH FACILITY, PER BIORETENTION TECHNICAL SPECIFICATIONS.
7. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3" DEEP LAYER OF 3/4" (NO. 4) OPEN-GRADED AGGREGATE.
8. BIORETENTION SOIL MEDIA (BSM) SPECIFICATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
9. PLANTING DESIGN AND IRRIGATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
10. MULCH (OPTIONAL) PER BIORETENTION TECHNICAL SPECIFICATIONS.
11. LOCATE ENERGY DISSIPATION COBBLE ONLY AS SPECIFIED IN INLET DETAILS - AVOID DECORATIVE USE.

**CONSTRUCTION NOTES**

1. SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM.
2. FACILITY EXCAVATION TO ALLOW FOR SPECIFIED SOIL AND MULCH DEPTHS TO ACHIEVE FINISHED ELEVATIONS ON CIVIL PLANS.
3. COMPACT EACH 6" LIFT OF BSM WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF WETTING, ALLOW TO DRY OVERNIGHT BEFORE PLANTING.
4. DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
5. KEEP HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.
6. LAYBACK SLOPE AS FLAT AS POSSIBLE UNTIL TOP WIDTH PRODUCES 1:1 SLOPE & 24" BOTTOM WIDTH. AS PLANTER GETS WIDER MAINTAIN 1:1 SLOPE AND INCREASE BOTTOM WIDTH WIDER THAN 24". ALTERNATIVE TRENCH WALL CONFIGURATIONS MAY BE PROPOSED BY THE PROJECT GEOTECHNICAL ENGINEER (I.E. VERTICAL SHORING, REINFORCED TRENCH SIDEWALL) THAT DON'T REQUIRE SIDEWALK SUPPORT FROM THE LIGHTLY COMPACTED BSM.

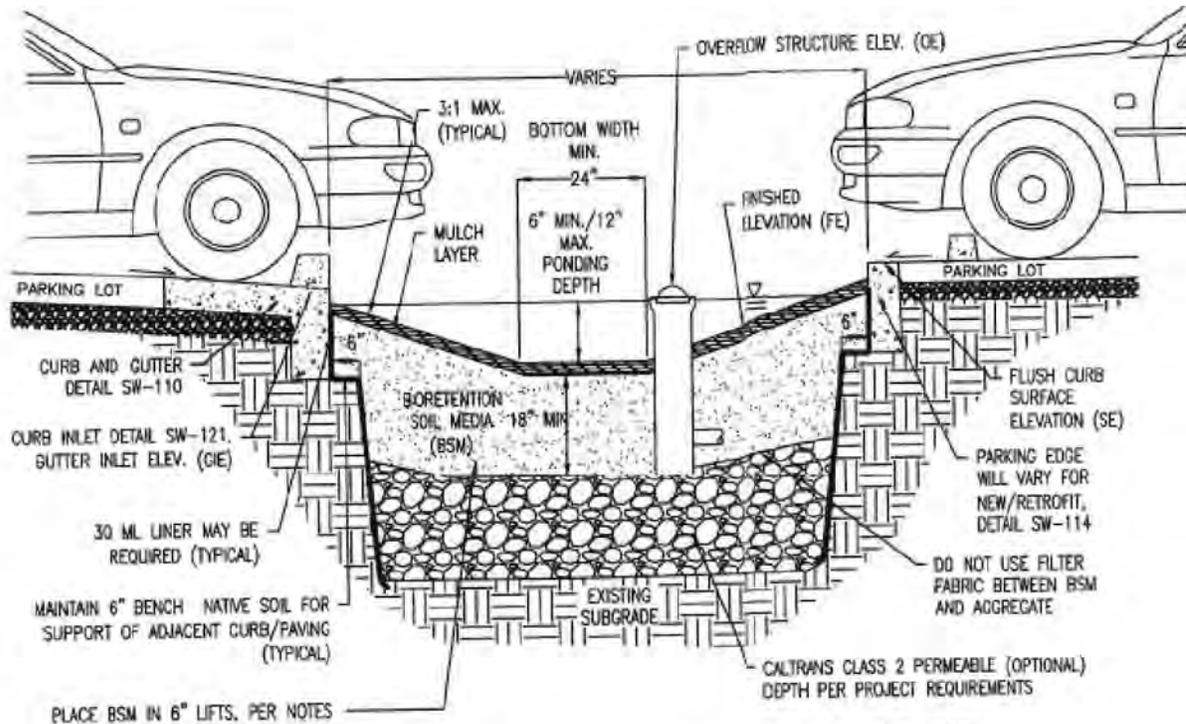


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**PARKING LOT  
BIORETENTION FACILITY**  
FLAT/PLANTER WITHOUT UNDERDRAIN

*CITY OF REEDLEY*

**LID-3**



**DESIGN NOTES**

1. ADDITIONAL DESIGN GUIDANCE PROVIDED IN BIORETENTION TECHNICAL SPECIFICATIONS DOCUMENT.
2. OVERFLOW STRUCTURE REQUIRED FOR IN-LINE SYSTEMS WITHOUT OVERFLOW BYPASS, DETAIL SW-140.
3. PROVIDE SPOT ELEVATIONS AT INLETS ON CIVIL PLANS (FE, OE, GIE, SE). SEE DETAIL SW-121.
4. MAX. LONGITUDINAL SLOPE 6% WITH CHECK DAMS. SEE DETAILS SW-130, SW-131.
4. EDGE CONDITION WILL VARY FOR PARKING LOT PROJECTS. SEE PARKING LOT EDGE OPTIONS DETAILS, SW-114. CURB AND FLUSH EDGE DETAILS MAY BE MODIFIED FOR PROJECT BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY THE CITY ENGINEER.
5. PROVIDE MONITORING WELL IN EACH FACILITY, PER BIORETENTION TECHNICAL SPECIFICATIONS.
6. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3" DEEP LAYER OF 3/4" (NO. 4) OPEN-GRADED AGGREGATE.
7. BIORETENTION SOIL MEDIA (BSM) SPECIFICATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
8. PLANTING DESIGN AND IRRIGATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
9. MULCH (OPTIONAL) PER BIORETENTION TECHNICAL SPECIFICATIONS.
10. LOCATE ENERGY DISSIPATION COBBLE ONLY AS SPECIFIED IN INLET DETAILS - AVOID DECORATIVE USE.

**CONSTRUCTION NOTES**

1. SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM.
2. FACILITY EXCAVATION TO ALLOW FOR SPECIFIED SOIL AND MULCH DEPTHS TO ACHIEVE FINISHED ELEVATIONS ON CIVIL PLANS.
3. COMPACT EACH 6" LIFT OF BSM WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF WETTING, ALLOW TO DRY OVERNIGHT BEFORE PLANTING.
4. DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
5. KEEP HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.
6. LAYBACK SLOPE AS FLAT AS POSSIBLE UNTIL TOP WIDTH PRODUCES 1:1 SLOPE & 24" BOTTOM WIDTH. AS PLANTER GETS WIDER MAINTAIN 1:1 SLOPE AND INCREASE BOTTOM WIDTH WIDER THAN 24". ALTERNATIVE TRENCH WALL CONFIGURATIONS MAY BE PROPOSED BY THE PROJECT GEOTECHNICAL ENGINEER (I.E. VERTICAL SHORING, REINFORCED TRENCH SIDEWALL) THAT DON'T REQUIRE SIDEWALK SUPPORT FROM THE LIGHTLY COMPACTED BSM.

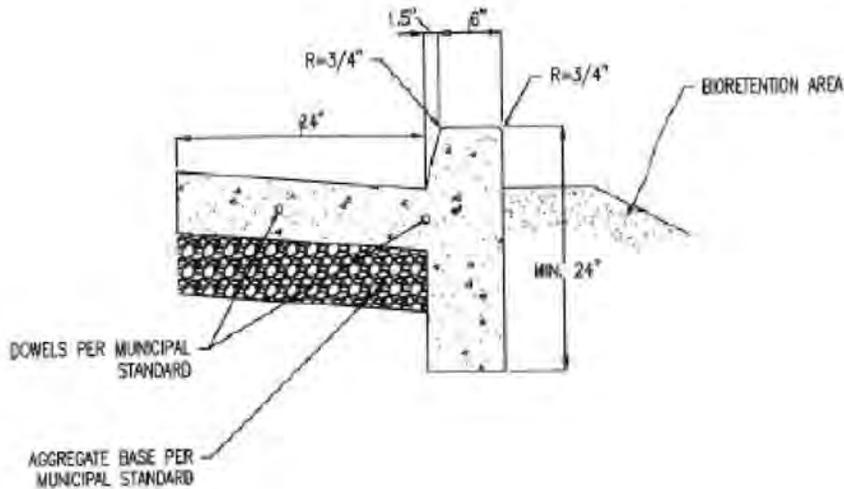


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**PARKING LOT  
BIORETENTION FACILITY**  
SLOPE SIDED, WITHOUT UNDERDRAIN

*CITY OF REEDLEY*

**LID-4**



**DESIGN NOTES**

1. SPECIAL DESIGN CONSIDERATION OR STRUCTURAL REVIEW MAY BE REQUIRED FOR LONGER PLANTER WALL SPANS. STEEL REINFORCEMENT OR ADDITIONAL CONCRETE CHECK DAMS MAY BE NEEDED FOR STABILITY.
2. EDGE CONDITION WILL VARY FOR NEW AND RETROFIT PROJECTS. CURB, GUTTER, AND WALL DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY CITY ENGINEER.
3. CONCRETE AND EXPANSION JOINTS SHALL MEET THE REQUIREMENTS OF THE MUNICIPALITY.

**CONSTRUCTION NOTES**

1. FINISH ALL EXPOSED CONCRETE SURFACES.
2. LAYBACK SLOPE AS FLAT AS POSSIBLE UNTIL TOP WIDTH PRODUCES 1:1 SLOPE & 24" BOTTOM WIDTH. AS PLANTER GETS WIDER MAINTAIN 1:1 SLOPE AND INCREASE BOTTOM WIDTH WIDER THAN 24". ALTERNATIVE TRENCH WALL CONFIGURATIONS MAY BE PROPOSED BY THE PROJECT GEOTECHNICAL ENGINEER (I.E. VERTICAL SHORING, REINFORCED TRENCH SIDEWALL) THAT DON'T REQUIRE SIDEWALK SUPPORT FROM THE LIGHTLY COMPACTED BSM.

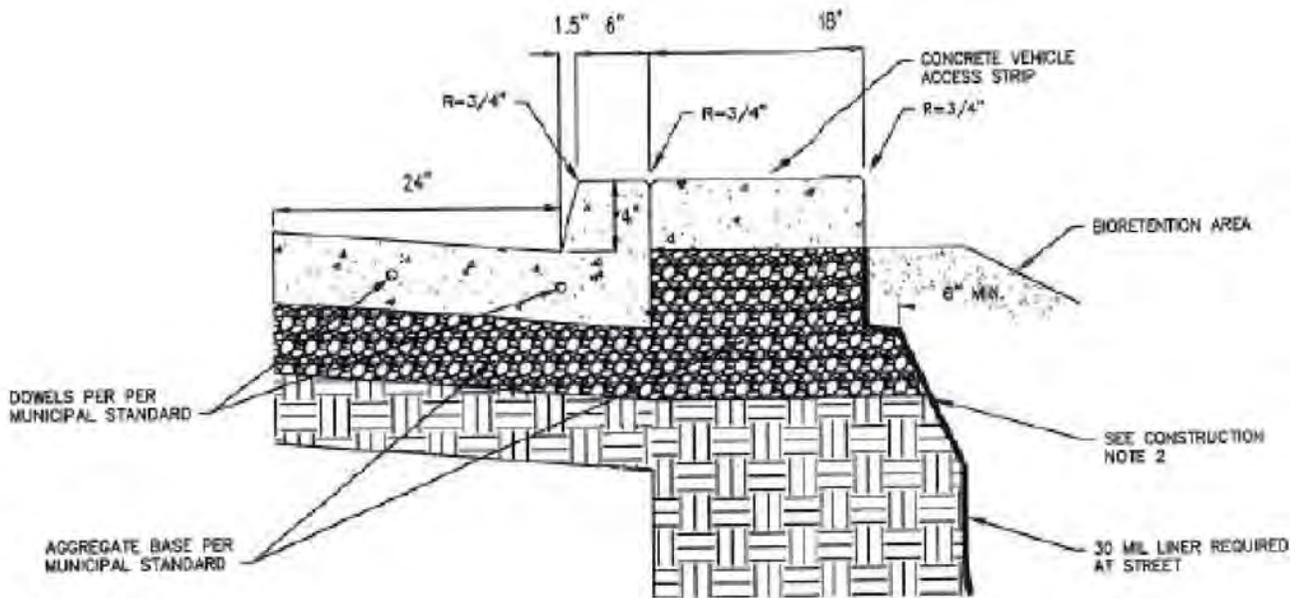


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REVISED:  
OCT. 2019  
REF. STD. DWG.:

**CURB AND GUTTER**

*CITY OF REEDLEY*

**LID-5**



**DESIGN NOTES**

1. SPECIAL CONCRETE AND EXPANSION JOINS SHALL MEET THE REQUIREMENTS OF MUNICIPAL STANDARDS
2. PROVIDE OPENINGS IN CURB (12" WIDE) TO ALLOW FOR SURFACE DRAINAGE TO BIORETENTION AREAS IF DEDICATED INLET NOT USED. SPACING TO BE DETERMINED BY PROJECT ENGINEER BASED ON DESIGN STORM TO MINIMIZE PONDING AGAINST CURB FOR MEDIAN ISLAND APPLICATION.

**CONSTRUCTION NOTES**

1. FINISH ALL EXPOSED CONCRETE SURFACES.
2. LAYBACK SLOPE AS FLAT AS POSSIBLE UNTIL TOP WIDTH PRODUCES 1:1 SLOPE & 24" BOTTOM WIDTH. AS PLANTER GETS WIDER MAINTAIN 1:1 SLOPE AND INCREASE BOTTOM WIDTH WIDER THAN 24". ALTERNATIVE TRENCH WALL CONFIGURATIONS MAY BE PROPOSED BY THE PROJECT GEOTECHNICAL ENGINEER (I.E. VERTICAL SHORING, REINFORCED TRENCH SIDEWALL) THAT DON'T REQUIRE SIDEWALK SUPPORT FROM THE LIGHTLY COMPACTED BSM.

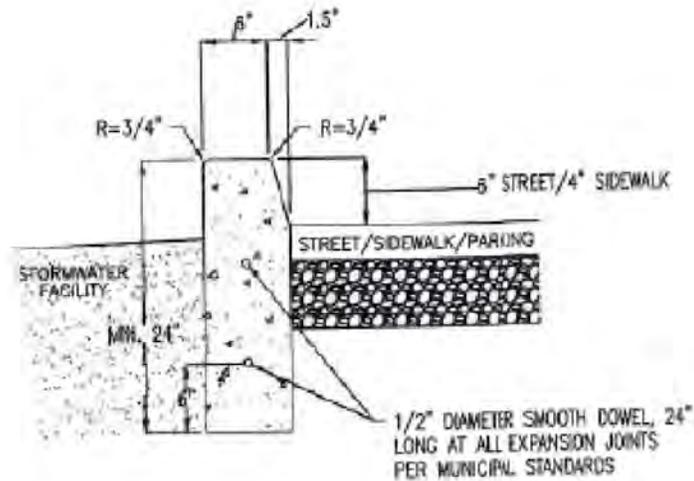


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OCT. 2019  
REF. STD. DWG.:

**CURB AND GUTTER**

*CITY OF REEDLEY*

**LID-6**



**DESIGN NOTES**

1. SPECIAL DESIGN CONSIDERATION OR STRUCTURAL REVIEW MAY BE REQUIRED FOR LONGER SWALE EDGE SPANS. STEEL REINFORCEMENT OR ADDITIONAL CONCRETE CHECK DAMS MAY BE NEEDED FOR STABILITY.
2. WHEN SIDEWALK DRAINS TO PLANTER, PROVIDE 4" - 6" WIDE NOTCH OPENINGS, 1" BELOW SIDEWALK, SLOPED TO FACILITY, PER BIORETENTION PLANTER DETAILS. SPACE OPENINGS TO CONVEY FLOWS. PROVIDE MINIMUM 2" COVER BETWEEN DRAINAGE NOTCH OPENING AND DOWELS.
3. CONCRETE AND EXPANSION JOINTS SHALL MEET THE REQUIREMENTS OF THE CITY.

**CONSTRUCTION NOTES**

1. FINISH ALL EXPOSED CONCRETE SURFACES.
2. LAYBACK SLOPE AS FLAT AS POSSIBLE UNTIL TOP WIDTH PRODUCES 1:1 SLOPE & 24" BOTTOM WIDTH. AS PLANTER GETS WIDER MAINTAIN 1:1 SLOPE AND INCREASE BOTTOM WIDTH WIDER THAN 24". ALTERNATIVE TRENCH WALL CONFIGURATIONS MAY BE PROPOSED BY THE PROJECT GEOTECHNICAL ENGINEER (I.E. VERTICAL SHORING, REINFORCED TRENCH SIDEWALL) THAT DON'T REQUIRE SIDEWALK SUPPORT FROM THE LIGHTLY COMPACTED BSM.

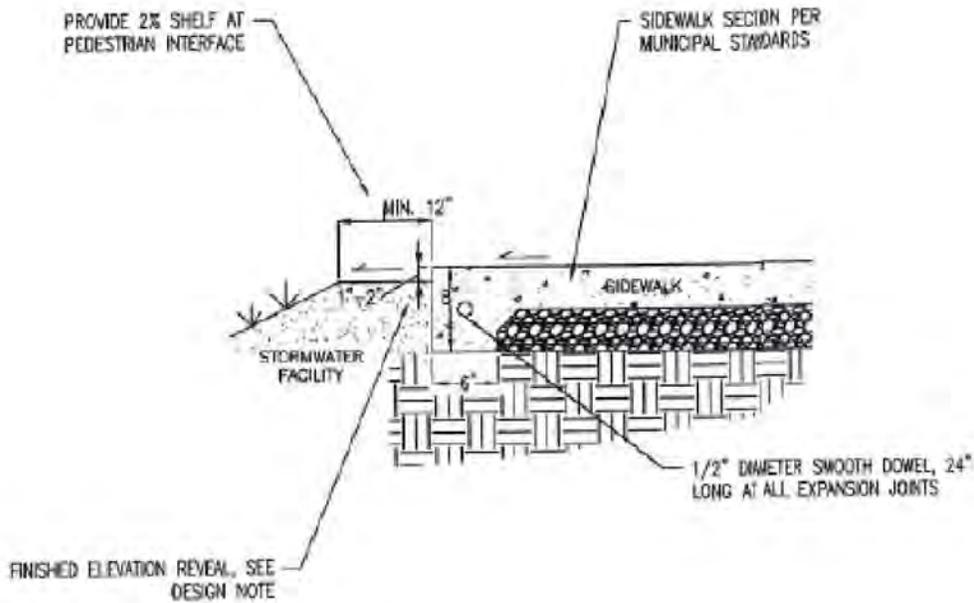


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OCT. 2019  
REF. STD. DWG.:

**DEEP CURB**

*CITY OF REEDLEY*

**LID-7**



**DESIGN NOTES**

1. SPECIAL DESIGN CONSIDERATION OR STRUCTURAL REVIEW MAY BE REQUIRED FOR LONGER FACILITY EDGE SPANS. STEEL REINFORCEMENT OR ADDITIONAL CONCRETE CHECK DAMS MAY BE NEEDED FOR STABILITY.
2. FINISHED ELEVATION REVEAL - WHERE SIDEWALK CONVEYS SHEET FLOW TO FACILITY, A 1"-2" REVEAL SHOULD BE MAINTAINED BETWEEN SIDEWALK AND FACILITY FINISHED GRADE TO AVOID MULCH OR PLANT BUILDUP FROM BLOCKING FLOWS.
3. CONCRETE AND EXPANSION JOINTS SHALL MEET THE REQUIREMENTS OF THE CITY.

**CONSTRUCTION NOTES**

1. FINISH ALL EXPOSED CONCRETE SURFACES.

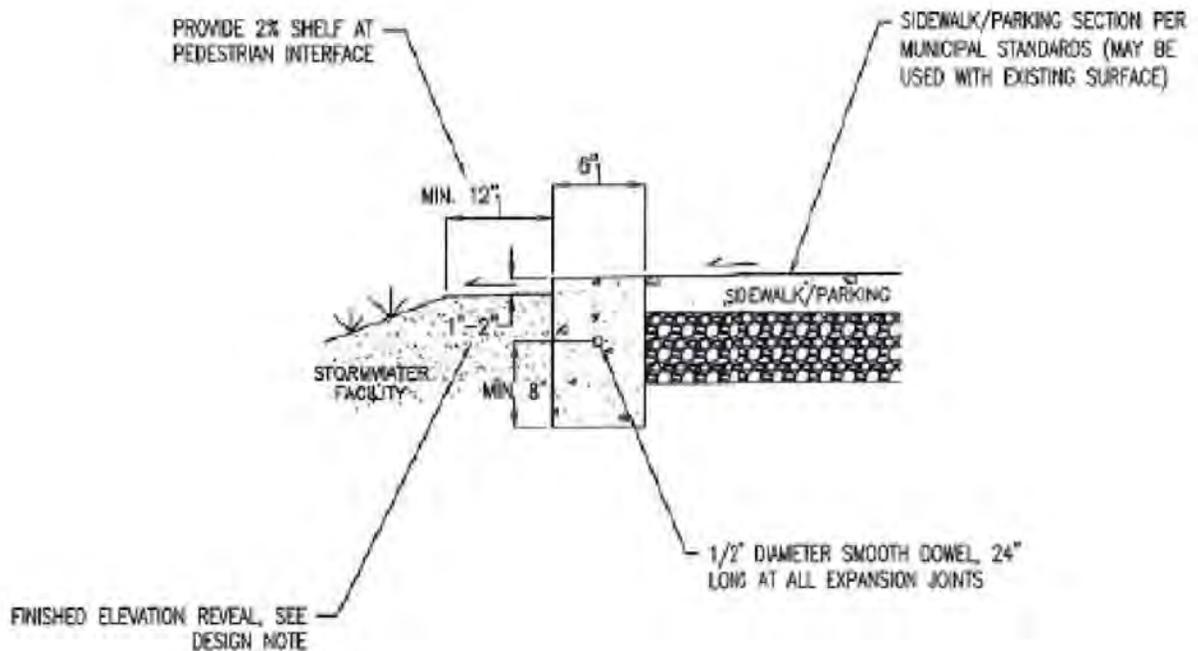


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REF. STD. DWG.:

**THICKENED EDGE  
SIDEWALK**

*CITY OF REEDLEY*

**LID-8**



**DESIGN NOTES**

1. SPECIAL DESIGN CONSIDERATION OR STRUCTURAL REVIEW MAY BE REQUIRED FOR LONGER FACILITY EDGE SPANS. STEEL REINFORCEMENT OR ADDITIONAL CONCRETE CHECK DAMS MAY BE NEEDED FOR STABILITY.
2. EDGE CONDITION WILL VARY FOR PROJECTS. CURB DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY CITY ENGINEER.
3. CONCRETE AND EXPANSION JOINTS SHALL MEET THE REQUIREMENTS OF THE CITY.
4. FINISHED ELEVATION REVEAL AT SIDEWALK - WHERE SIDEWALK CONVEYS SHEET FLOW TO FACILITY, A 1"-2" REVEAL SHOULD BE MAINTAINED BETWEEN SIDEWALK AND FACILITY FINISHED GRADE TO AVOID MULCH OR PLANT BUILDUP FROM BLOCKING FLOWS AND REDUCE DROP AT PEDESTRIAN INTERFACE.

**CONSTRUCTION NOTES**

1. FINISH ALL EXPOSED CONCRETE SURFACES.



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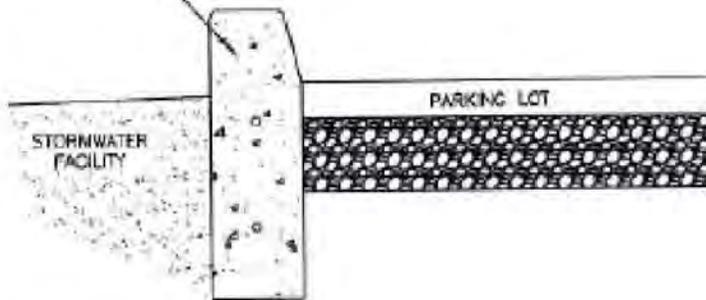
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**FLUSH CURB  
AT SIDEWALK**

*CITY OF REEDLEY*

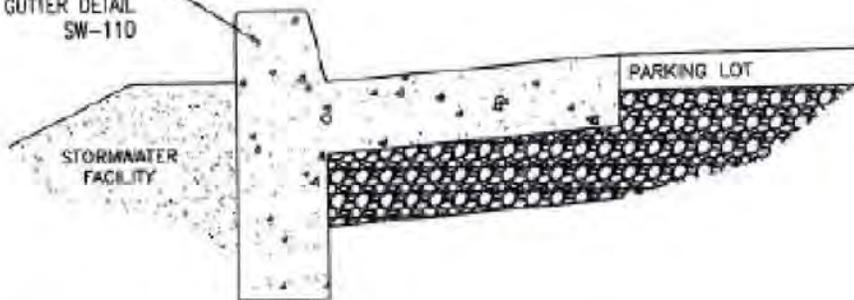
**LID-9**

DEEP CURB  
DETAIL SW-111



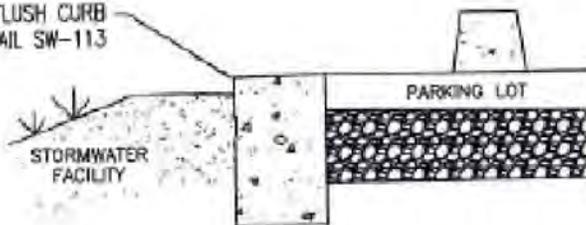
DEEP CURB

CURB AND  
GUTTER  
DETAIL  
SW-110



CURB AND GUTTER

FLUSH CURB  
DETAIL SW-113



FLUSH EDGE/WHEEL STOPS

DESIGN NOTES

1. WHEEL STOPS MAY BE USED ON NON-FLUSH DESIGNS TO KEEP CARS FROM OVERHANGING BIORETENTION FACILITY.
2. VEHICLE OVERHANG CAN BE USED TO REDUCE IMPERVIOUS PAVEMENT AREA.
3. WHERE VEHICLE OVERHANG IS UTILIZED SELECT LOW GROWING PLANTS THAT WILL TOLERATE SHADING.



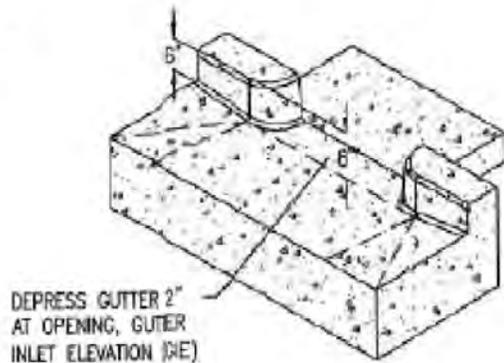
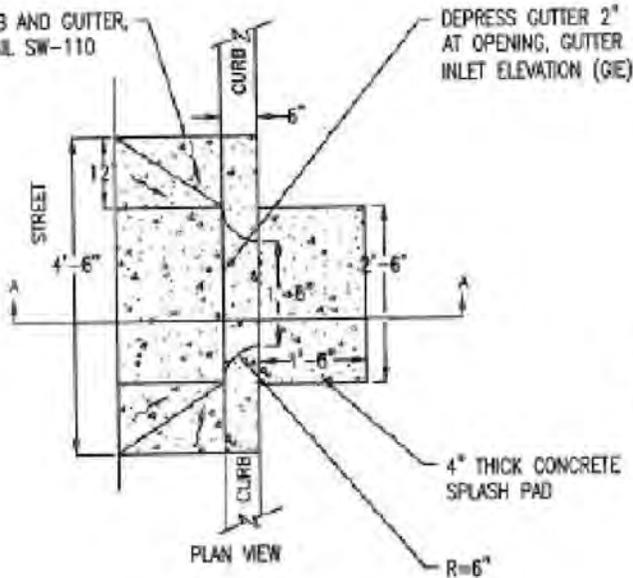
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PARKING LOT  
EDGE OPTIONS

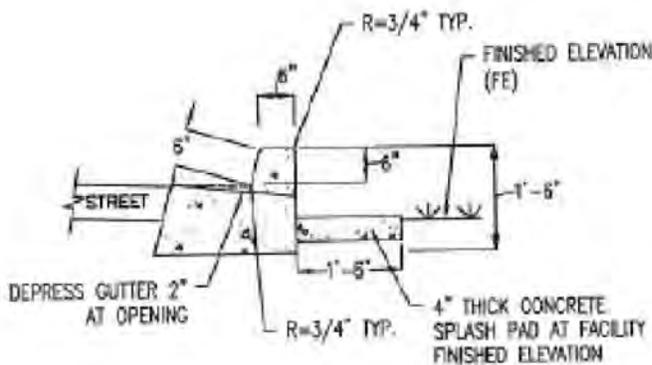
*CITY OF REEDLEY*

**LID-10**

CURB AND GUTTER,  
DETAIL SW-110



PERSPECTIVE VIEW



SECTION A-A

**BIORETENTION DESIGN NOTES**

1. FOR USE WITH STORMWATER FACILITIES WITH FLAT BOTTOMS.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, OE, GIE, IE). SEE DETAIL SW-100.
3. CURB AND WALL DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY CITY ENGINEER.
4. CURB HEIGHT MAY BE REDUCED TO 4-INCHES WHERE ADJACENT TO A SIDEWALK. SEE DETAILS SW-110 & SW-111.

**CONSTRUCTION NOTES**

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.



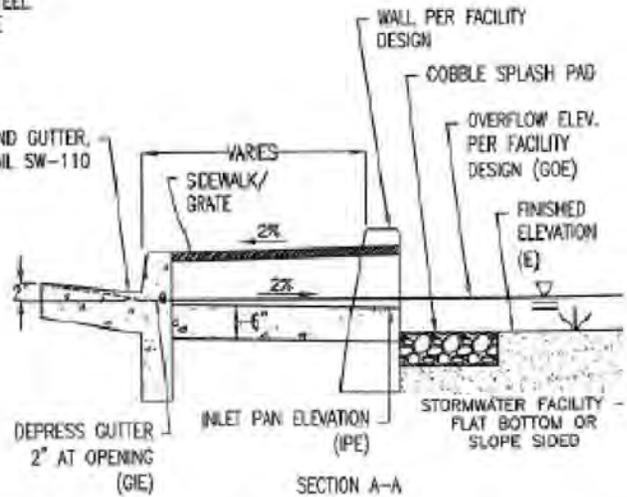
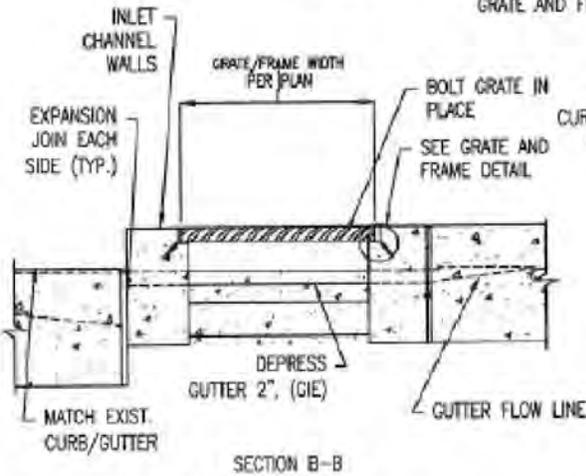
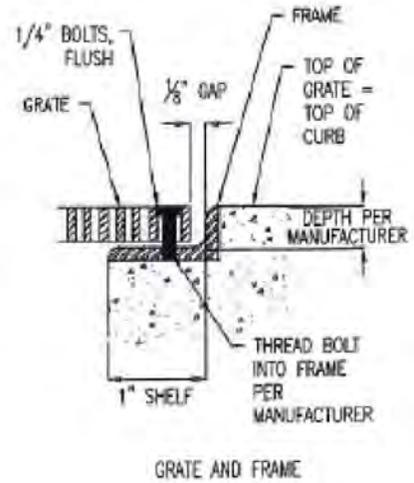
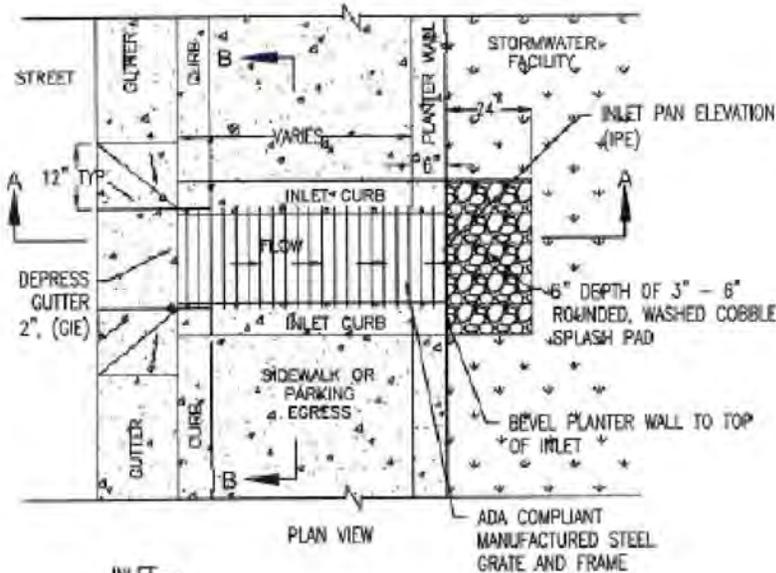
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OCT. 2019  
REF. STD. DWG.:

**CURB CUT INLET  
FOR PLANTERS**

*CITY OF REEDLEY*

**LID-11**





**BIORETENTION DESIGN NOTES**

1. FOR USE WITH STORMWATER FACILITIES WITH SLOPED SIDES OR FLAT BOTTOMS.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, OE, GIE, IPE). SEE DETAIL SW-100.
3. REFER TO MUNICIPAL STANDARD DRAWINGS AND MATCH GUTTER PAN OF ADJACENT CURB AND GUTTER.
4. IF SLOPED SIDES, WHERE INLET FLOW VELOCITY IS HIGH, EXTEND COBBLE INTO FACILITY, BUT AVOID EXCESSIVE USE.
5. BASE MATERIAL FOR CURB, GUTTER, AND SIDEWALK PER MUNICIPAL STANDARDS.

**CONSTRUCTION NOTES**

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.



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OCT. 2019

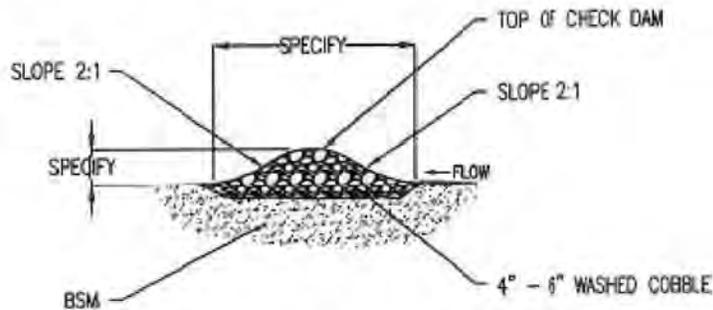
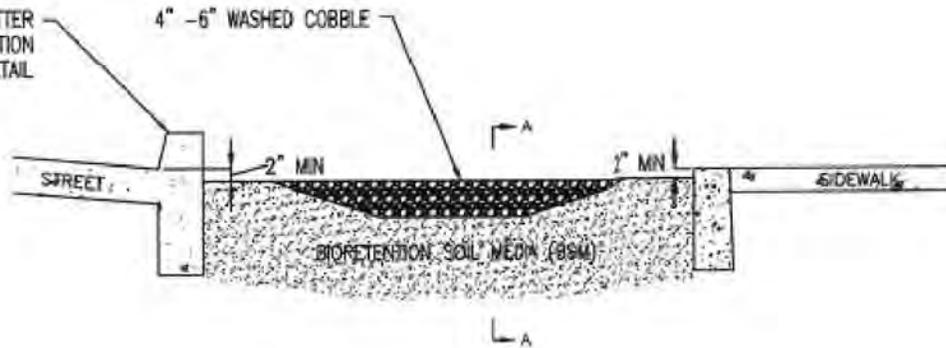
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**INLET WITH GRATE**

*CITY OF REEDLEY*

**LID-13**

CURB AND GUTTER  
PER BIORETENTION  
WITH SIDESLOPE DETAIL



SECTION A-A

BIORETENTION DESIGN NOTES

1. FOR USE WITH STORMWATER FACILITIES WITH SLOPED SIDES.
2. BEST SUITED FOR FACILITIES WITH  $< \text{OF } \leq$  THAN 2% LONGITUDINAL SLOPE.
3. PROVIDE ELEVATIONS AND STATIONING AND/OR DIMENSIONING FOR CHECK DAMS.
4. SPACE CHECK DAMS TO MAXIMIZE PONDING ACROSS ENTIRE CELL.
5. ENSURE THAT CHECK DAM ELEVATIONS DO NOT CAUSE STORMWATER TO OVERFLOW TO SIDEWALK.

CONSTRUCTION NOTES

1. DO NOT WORK DURING RAIN OR UNDER WET CONDITIONS.
2. KEEP ALL HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.

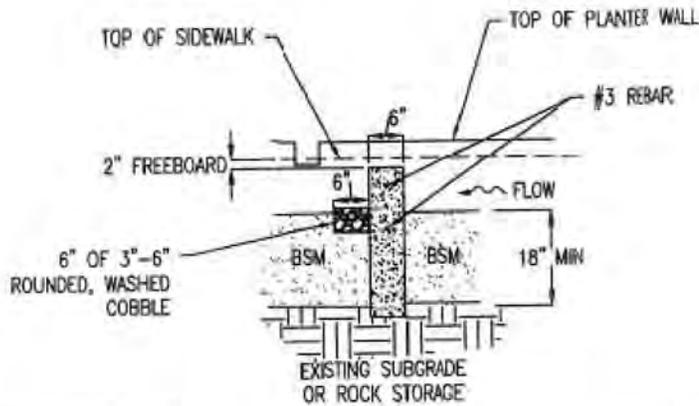
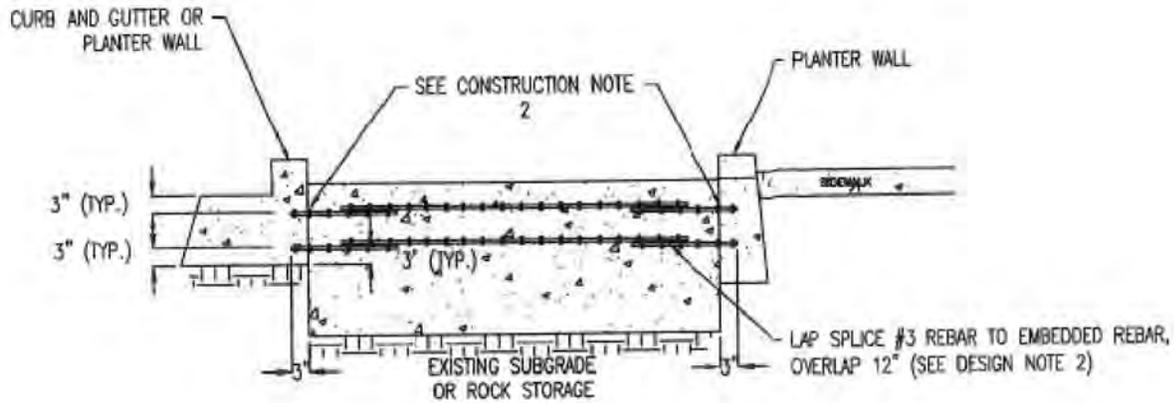


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GRAVEL CHECK DAM

CITY OF REEDLEY

LID-14



**BIORETENTION DESIGN NOTES**

1. FOR USE WITH BIORETENTION PLANTERS OR SLOPED SIDED SWALES/RAIN GARDENS.
2. FOR CHECK DAMS LONGER THAN 12' SPECIFY REBAR OVERLAP LENGTH.
3. SPACE CHECK DAMS TO MAXIMIZE PONDING ACROSS CELLS.
4. PROVIDE ELEVATIONS AND STATIONING AND/OR DIMENSIONING FOR CHECK DAMS.
5. ENSURE THAT CHECK DAM ELEVATIONS DO NOT CAUSE STORMWATER TO OVERFLOW TO SIDEWALK.
6. SHOW PLANTER WALL EMBEDDED IN EXISTING SUBGRADE OR DRAINROCK.

**CONSTRUCTION NOTES**

1. EMBED #3 REBAR 3" INTO CURB AND PLANTER WALL.
2. DO NOT WORK DURING RAIN OR UNDER WET CONDITIONS.
3. KEEP ALL HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.

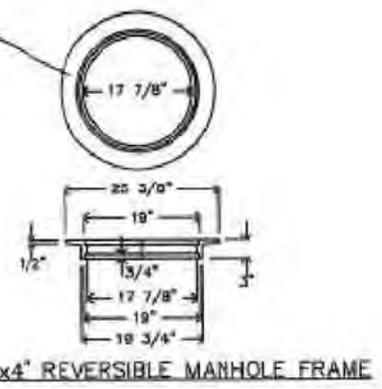
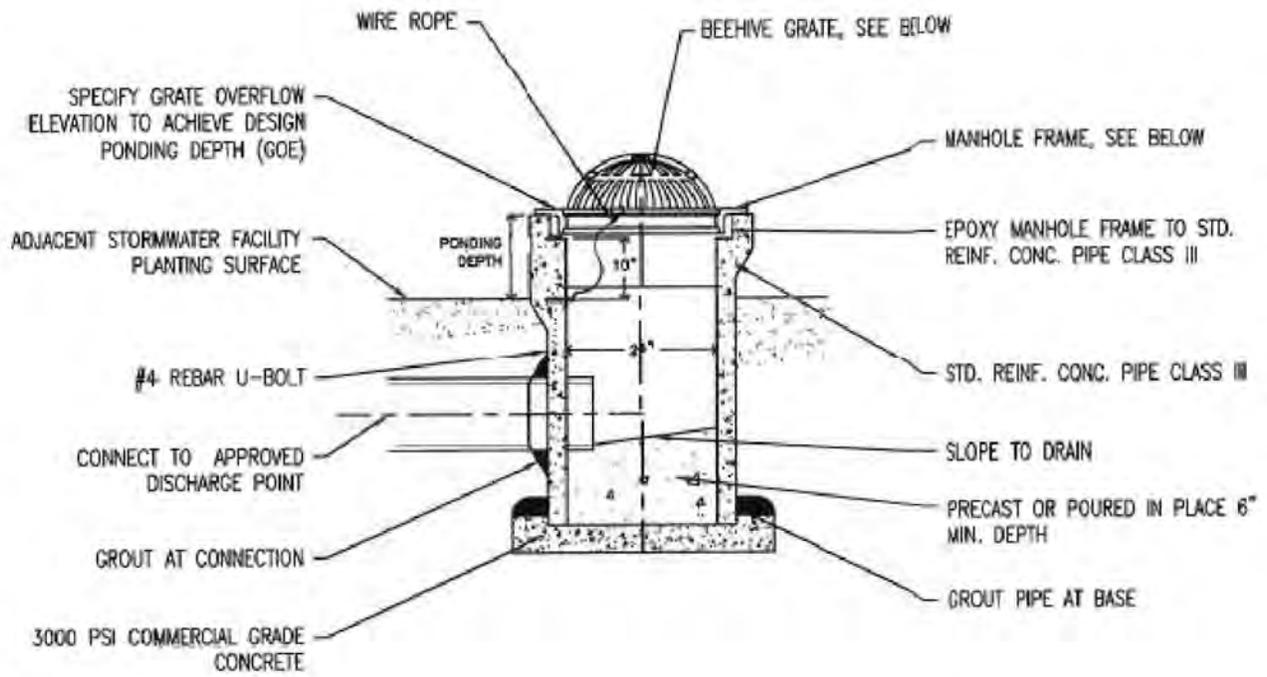


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**CONCRETE CHECK DAM**

*CITY OF REEDLEY*

**LID-15**



**DESIGN NOTES**

1. PROVIDE GRATE OVERFLOW ELEVATION ON PLANS.
2. TO INCORPORATE FLEXIBILITY INTO DESIGN OVERFLOW ELEVATION OR CORRECT ELEVATION OF AN EXISTING STRUCTURE, INSTALL OVERFLOW COLLAR, PER DETAIL SW-141.
3. IN PRIVATE SITES NOT IN CITY R/W THE PROJECT CIVIL ENGINEER MAY PROPOSE ALTERNATIVES FOR GRATE INSTALLATIONS USING ALTERNATIVE MANUFACTURER'S PRODUCT/CONFIGURATION.

**CONSTRUCTION NOTES**

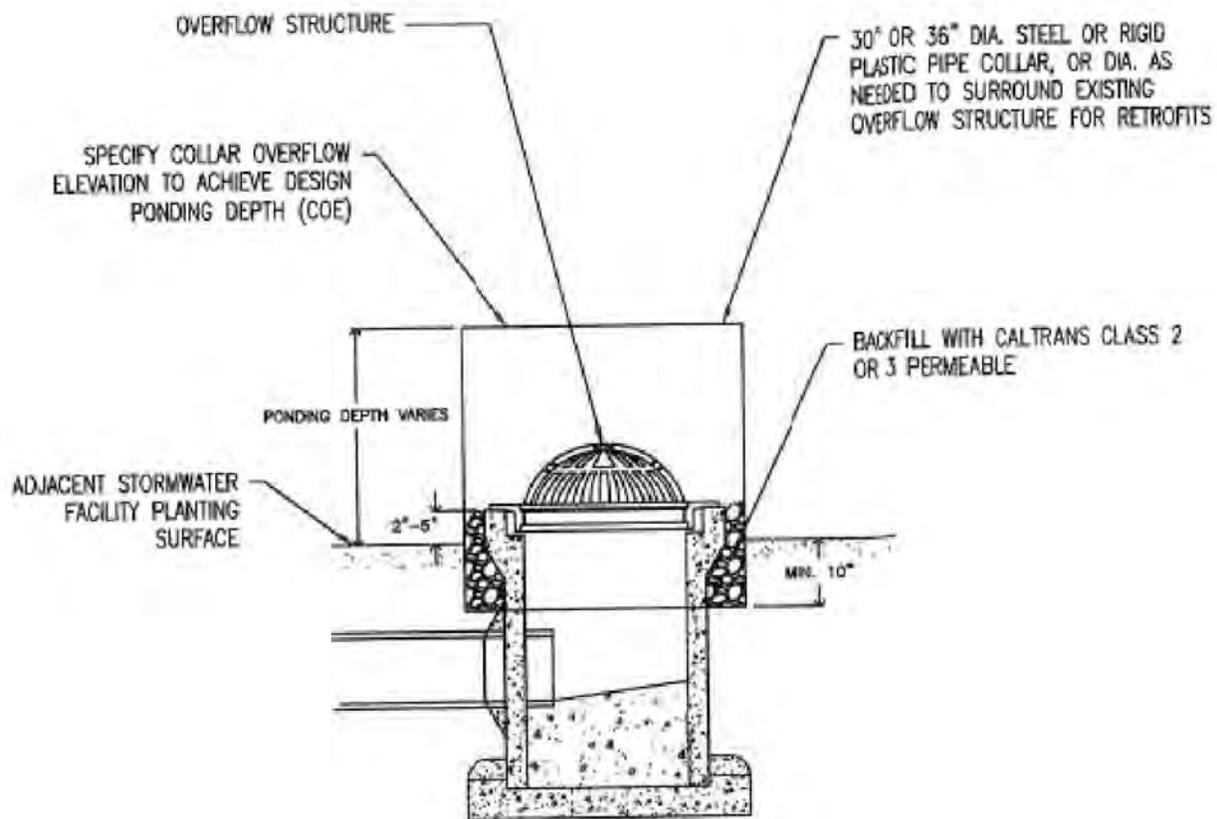
1. DO NOT ADJUST OVERFLOW GRATE ELEVATION, CONSTRUCT AS SHOWN ON PLANS.



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REF. STD. DWG.:

**OVERFLOW STRUCTURE  
WITH BEEHIVE GRATE**

*CITY OF REEDLEY*  
**LID-16**



**DESIGN NOTES**

1. MAY BE USED IN CONJUNCTION WITH OVERFLOW STRUCTURES TO ALLOW FOR FIELD ADJUSTMENT OF OVERFLOW ELEVATION, OR AS RETROFIT TO CORRECT EXISTING STRUCTURE THAT DOES NOT ALLOW PONDING TO OCCUR.
2. PROVIDE COLLAR OVERFLOW ELEVATION (COE) ON PLANS.
3. PCC PIPE RISER EXTENSIONS MAY BE UTILIZED IN LIEU OF OVER FLOW STRUCTURE COLLAR.

**CONSTRUCTION NOTES**

1. CENTER COLLAR ON OVERFLOW GRATE.

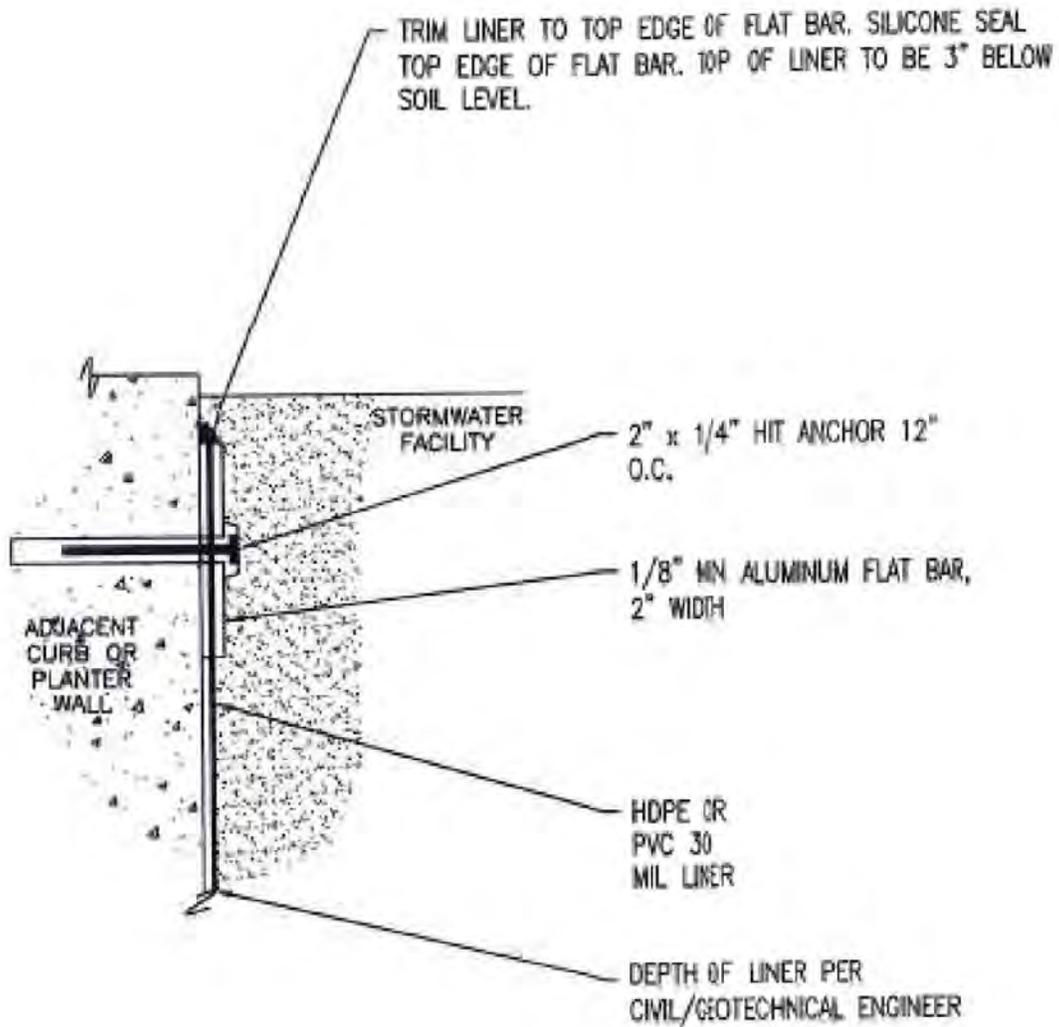


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REF. STD. DWG.:

**OVERFLOW STRUCTURE  
COLLAR**

*CITY OF REEDLEY*

**LID-17**



SCALE:  
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OCT. 2019

REF. STD. DWG.:

IMPERMEABLE LAYER

CITY OF REEDLEY

LID-18



SCALE:  
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REF. STD. DWG.:

**ZONE A LID RECOMMENDED  
PLANT LIST**  
GRASS/GRASSLIKE

**CITY OF REEDLEY**  
**LID-19**

**Bioremediation Plant List**  
Plants for Zone A: Periodic inundation, area ponds following storm events (6" to 12" depth for 24 - 72 hours) and compost amended sand soil.

Scientific & Common Name	Height / Width	Light Preferences		Water Tolerances		CA Native	Sunset Climate Zones <sup>1</sup>	Notes
		Sun	Shade	Drought	Inundation			
<b>GRASS/GRASSLIKE</b>								
<i>Carex barbinis</i> Santa Barbara Sedge/ Basket Sedge	1-2' / 1'-2'	X	X	X	X	X	4 - 9, 14 - 23	Attracts butterflies, deer resistant, good for erosion control, can spread aggressively and should be sited carefully.
<i>Carex stricta</i> Berkeley Sedge	1' / spreading	X	X	X	X		all, but 1A-3A	Attractive blue-grey leaves. Can be mowed 4 in high to keep clean look.
<i>Carex juncea</i> Blue Sedge	1' / spreading	X	X	X	X		3A - 9, 14 - 23	Attractive blue-grey leaves. Can be mowed 4 in high to keep clean look.
<i>Carex proserpinzifolia</i> California Field Sedge	1' / spreading	X	X		X	X	all, but 1A -3A	Mounding, drought deciduous during summer months.
<i>Carex spicata</i> San Diego sedge	3-4' / 2-3'	X	X		X	X	all, but 1A-3A	Can handle foot traffic and is deer resistant.
<i>Chondropetalum heterotum</i> Small Cape Rush	2-3' / 3-4'	X	X	X	X		all, but 1A-3A and 7	Needs very little maintenance. If trimmed too much plant will lose visual integrity.
<i>Leymus condensis</i> 'Canyon Prince' Canyon Prince Wild Rye	3'/3'	X	X		X	X	all, but 1A-3A	Tolerant of drought, poor soils, part shade and seasonal wet. Spreads by rhizomes, so nice planted in masses. Cut back annually in spring before new growth emerges.
<i>Juncus effusus</i> Common Rush	2-3' / clumping	X	X		X	X	all	Easy to grow & very reliable. Needs more water than <i>Juncus patens</i> .
<i>Juncus patens</i> 'Elk Blue' Elk Blue California Gray Rush	2' / clumping	X	X	X	X	X	all	Very little maintenance, handles dry summers and wet winters.
<i>Muhlenbergia rigens</i> Deer Grass	2-3' / 3-6'	X	X	X	X	X	all, but 1A-3A	Can handle no watering, will stay green year round with watering, trim annually.
<i>Scirpus comus</i> Low Bulrush	1' / spreading	X	X		X	X	7 - 24	Grow individually or in mass, cut back once a year, very attractive.

<sup>1</sup> Refers to the Sunset Western Garden Book Zones [www.sunset.com/garden/climatezones/](http://www.sunset.com/garden/climatezones/)



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## ZONE A LID RECOMMENDED PLANT LIST

PERENNIALS

*CITY OF REEDLEY*

**LID-20**

**Bioretention Plant List**  
Plants for Zone A: Periodic inundation, area ponds following storm events (6" to 12" depth for 24 - 72 hours) and compost amended sand soil.

Scientific & Common Name	Height / Width	Light Preferences			Water Tolerances		CA Native	Sunset Climate Zones <sup>1</sup>	Notes
		Sun	Part Shade	Shade	Drought	Inundation			
<b>PERENNIALS</b>									
<i>Achillea millefolium californica</i> Yarrow	1-3' / 2'	X	X		X	X	X	all	Tolerates regular to no watering, foot traffic attracts butterflies, stress deciduous.
<i>Aureopsis californica</i> Yerba Mansa	1-2' / spreading	X	X		X	X	X	all, but 1A-3A	Mat forming ground cover, interesting white flowers, prune back in late summer, likes moist conditions.
<i>Bidens laevis</i> Joaquin Sunflower	2-3' / 1-2'	X			X	X	X	all but 1A	Attracts beneficial insects, stress deciduous in summer, likes water but will survive drought if pruned back.
<i>Callitriche eripophylla</i> Fairy Duster	1-3' / 1-3'	X			X	X	X	10-24	Very attractive 1-2 inch pink flowers, little water after established, semi-evergreen, attracts butterflies and hummingbirds.
<i>Epipactis gigantea</i> Simsian Orchid	1-2' / 2-3'	X	X		X	X	X	all	Will go dormant during drought, releases big muted pink and yellow flowers.
<i>Eschscholzia californica</i> California Poppy	1-3' / 1-3'	X			X	X	X	all	Can handle periodic inundation, cut back yearly to prevent it from becoming weedy.
<i>Fls aboriginaria</i> Douglas Iris	1-2' / spreading	X	X		X	X	X	all, but 1A-3A	Needs moisture or shade inland, does well on coast, evergreen leaves, attractive lavender-blue flowers in Spring.
<i>Lilium pardalinum</i> Leopard Lily	3-8' / 6"	X	X		X	X	X	2-7, 14-17	Attractive red-orange spotted blossoms in spring, needs regular water, will get large in moist, partial shade conditions.
<i>Lobelia cardinalis</i> Cardinal Flower	2-3' / 2'	X	X	X	X	X	X	1-7, 14-17	A bog plant, attracts hummingbirds, showy scarlet flowers.
<i>Mimulus cardinalis</i> Scarlet Monkey Flower	1-3' / 1-3'	X	X	X	X	X	X	all but 1A	Year round red color with regular water, attracts hummingbirds, reseeds itself & should not be used for small spaces.
<i>Mimulus guttatus</i> Swamp Monkey Flower	1-3' / 1-3'	X	X		X	X	X	all but 1A	Yellow flowers are abundant in spring-summer, attracts butterflies. Will die back in drought and come back following year.
<i>Rudbeckia californica</i> California Coneflower	2-5' / 1-2'	X			X	X	X	all	Yellow showy flowers late summer and fall, cut back in winter, can get large under ideal conditions and may require pruning.
<i>Salvia spaldingii</i> Hummingbird Sage	1-3' / spreading	X	X	X	X	X	X	all, but 1A-3A	Very attractive foliage and flowers, fragrant, attracts hummingbirds, deer resistant, likes to grow in understory of trees.
<i>Sisyrinchium bellum</i> Blue-Eyed Grass	6"-3' / 6"-1'	X			X	X	X	all, but 1A-3A	Requires little to no maintenance. Summer dormant, will come back during wetter months on its own. Can irrigate to prolong flowering.
<i>Solidago californica</i> California Goldenrod	1-3' / 2-3'	X	X	X	X	X	X	all, but 24	Attracts beneficial insects and butterflies. Attractive yellow flowering inflorescences in summer and fall. Dormant in winter, cut back to ground.

<sup>1</sup> Refers to the Sunset Western Garden Book Zones [www.sunset.com/garden/climatezones/](http://www.sunset.com/garden/climatezones/)

Prepared by the Central Coast Low Impact Development Initiative [www.centralcoastlidi.org](http://www.centralcoastlidi.org)



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## ZONE A LID RECOMMENDED PLANT LIST

SHRUBS/TREES

*CITY OF REEDLEY*

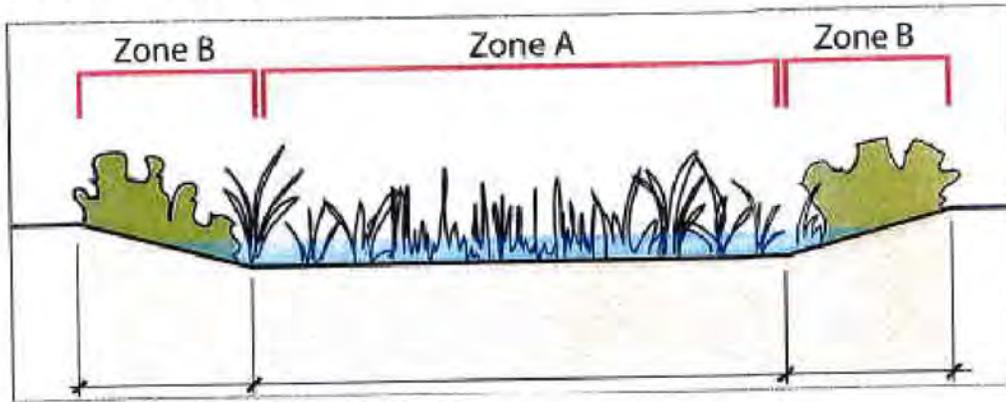
**LID-21**

**Bioretention Plant List**  
Plants for Zone A: Periodic inundation, area ponds following storm events (6" to 12" depth for 24 - 72 hours) and compost amended sand soil.

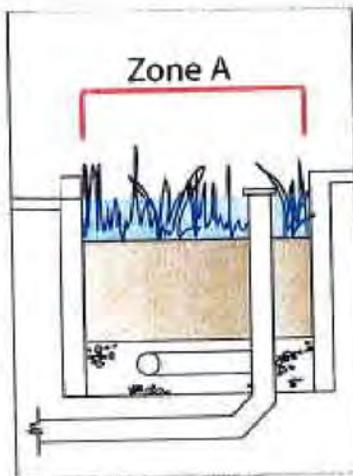
Scientific & Common Name	Height / Width	Light Preferences		Water Tolerances		CA Native	Sunset Climate Zones <sup>1</sup>	Notes
		Sun	Shade	Drought	Inundation			
<b>SMALL SHRUBS</b>								
<i>Baccharis pilularis</i> Coyote Brush	wide variation	X		X	X	X	all, but 1A-3A	Adaptable evergreen shrub, provides quick cover and bank stabilization, tolerant of coastal conditions, alkaline soil, sand, clay and seasonal wet, dwarf (low growing) varieties available.
<i>Zauschneria californica</i> 'Catalina' Island California Fuchsia	1 - 3' / 2 - 3'	X	X	X	X	X	All but 1A	Likes moisture but will survive through drought, attractive red flowers that hummingbirds like. This species is hardier and flowers last longer.
<i>Zauschneria californica</i> 'Uvas Canyon' San Jose California Fuchsia	2 - 3' / spreading	X	X	X	X	X	All but 1A	Grey foliage, attractive red-orange flowers, very showy in late fall. Full sun with regular watering or along coast. Can be mowed to look like lawn.
<b>LARGE SHRUBS / TREES</b>								
<i>Asclepias californica</i> California Buckeye	15'	X		X	X	X	all but 1A-2A	Small tree that has fragrant white panicles April - May. Needs regular water for the first 2 years. Interesting form throughout all seasons. Good for native bee populations.
<i>Amorpha californica</i> California False Indigo Bush	6' / spreading	X	X	X	X	X	all, but 1A -3A	Large shrub, with fragrant purple flowers. Needs no water after established. Provides larval food for California State butterfly.
<i>Cercis occidentalis</i> Western Redbud	3 - 16' / 3 - 16'	X	X	X	X	X	all but 1A	Needs winter chill to set flowers properly. Abundant amount of flowering purple-pink flowers in spring. Can be pruned to tree or left as shrub.
<i>Cornus californica</i> California Dogwood	3 - 10' / 3 - 10'	X	X	X	X	X	all, but 1A -3A	Attractive red branching stems with red deciduous leaves in winter. Good for erosion control. Showy white blooms in spring.
<i>Coryna elliptica</i> 'James Roof' Silk Tassel	10 - 15'	X	X	X	X	X	all, but 1A -3A	Drought tolerant where rainfall exceeds 20" Evergreen shrub - tree with hanging white catkins.
<i>Sambucus mexicana</i> Tartan, Blue Elderberry	6 - 15'	X	X	X	X	X	all but 1A	Deciduous shrub that can be pruned to a tree. Can handle extreme drought after first years. Needs maintenance to upkeep appearance. Attractive yellow flowers and edible blue berries. Great for ecosystem rehabilitation.
<i>Spiraea douglasii</i> Western Spiraea	4 - 5'	X	X	X	X	X	all	Deciduous shrub, fast growing. Attractive pink clustered flowers summer to early fall. Drought tolerant once established. Very adaptable.

<sup>1</sup> Refers to the Sunset Western Garden Book Zones [www.sunset.com/garden/climatezones/](http://www.sunset.com/garden/climatezones/)

**Varying slope and ponding levels:** Varying slope and ponding levels: This bioretention planting area has sloped edges. Plants in the bottom area will be inundated during storms (**Zone A**). Those planted on the sideslopes are above the level of ponding, but will experience seasonally wet conditions (**Zone B**).



**Uniform surface grade:** This stormwater planter has a flat bottom with consistent depth of ponding across the structure. All of the plants selected for this design must be tolerant of periodic inundation (**Zone A**).

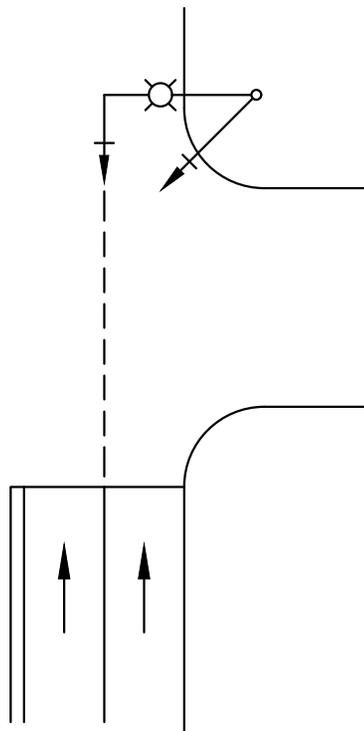


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## PLANTING INUNDATION ZONES

*CITY OF REEDLEY*

**LID-22**



LEGEND:

- - - PREFERRED PLACEMENT
- ⊥ PERMISSIVE SIGNAL INDICATION
- ⊙ LUMINAIRE (SAFETY LIGHT)

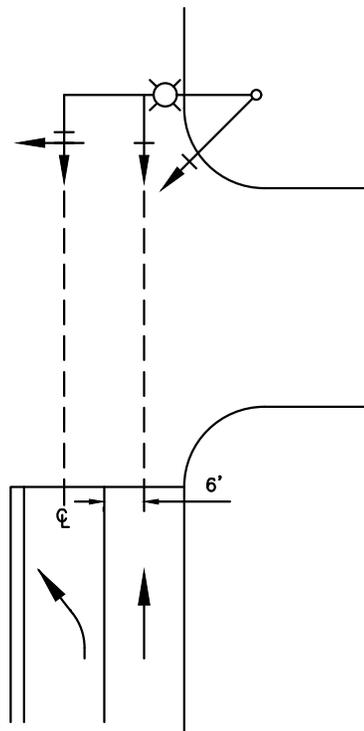


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**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
2 THROUGH LANES ONLY

*CITY OF REEDLEY*

**TS-1**



LEGEND:

- - - PREFERRED PLACEMENT
- ↓ PERMISSIVE SIGNAL INDICATION
- ←↓ PROTECTED LEFT-TURN SIGNAL INDICATION
- ⊗ LUMINAIRE (SAFETY LIGHT)



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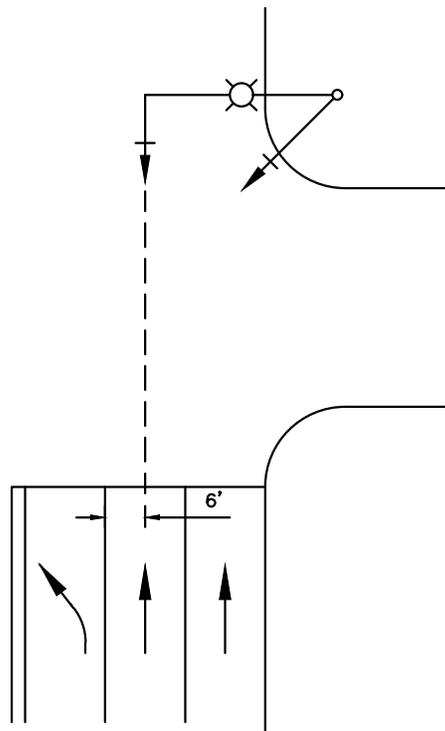
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OCT. 2019

REF. STD. DWG.:

**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
1 THROUGH LANE & SEPARATE  
PROTECTED LEFT TURN LANE

*CITY OF REEDLEY*

**TS-1A**



LEGEND:

- - - PREFERRED PLACEMENT
- ⊥ PERMISSIVE SIGNAL INDICATION
- ⊗ LUMINAIRE (SAFETY LIGHT)

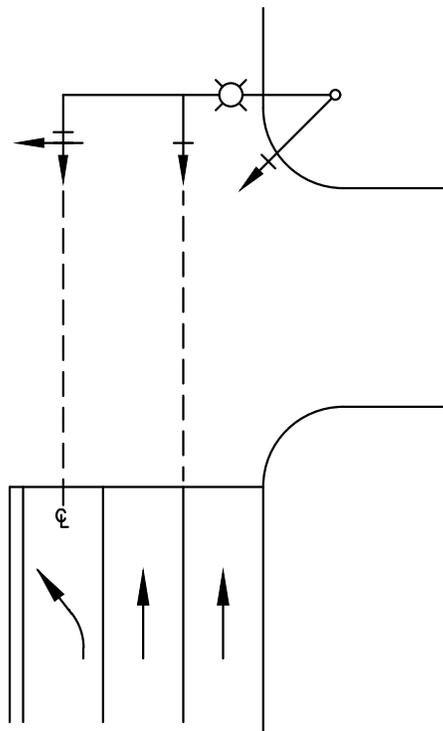


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REF. STD. DWG.:

**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
2 THROUGH LANE WITH  
UNPROTECTED LEFT TURN LANE

*CITY OF REEDLEY*

**TS-1B**



LEGEND:

- - - PREFERRED PLACEMENT
- ↓ PERMISSIVE SIGNAL INDICATION
- ←↓ PROTECTED LEFT-TURN SIGNAL INDICATION
- ⊙ LUMINAIRE (SAFETY LIGHT)



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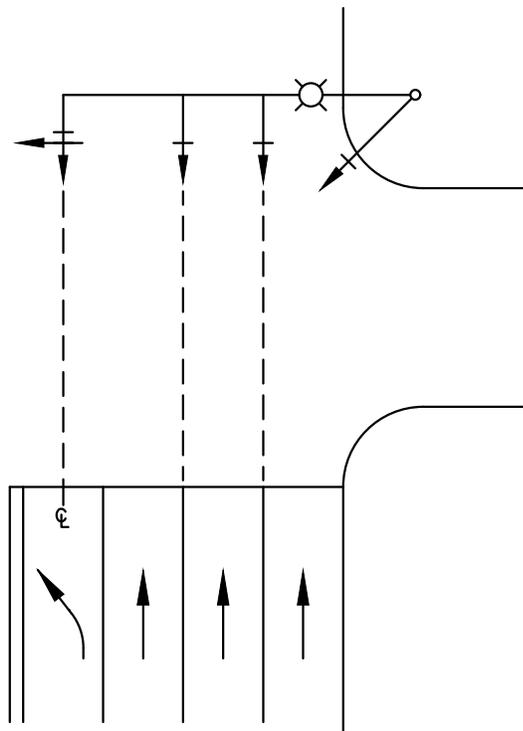
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REF. STD. DWG.:

**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
2 THROUGH LANES WITH  
PROTECTED LEFT TURN LANE

*CITY OF REEDLEY*

**TS-1C**



LEGEND:

- - - PREFERRED PLACEMENT
- ↑ PERMISSIVE SIGNAL INDICATION
- ←↑ PROTECTED LEFT-TURN SIGNAL INDICATION
- ⊙ LUMINAIRE (SAFETY LIGHT)

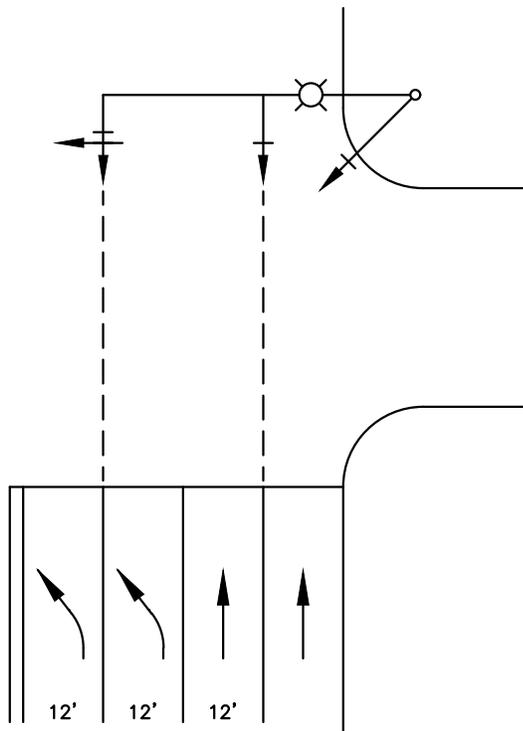


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REF. STD. DWG.:

**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
3 THROUGH LANES WITH  
PROTECTED LEFT TURN LANE

*CITY OF REEDLEY*

**TS-1D**



**LEGEND:**

- PREFERRED PLACEMENT
- ↓ PERMISSIVE SIGNAL INDICATION
- ←↓ PROTECTED LEFT-TURN SIGNAL INDICATION
- ⊗ LUMINAIRE (SAFETY LIGHT)

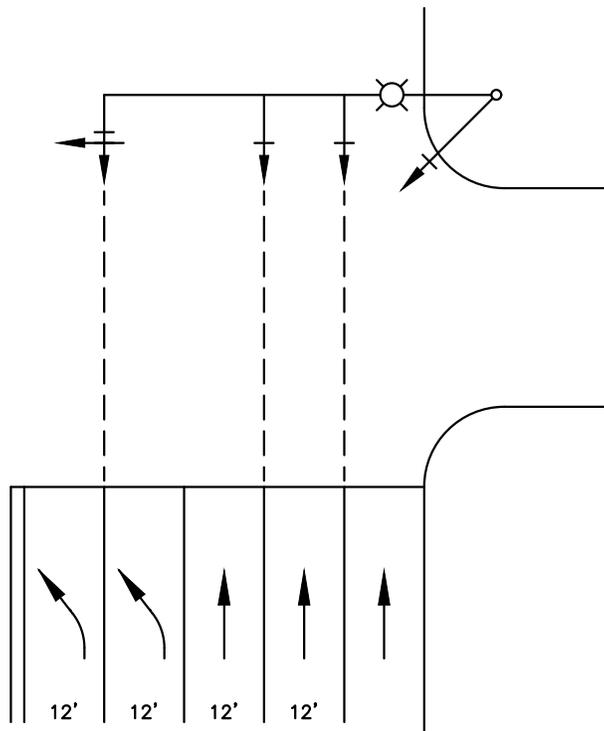


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**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
2 THROUGH LANES WITH  
2 PROTECTED LEFT TURN LANE

*CITY OF REEDLEY*

**TS-1E**



LEGEND:

- - - PREFERRED PLACEMENT
- ↓ PERMISSIVE SIGNAL INDICATION
- ←↓ PROTECTED LEFT-TURN SIGNAL INDICATION
- ⊙ LUMINAIRE (SAFETY LIGHT)



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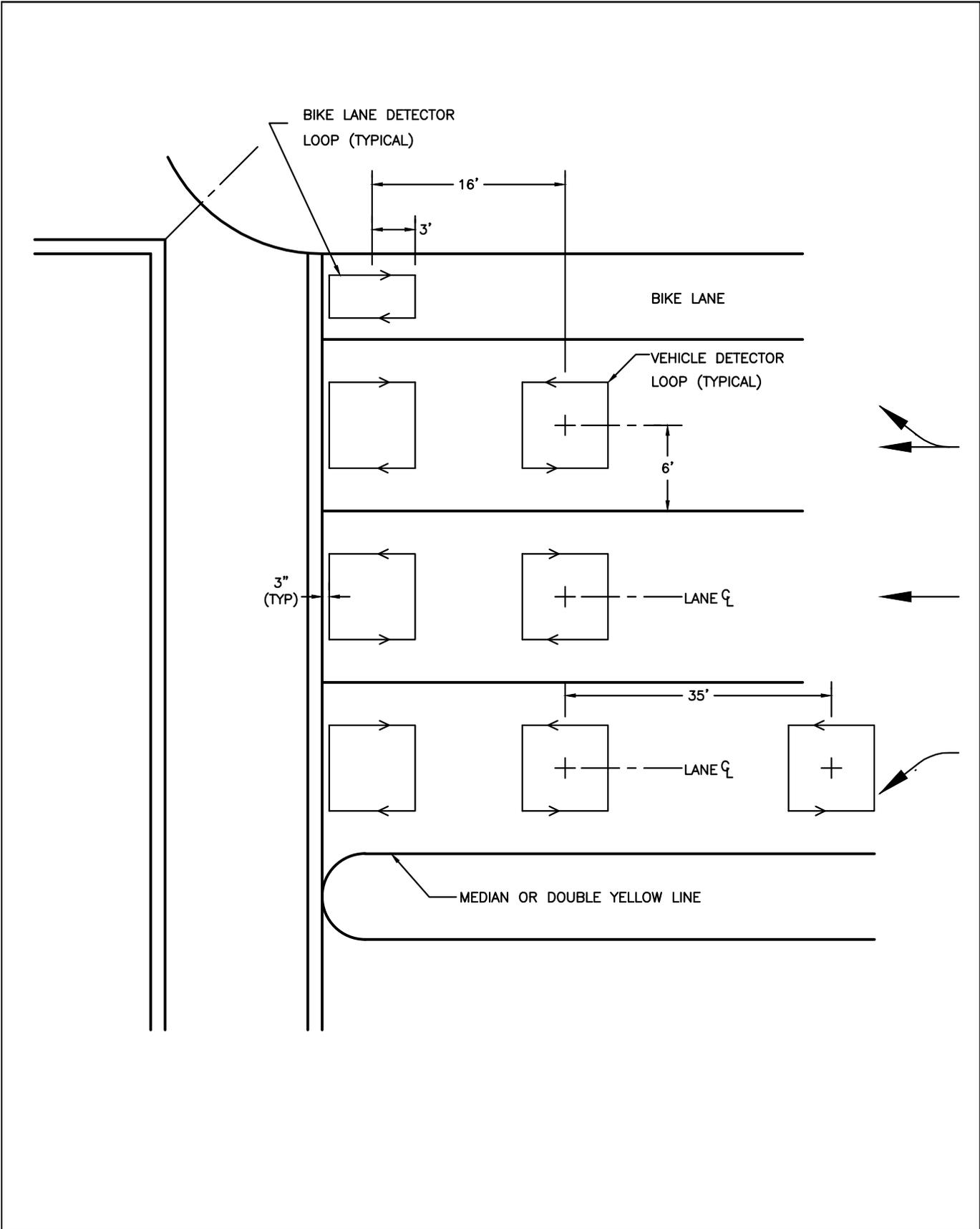
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**TRAFFIC SIGNAL HEAD  
LOCATIONS**  
3 THROUGH LANES WITH  
2 PROTECTED LEFT TURN LANE

*CITY OF REEDLEY*

**TS-1F**



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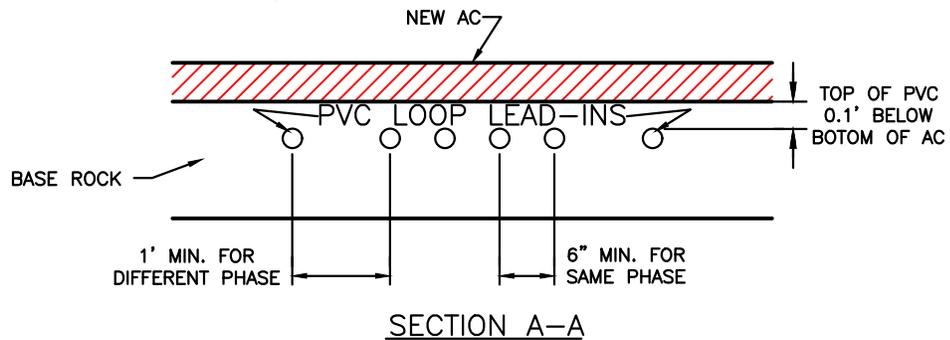
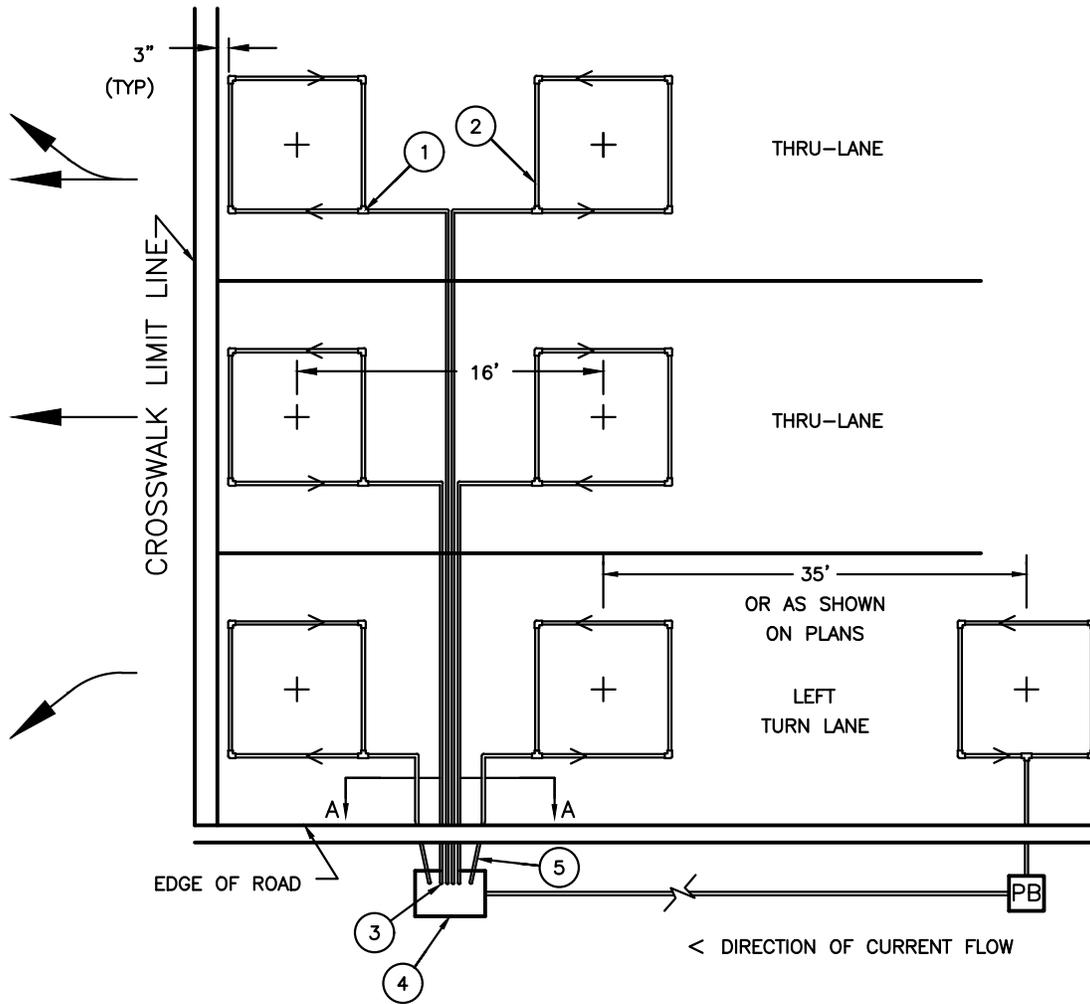
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# LOOP DETECTOR PLACEMENT

*CITY OF REEDLEY*

**TS-2**

- ① 3/4" PVC SCH.40 CONDULET. COVER SHALL BE ON TOP (TYP).
- ② 3/4" PVC SCH.40 CONDUIT & LARGE RADIUS ELS.
- ③ SUPPLY & INSTALL BUSHINGS ON ALL CONDUITS.
- ④ PER STD. SPECS, PULL BOX No.6 W/EXT. OR AS NOTED ON PLANS.
- ⑤ TWIST CONDUCTORS 2 TURNS PER FOOT FROM CONDULET TO PULL BOX IN ALL PVC LEAD-IN CONDUITS.

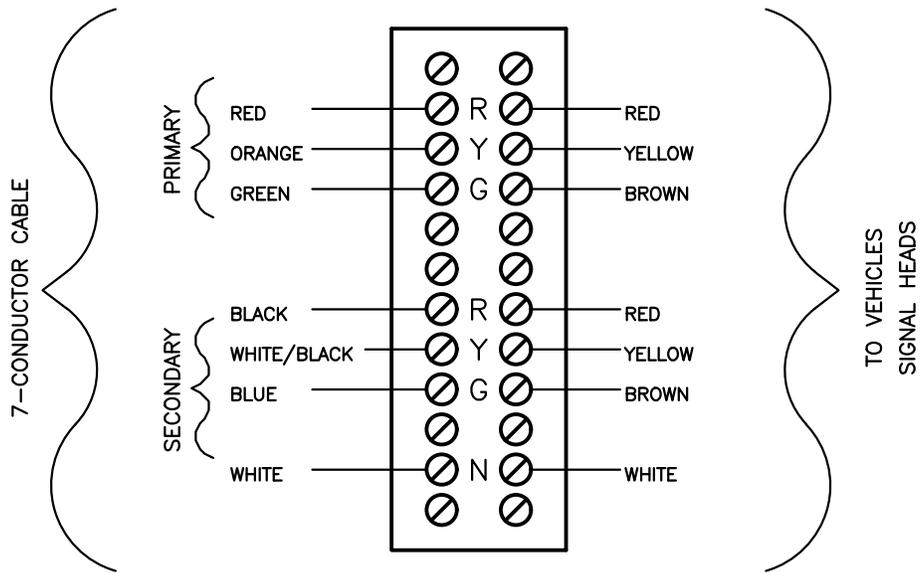


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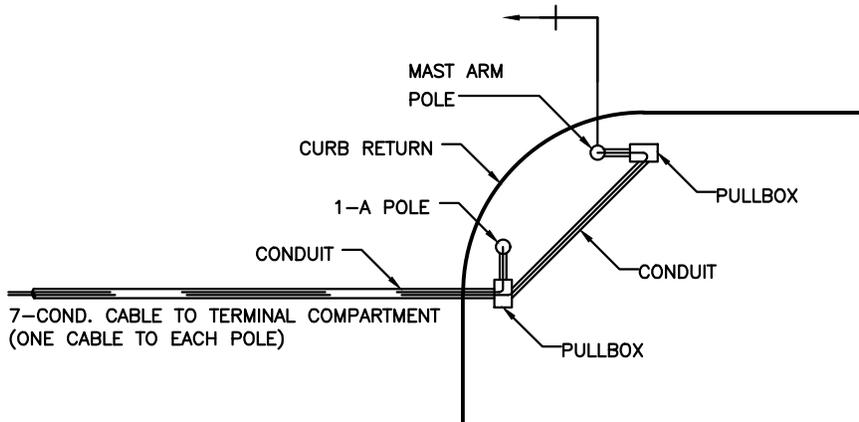
## LOOP DETECTOR PLACEMENT

*CITY OF REEDLEY*

**TS-2A**



VEHICLE TERMINAL COMPARTMENT



TYPICAL CORNER CONNECTIONS

**NOTES:**

1. INSTALL SINGLE CONDUCTOR COLOR CODED #14 THWN COPPER WIRE BETWEEN TERMINAL STRIP & EACH SIGNAL ASSEMBLY & CONNECT.
2. THE CABLES THAT COMPRISE A SIGNAL PHASE SHALL HAVE AN IDENTIFICATION BAND PLACED NEAR THE END OF TERMINATION POINTS & IN EVERY PULL BOX. THE IDENTIFICATION BAND SHALL BE A 3/8" PLASTIC STRIP & INSTALLED WITH NON-FERROUS PERMANENT FASTENER. ALL CABLES SHALL BE LABELED PER PHASING SHOWN ON PLANS.



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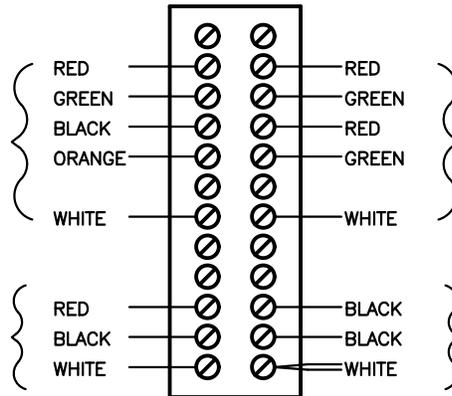
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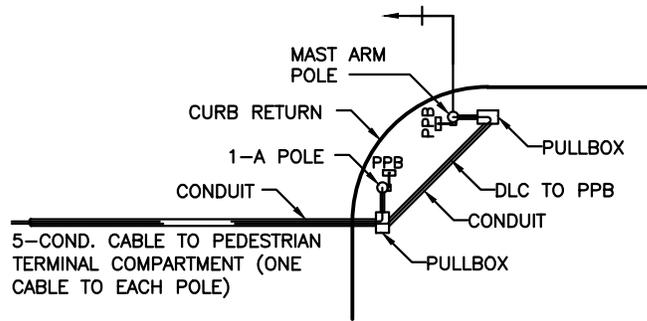
**VEHICLE SIGNAL  
TERMINAL LOCATION**

*CITY OF REEDLEY*

**TS-3**



TERMINAL STRIP



TYPICAL CORNER CONNECTIONS

NOTES:

1. INSTALL SINGLE CONDUCTOR COLOR CODED #14 THWN COPPER WIRE BETWEEN TERMINAL STRIP & EACH SIGNAL ASSEMBLY & CONNECT.
2. THE CABLES THAT COMPRISE A SIGNAL PHASE SHALL HAVE AN IDENTIFICATION BAND PLACED NEAR THE END OF TERMINATION POINTS & IN EVERY PULL BOX. THE IDENTIFICATION BAND SHALL BE A 3/8" PLASTIC STRIP & INSTALLED WITH NON-FERROUS PERMANENT FASTENER. ALL CABLES SHALL BE LABELED PER PHASING SHOWN ON PLANS.



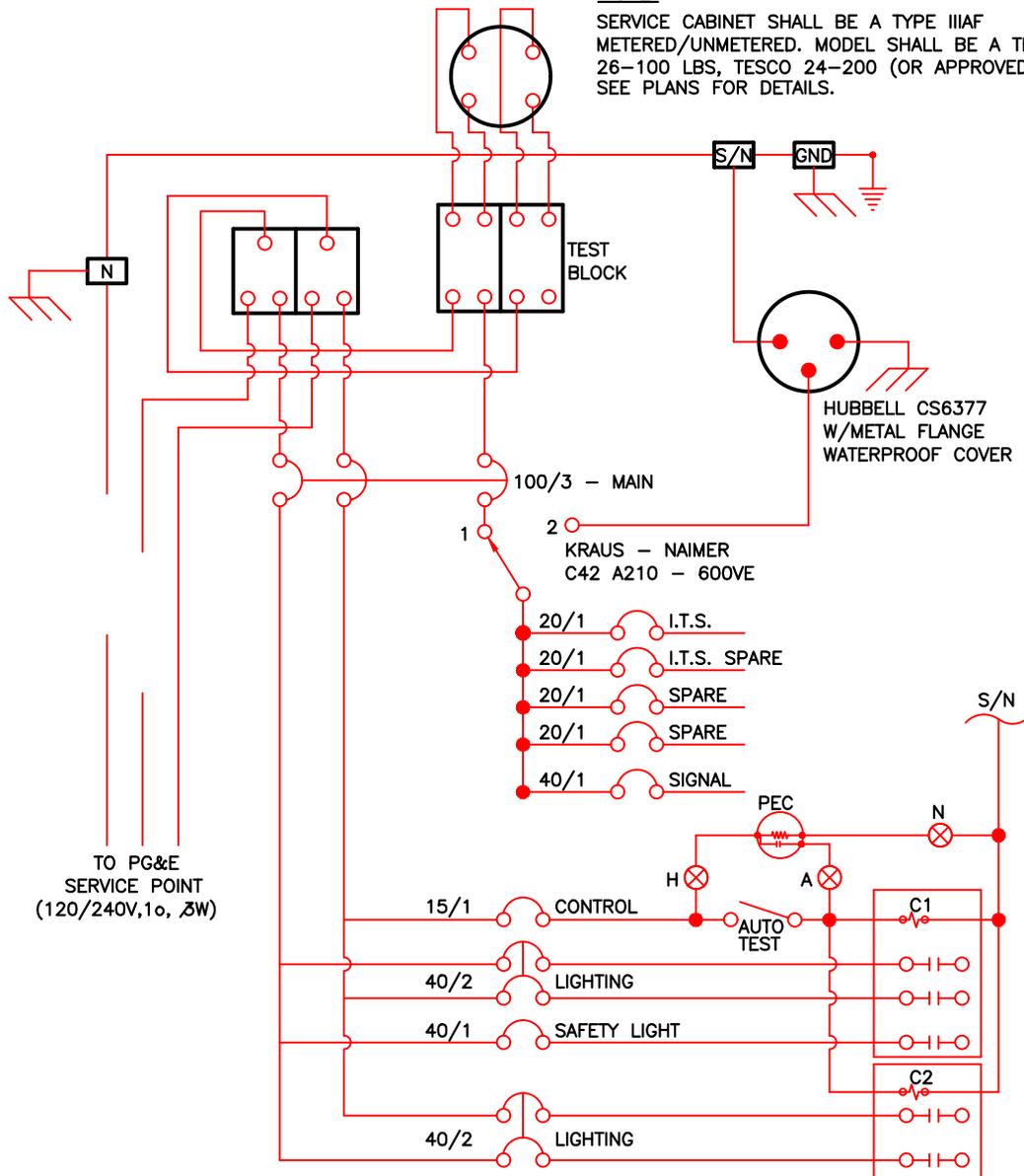
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PEDESTRIAN SIGNAL  
TERMINAL LOCATIONS

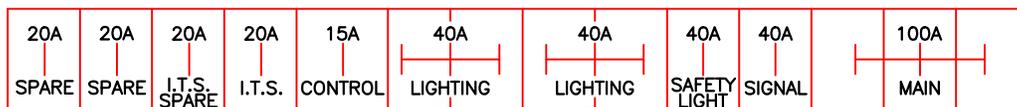
*CITY OF REEDLEY*

**TS-3A**

**NOTE:**  
 SERVICE CABINET SHALL BE A TYPE IIIAF  
 METERED/UNMETERED. MODEL SHALL BE A TESCO  
 26-100 LBS, TESCO 24-200 (OR APPROVED EQUAL).  
 SEE PLANS FOR DETAILS.



SERVICE PEDESTAL SCHEMATIC



SWITCH LOCATION

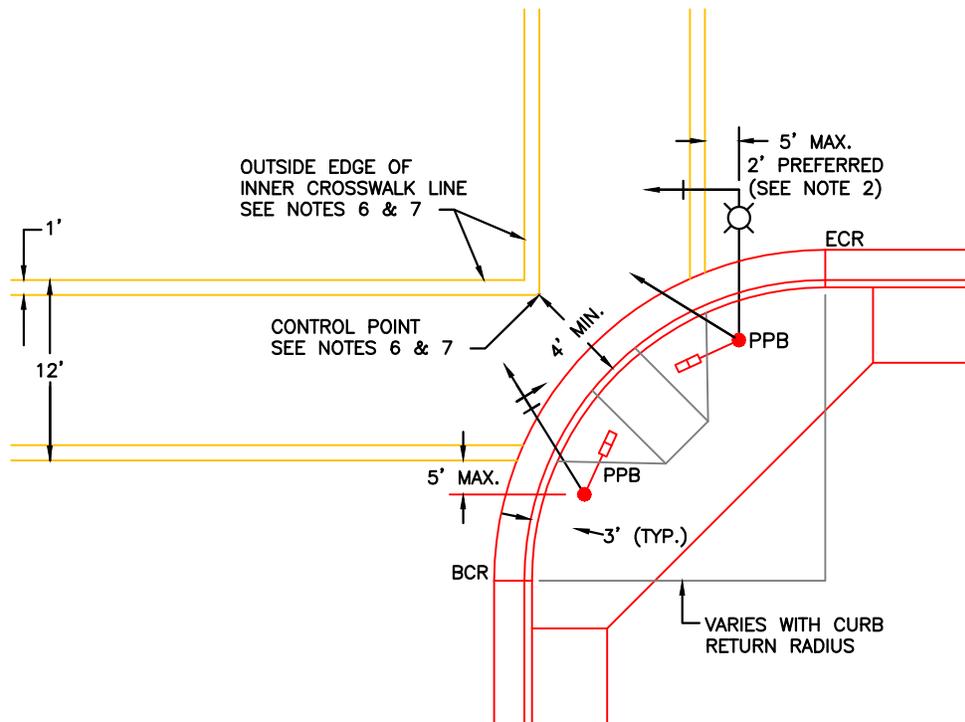


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**SERVICE PEDESTAL SCHEMATIC**

*CITY OF REEDLEY*

**TS-4**



**NOTES:**

1. PEDESTRIAN PUSH BUTTONS ON SEPARATE POSTS WHERE REQUIRED. PPB SHALL BE MOUNTED ON "PEDESTRIAN PUSH BUTTON POST" PER CALTRANS STD. DWG ES-7A. DO NOT USE "COMBINED" POST UNLESS SPECIFIED.
2. SIGNAL STANDARD SHALL BE USED FOR PEDESTRIAN PUSH BUTTONS WITHIN 5 FEET FROM THE CROSSWALK AREA. IF STANDARD IS MORE THAN 5 FEET FROM A CROSSWALK, A PPB SHALL BE INSTALLED AS SHOWN ON PLANS.
3. PEDESTRIAN PUSH BUTTONS SHALL BE PLACED ON CROSSWALK SIDE OF STANDARD OR POST.
4. CROSSWALK AREA OF THE SIDEWALK SHOULD BE KEPT CLEAR OF POLES.
5. WHERE CURB RETURN RADIUS EXCEEDS 10 FEET, SIGNAL FACES SHOULD BE SPLIT OR LOCATED ON SEPARATE STANDARDS SO THAT GOOD VISIBILITY OF RIGHT AND FAR LEFT SIGNALS ARE PROVIDED FOR ALL APPROACHES.
6. MAINTAIN A MINIMUM CLEAR SIDEWALK WIDTH OF 48 INCHES FOR WHEELCHAIRS.
7. CURB RETURNS WITH A RADIUS OF LESS THAN 15 FEET: LINE UP OUTSIDE EDGE OF INNER CROSSWALK LINE WITH FACE OF CURB.
8. CURB RETURNS WITH A RADIUS OF 15 FEET OR MORE: LOCATE CENTER OF CURB RETURN. MEASURE 4 FEET TOWARDS CENTER OF INTERSECTION TO LOCATE CONTROL POINT. LINE UP THE CROSSWALK WITH THE CONTROL POINT AS INDICATED ABOVE.

**LEGEND:**

- VEHICLE SIGNAL HEAD
- +○ VEHICLE SIGNAL HEAD WITH BACKPLATE
- +○ VEHICLE SIGNAL HEAD WITH ARROWS
- VEHICLE SIGNAL HEAD
- LUMINAIRE
- PPB PEDESTRIAN PUSH BUTTON
- PPB ON POST



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**TRAFFIC SIGNAL  
INSTALLATION**

*CITY OF REEDLEY*

**TS-5**



# CITY OF REEDLEY

ENGINEERING DEPARTMENT

## STANDARD SPECIFICATIONS



**October, 2019**

Copies of this book may be purchased for \$10.00 each  
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**CITY OF REEDLEY  
ENGINEERING DEPARTMENT  
1733 NINTH STREET  
REEDLEY, CA 93654**

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# SECTION 1 - DEFINITIONS AND TERMS

## 1.01 GENERAL

Wherever in these City Standard Specifications and other contract documents the abbreviations and terms, or pronouns in place of them, are used, the intent and meaning shall be interpreted as provided in the Division titled GENERAL PROVISIONS of the most current version of the State Standard Specifications of the State of California, Department of Transportation, or as modified in these City Standard Specifications.

## 1.02 ABBREVIATIONS

Shall conform to the Section of most current version of the State Standard Specifications titled ABBREVIATIONS.

## 1.03 DEFINITIONS

Definitions shall conform to the Section of the most current version of the State Standard Specifications titled DEFINITIONS except as modified herein:

- a. Acceptance: The formal acceptance by the City Council of an entire contract, which has been completed in all parts and requirements in accordance with the Plans and Specifications and any modifications thereof, previously approved. The “Notice of Completion” shall mean the document recorded with the Fresno County Recorder indicating formal acceptance of a specified Contract.
- b. Agency: The City of Reedley, Reedley, California
- c. Bid Package: Is equivalent to contract documents which includes all items/forms listed under the bidder’s checklist, and which includes contract plans, special provisions, and Public Improvement Agreement entered into by the contractor.
- d. Bidder: Any individual, firm, partnership, corporation, or combination thereof, submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.
- e. Certified Testing Laboratory: An established laboratory properly certified and approved by the City Engineer to test materials, specimen, or work involved in the contract, and as specified herein.
- f. City-Owner: The City of Reedley, California, as represented by the City Engineer.

- g. City Council: The City Council of the City of Reedley, California.
- h. Completion:
  - i. For purposes of a Notice of Completion and Civil Code sections 3082-3106 and 3179-3214, “completion” means the date of acceptance of the Work as complete by City Council, pursuant to Civil Code section 3086.
  - ii. For purposes of retention release under Public Contract Code Section 7107, “completion” means any of the following:
    - 1. The occupation, beneficial use, and enjoyment of a work improvement, excluding any operation only for testing, startup, or commissioning, by the City, or its agent, accompanied by a cessation of labor or work improvement.
    - 2. The acceptance by the City Council, or its agent, of the work improvement.
    - 3. After commencement of a work improvement, a cessation of labor on the work of improvement for a continuous period of a 100 days or more, due to factors beyond the control of the contractor.
    - 4. After commencement of a work improvement, a cessation of labor on the work of improvement for a continuous period of 30 days or more, if the public agency files for record a notice of cessation or a notice of completion.
  - iii. For all other purposes (including but not limited to assessment of liquidated damages), “completion” means the point where Contractor has fully and correctly performed all Work in all parts and requirements, a Final Inspection has been made, all corrective and punch list Work has been performed, and the Engineer has certified that the Work is ready for acceptance by the City Council. “Completion” does not mean substantial completion or any other form of partial or insufficient performance of the Work.
- i. Department or Department of Transportation (Caltrans): The Engineering Department of the City of Reedley, California.
- j. Encroachment: Any structure or object of any kind or character placed, without the authority of law, either in, under, or over any City right of way. An encroachment can include, but not be limited to, any tower, pole, pole line, pipe, pipeline, driveway, fence, stand, private roadway, billboard, or sign.
- k. Engineer: The Engineer of the City of Reedley, California, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them such as an inspector.
- l. Laboratory: See "Certified Testing Laboratory."
- m. Legal Holidays: Those days designated as City holidays as designated by the City of Reedley City Council in observance of which City office are closed.
- n. California Manual On Uniform Traffic Control Devices (CA-MUTCD): The most current adopted version of the CA-MUTCD for streets and highways, and amendments thereto.

- o. State Standard Plans: Most current version of the State Standard Plans as published by CALTRANS.
- p. City of Reedley Standard Plans: Latest version of standard plans of the City of Reedley approved by the City Council of the City of Reedley, California.
- q. State Standard Specifications: Unless specifically referenced, most current version of the State Standard Specifications as published by CALTRANS. Divisions II through Division XI of State Standard Specifications are hereby incorporated and included in the Standard Specifications of the City of Reedley, California, except as modified by said City of Reedley Standard Specifications and by specific contract special provisions.
- r. State: The City of Reedley, California.
- s. Work: All the obligations and construction specified, indicated, shown, required or contemplated in the Contract and Contract Documents, including all alterations, amendments or extensions thereto made by Contract Change Order or other written orders of the Engineer, and including all punch list, corrective work, as-built or as-constructed drawings, and manuals at the end of construction. The Work shall constitute “work” and “work of improvement” under Civil Code Sections 3082-3016, and a “work of improvement” shall not include work being performed by the Owner (by itself or through other contractors) that is merely related to the Work.
- t. Working Days: Unless otherwise designated, working day as used in these Special Provisions shall mean any day on which the Contractor is not prevented by inclement weather, or conditions resulting therefrom, from proceeding with substantial prosecution of the work, excluding Saturdays, Sundays, legal holidays, and any other day the Contractor is specifically required by the Special Provisions to suspend construction operations.

## SECTION 2 – BID PROPOSAL REQUIREMENTS

### 2.01 GENERAL INFORMATION

The City Council of the City of Reedley, California, will receive at the City Hall, in said City, until the hour and day specified in the "Notice to Bidders", sealed bid proposals, for furnishing material, supplies, equipment and labor for performing the work as specified in contract bid documents.

### 2.02 ENGINEER'S ESTIMATE

The items of work given in the Bid Proposal and in the specifications are given as a basis for comparison of bids and the City does not expressly or by implication agree that the actual amount of work will correspond therewith, and reserves the right to increase or decrease the amount of the work or to omit portions of the work as may be deemed advisable by the Engineer.

### 2.03 UNIT PRICES

Excepting the items for which lump sums are called for, the unit prices inserted in the bid form by the bidder will be considered to be the bid prices for the various work performed. In case of a discrepancy between the unit price bid and the calculated total, the unit price will govern, and the total will be recalculated. In the event of discrepancy between numbers and written prices, the written prices will govern.

### 2.04 QUANTITIES

The estimates of the quantities of work to be performed and materials to be furnished given in the Notice to Contractors, Bid Proposal, and in the Contract Specifications are approximate only, being given as a basis for the comparison of bids. The City does not expressly or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work or to omit portions of the work that may be deemed necessary or expedient by the Engineer. Reference is made to Section 4.11 "Changes" of the City Standard Specifications regarding changes to quantities.

### 2.05 EXAMINATION OF SITE OF WORK, PLANS, SPECIFICATIONS AND CONTRACT FORM

The bidder is required to examine carefully the site of the proposed work, the proposal, plans, specifications and contract forms for the work contemplated, and it will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of the work to be performed and materials to be furnished, and as to the

requirements of the specifications, and the contract. The submission of a bid proposal shall be considered prima facie evidence that the bidder has made such examination.

**Prospective bidders must satisfy themselves, by such means as they prefer, as to local conditions and all other matters which influence their bid for the work. The City Engineer shall not be liable on account of any obstructions of any nature, unforeseen difficulties in construction, or unreliable information from any source.**

## 2.06 FORM OF PROPOSAL

All proposals must be made upon blank forms included in the contract documents. All proposals must give the unit price where indicated, or lump sum where unit prices are not called for, for each of the items, and must be signed by the bidder with his address. If the proposal is made by an individual, his name and post office address must be shown. If made by a partnership, the name and post office address of each member of the firm or partnership must be shown. If made by a corporation, the proposal must show the name of the State under the laws of which the corporation was chartered and the names, titles and business addresses of the president, secretary and treasurer.

All proposals must be submitted under sealed cover and the envelope properly marked "Bid for \_\_\_\_\_ (Insert Project Title) \_\_\_\_\_."

## 2.07 WITHDRAWAL OF PROPOSALS

Any bid may be withdrawn at any time prior to the time fixed in the Notice to Bidders for the opening of bids upon written request for the withdrawal of the bid filed with the City. The request shall be executed by the bidder or his duly authorized representative. The withdrawal of a bid does not prejudice the right of the bidder to file a new bid. A bid will not be received after the time, nor any bid withdrawn after the time fixed in the public notice for the opening of bids until either all bids are rejected, or until the expiration of sixty (60) days set from the date set for the opening of bids, or until the contract has been executed and the required contractor's bonds furnished by the successful bidder or bidders, whichever occurs first.

## 2.08 PROPOSAL GUARANTEE

All proposals must be accompanied by either a cashier's check, certified check or bidder's bond of a corporate surety authorized to do business in the State of California and acceptable to the City in a sum equal to at least ten (10%) percent of the total amount of the bid. Checks or bonds must be made payable to the City of Reedley, such securities to be retained by the City as a guarantee that the Bidder, if his bid is accepted, will enter into a satisfactory contract within ten (10) calendar days, not including Saturdays, Sundays and legal holidays, from the date that the notice of award is mailed to the bidder, and will furnish a good and sufficient bond for the faithful

performance thereof and for the payment of labor and material costs in accordance with the requirements of plans and specifications.

## 2.09 REJECTION PROPOSALS

The City reserves the right to reject any or all proposals.

A bid will be rejected if the total price of all work to be performed by listed subcontractors is 50% or more of the total [base] bid.

Proposals may be rejected if they show any alteration of form, additions not called for, conditional or alternative bids, incomplete bids, erasures, or irregularities of any kind. Proposals in which the prices are obviously unbalanced may be rejected.

## 2.10 DISQUALIFICATION OF BIDDERS

Unless alternate bids are called for, more than one proposal for the same unit or units from an individual, firm, partnership, co-partnership, corporation, or combination thereof under the same or different names will not be considered. If there is reason for believing that collusion exists among the bidders, none of the participants in such collusion will be considered in future proposals.

## 2.11 DESIGNATION OF SUBCONTRACTORS

The Contractor shall comply with the California Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the State Public Contract Code. The Contractor shall file with the bid the name and address of each subcontractor who will perform more than one-half of one percent ( $\frac{1}{2}$  %) of the contract amount.

To determine the value of work subcontracted, where an entire item is subcontracted, the value of work subcontracted will be based on the contract item bid price.

When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the contract item bid price, determined from information submitted by the Contractor, subject to approval by the Engineer.

Only one subcontractor shall be listed for each portion of the work. The portion shall be defined as to its nature and extent. The failure of the Contractor to specify a subcontractor constitutes a statement that the Contractor is qualified and intends to perform said work.

Designation of subcontractors must be made upon forms included with the bid package or to be obtained from the office of the City Engineer at City Hall. The bidder must give the names of all the subcontractors and the form must be signed by the bidder.

The Contractor must have the consent of the City and approval of the City Engineer, in writing, to substitute a subcontractor other than that designated in the original bid, to permit any subcontract to be assigned or transferred, to allow a subcontract to be performed by other than the original subcontractor, and which is more than one-half of one percent ( $\frac{1}{2}$  %) of the contract amount.

Violation of any of the above provisions is a violation of the Contract and cause for ordering any unapproved subcontractor from the work site. The Contractor shall comply with Section 8.01, "SUBCONTRACTORS," of the City Standard Specifications, which contains additional regulations regarding subcontractors. The bidder shall list each subcontractor and the dollar amount of each listed subcontractor's portion of the work to be performed. Any bid will be rejected in which the total price of all work to be performed by listed subcontractors is 50% or more of the total [base] bid.

Attention is directed to Section 8.01 "SUBCONTRACTORS" of the City Standard Specifications for additional requirements.

## 2.12 GUARANTEE OF WORK

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition, and manufacturer of any or all materials to be used in the construction of the work, together with samples, which samples may be subject to the tests provided for in these specifications to determine their quality and fitness for the work.

The bidder may also be required to furnish a written guarantee covering certain items of work for varying periods of time from the date of acceptance of the contract. When such guarantee is required, the form and the time limit of the guarantee will be specified in these Specifications or in the Special Provisions. Said guarantee shall be signed and delivered to the Engineer before acceptance of the contract. The Labor and Materials bond shall not be reduced until the expiration of the time required by Section 3249 of the Civil Code.

## 2.13 CONTRACTOR'S LICENSE

Unless stated otherwise in the "Notice to Bidders," all prospective bidders must possess, or be able to obtain within 30 days after the bid date, a Class "A" Contractor's License issued by the State of California.

## SECTION 3 - AWARD AND EXECUTION OF CONTRACT

### 3.01 MULTIPLE CONSTRUCTION UNITS

If there are two or more units in the construction project and the Notice to Bidders has called for separate proposals for each unit, the City reserves the right to award the contract for one unit or for more than one unit to one bidder, while awarding a contract or contracts to other bidders for other units or combinations of units.

### 3.02 AWARD OF CONTRACT

The award of the contract, if it is awarded, will be to the lowest responsive responsible bidder whose proposal complies with all the requirements described. Such award, if made, will be made within thirty (30) calendar days after the opening of the proposals. If the lowest responsive responsible bidder refuses or fails to execute the contract, the City may award the contract to the second lowest responsive responsible bidder. Such award, if made, will be made within forty-five (45) calendar days after the opening of the proposals. If the second lowest responsive bidder refuses or fails to execute the contract, the Owner may award the contract to the third lowest responsive responsible bidder. Such award, if made, will be made within sixty (60) calendar days after the opening of the proposals. The periods of time specified above, within which the award of contract may be made, shall be subject to extension for such further periods as may be agreed upon in writing between the Owner and Bidder concerned.

All bids will be compared on the basis of the Engineer's estimate of quantities of work to be done.

### 3.03 EXECUTION OF CONTRACT

The contract shall be signed by the successful bidder and returned together with the contract bonds within ten (10) calendar days, not including Saturdays, Sundays, and legal holidays from the date that the notice of award has been mailed. No proposal shall be considered binding upon the City until execution of the contract by all parties, including the City.

Failure to execute a contract and file acceptable bonds as provided herein within ten (10) calendar days, after the bidder has received notice that the contract has been awarded, shall be just cause for the annulment of the award and the forfeiture of the proposal guarantee as liquidated damages.

### 3.04 RETURN OF GUARANTEES

All proposal guarantees will be held until the contract has been awarded, after which the guarantees accompanying proposals no longer considered in making the award will be returned to the bidder whose proposal they accompany. Retained proposal guarantees will be held until the contract has been executed, after which all guarantees, except those forfeited, will be returned.

### 3.05 REQUIRED CONTRACT SECURITIES, INSURANCE CERTIFICATE, BUSINESS LICENSE

The bidder to whom the contract has been awarded will be required to furnish a labor and material bond in an amount equal to one hundred percent (100%) of the contract price, and a faithful performance bond in an amount equal to one hundred percent (100%) of the contract price. Said bonds shall be secured from a “corporate surety”, and are to be submitted to the City Engineer with the executed contract. “Surety” of “Corporate Surety” refers to a corporate surety company included on the State of California, Department of Insurance, Admitted Sureties List, most current edition, and acceptable to the City.

In addition to furnishing the above required sureties, the bidder to whom a contract has been awarded shall furnish and submit with the executed contract an original Insurance Certificate indicating coverage in compliance with Section 7.13 “INSURANCE AND LIABILITY”, of the City Standard Specifications.

The Contractor shall comply with Section 7.10, “PERMITS AND LICENSES” of the City Standard Specifications. The Contractor to whom the contract is awarded, and all Subcontractors listed on the Contractor’s Bid Proposal, or any Subcontractor substituted or added after a contract is awarded and in accordance with these City Standard Specifications, must obtain a City of Reedley Business License and pay all fees associated therewith. Business Licenses are to be obtained from the City of Reedley Finance Department, 1733 Ninth Street, Reedley, CA 93654.

Bidders must contact the Finance Department to determine fee amounts prior to submitting a bid. This requirement applies regardless of the business address or location of the Contractor or any Subcontractor. Evidence showing the Contractor and all subcontractors have obtained a City of Reedley Business License shall be submitted to the Engineer with the executed Contract.

## SECTION 4 - GENERAL SCOPE OF WORK AND RESPONSIBILITIES

### 4.01 WORK TO BE DONE

The work to be performed under this contract consists of furnishing all materials, equipment, supplies, labor and transportation, and performing all work as required by the contract in strict accordance with the specifications, schedules and drawings, all of which are made a part hereof. The work shall be complete, and all work, material and services not expressly called for in the specifications or not shown on the drawings which may be necessary for completion and proper construction to carry out the contract in good faith and leave the site of the work in a neat condition shall be performed, furnished and installed by the contractor at no increase in cost to the City.

### 4.02 INTENT OF PLANS AND SPECIFICATIONS

The intent of the Plans and Specifications is to prescribe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the contract. Where the Plans or Specifications describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used.

The Contractor shall furnish all labor, materials, tools, equipment, and incidentals, and do all the work involved in completing all of the contract requirements in a satisfactory and workmanlike manner. The Plans, Specifications and other Contract documents will govern the work. Anything in the Specifications and not on the Plans, or on the Plans and not in the Specifications, shall be as though shown or mentioned in both.

The Contractor shall keep at the worksite a copy of the Plans and Contract Specifications, to which the Engineer shall have access at all times. While it is believed that much of the information pertaining to physical conditions which may affect the cost of the proposed work will be shown on the Plans or indicated in the Contract Specifications, the City does not warrant the completeness or accuracy of such information.

The Contractor shall ascertain the existence of any such conditions affecting the cost of the work which would have been disclosed by reasonable examination of the site. No test, investigation, statement or estimate of a factual situation not incorporated in the Contract Documents shall be relied on by the Contractor. Any test, investigation, statement, or estimate of fact incorporated in the Contract shall be considered by the Contractor to be a suggestion only and he shall request equal access to the underlying or background informative material or source and shall arrive at his own opinion thereon, including his determination of how reliable might be any conclusion appearing in or inferred from the Contract Documents.

In general, the drawings will indicate dimensions, position and kind of construction, and the written Specifications will indicate qualities and methods. Any work indicated on the Plans and not mentioned in the written Contract Specifications, or vice versa, shall be furnished by the Contractor as though fully set forth in both. Work not particularly detailed, marked or specified, shall be as similar parts that are detailed, marked or specified. All alterations authorized by the Engineer which affect the requirements and information given on the approved plans shall be in writing. No changes shall be made in any plan or drawing after the same has been approved by the Engineer, except by direction of the Engineer.

During the course of the work, if the Contractor discovers any discrepancies between the Plans and the conditions in the field, or any errors or omissions on the Plans or in the Specifications which will significantly affect the work, it shall be the Contractor's duty to inform the Engineer immediately in writing, and the Engineer shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

#### 4.03 COORDINATION, INTERPRETATION, AND PRECEDENCE OF PLANS AND SPECIFICATIONS

The Plans, Specifications, and all supplementary documents are essential parts of the Contract and a requirement occurring in one is as binding as though occurring in all. They are intended to be cooperative, to describe, and to provide for a complete work.

Whenever any conflict appears in any portions of the Contract, it shall be resolved by application of the order of precedence given below, unless the Engineer shall order otherwise.

1. Change Orders and Supplemental Agreements;
2. Agreement;
3. Pre-bid Addenda;
4. Contract Specifications;
5. Contract Construction Plans or Drawings;
6. City Standard Specifications (including General Provisions);
7. City Standard Drawings;
8. Any other referenced and incorporated specifications;
9. Any other referenced and incorporated plans or drawings.

Detailed plans and specifications shall take precedence over general plans and specifications, even within the same level of precedence. Dimensions called out on the Plans shall control and supersede scaled dimensions. No scaled dimension shall be used in the execution of the work, unless no dimension is called out on the Plans and the use of a scaled dimension is authorized by the Engineer.

#### 4.04 INTERPRETATIONS

Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained on the Plans or Specifications, the Contractor shall apply to the Engineer for such further explanations as may be necessary, and shall conform to such explanation or interpretation as part of the Contract, so far as may be consistent with the intent of the original Plans and Specifications. In the event of doubt or question relative to the true meaning of these documents, reference shall be made to the Engineer, whose decision thereon shall be final.

#### 4.05 WORKING DRAWINGS

When working drawings or shop drawings are required by the Plans or Specifications, or requested by the Engineer, they shall be prepared in accordance with modern engineering practice by the Contractor at the Contractor's expense. Shop or working drawings shall be of a size and scale to clearly show all necessary details. Unless otherwise specified, shop or working drawings shall be submitted in quadruplicate to the Engineer for approval or correction at least fifteen (15) calendar days before approved drawings will be required for the work.

If corrections are required, the Contractor shall make corrections as directed by the Engineer and shall deliver four (4) copies of the corrected shop or working drawings to the Engineer. Upon final approval, one set will be returned to the Contractor marked "approved" or "approved as corrected".

For items requiring shop drawings, no materials shall be furnished or work done before approval of the drawings. Approval of shop or working drawings by the Engineer means that there is substantial and acceptable conformance with the Plans and Specifications, but details of design may not necessarily be checked for adequacy or accuracy. An approval shall not relieve the Contractor from the responsibility for errors or omissions in the drawings or from deviations from the Contract documents unless such errors, omissions, or deviations were specifically called to the attention of the Engineer in writing.

The Contractor is responsible for the correctness of the shop or working drawings, for shop fits and field connections, and for the results obtained by use of such plans. In the event of discrepancy between the scaled dimension on any drawing and the figures written thereon, the figures shall be taken as correct, unless otherwise determined by the Engineer.

#### 4.06 CONFORMITY WITH PLANS AND ALLOWABLE DEVIATIONS

Finished surfaces including the completed final surface of earth, concrete, pavement or other material, or the completed top of a layer of subgrade, base or surfacing, in all cases shall conform with the lines, grades, cross sections, and dimensions shown on the Plans. Where tolerances are indicated in the Specifications, the work shall be constructed within the tolerances.

Deviations from the Plans required by the exigencies of construction will be determined in all cases by the Engineer and authorized only in writing.

#### 4.07 EXISTING FACILITIES AND STRUCTURES SHOWN ON PLANS

Where underground and surface facilities or structures are shown on the Plans, the locations, depth and dimensions of such facilities or structures are believed to be reasonably correct, but are not guaranteed. Such facilities or structures are shown for the information of the Contractor, but information so given is not to be construed as a representation that such facilities or structures will, in all cases, be found or encountered just where shown, or that they represent all the structures which may be encountered. The Contractor shall comply with the provisions in Section 8.19, "UTILITY AND NON-STREET FACILITIES; POTHOLING".

#### 4.08 OMISSIONS IN PLANS AND SPECIFICATIONS

Omissions from the Plans or the Specifications of the materials or details of work which are manifestly or obviously necessary to carry out the intent of the Plans and Specifications, or which are customarily furnished or performed, shall not relieve the Contractor of the responsibility for furnishing such omitted materials or performing such omitted work, but shall be furnished or performed as if fully shown or described in the Plans or Specifications. Any materials or work mentioned in the Specifications and not shown on the Plans, or shown on the Plans and not mentioned in the Specifications, shall be of the same effect as if shown or mentioned in all.

#### 4.09 INCORPORATION OF REFERENCED SPECIFICATIONS

Where referenced thereto on the Plans or the Specifications, the work embraced herein shall be done in accordance with the provisions of the "State of California, Department of Transportation Standard Specifications," latest revision, which Specifications are hereinafter referred to as the State Standard Specifications, and the Fresno Metropolitan Flood Control District Standard Specifications, latest revision, hereinafter referred to as the FMFCD Standard Specifications, in accordance with the following provisions.

In case of a conflict between the City's Standard Specifications and any other referenced and/or incorporated set of specifications such as the State or FMFCD Standard Specifications, the City's Standard Specifications take precedence over and shall be used in lieu of such conflicting portions in the other specifications, in accordance with Section 4.03, "COORDINATION, INTERPRETATION, AND PRECEDENCE OF PLANS AND SPECIFICATIONS".

#### 4.10 WORK TO BE DONE

The work to be performed under the Contract consists of furnishing all materials, equipment, supplies, labor and transportation, and performing all Work as required by the Contract in strict accordance with the contract documents in a satisfactory and workmanlike manner. The

Work includes all work, material and services not expressly called for in the Contract Specifications or not shown on the Plans, but which may be necessary for completion and proper construction to carry out the Contract in good faith. The site of Work shall be left in a neat condition. The cost of all Work performed, furnished and installed is to be included in the amount bid for the various items of Work with no separate compensation allowed therefor.

#### 4.11 CHANGES

The City reserves the right to make such alterations, deviations, additions to, or deletions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the Work or to delete any item or portion of the Work (see Section 2.04, "QUANTITIES") as may be deemed by the Engineer to be necessary or advisable, and to require such Extra Work as may be determined by the Engineer to be required for the proper completion or construction of the whole work contemplated.

Changes required by the Engineer will be made in accordance with Section 4-1.05, "Changes and Extra Work," of the State Standard Specifications. For all changes, the City shall reasonably compensate Contractor with money (including overhead and profit) and/or time for any Extra Work ordered by the City to be performed; and the City shall receive a reasonable credit for money (including overhead and profit) and/or time saved by any deletion of work.

#### 4.12 EXTRA WORK

The Contractor shall be compensated for Extra Work. In the event portions of such work are determined by the Engineer to be covered by some of the various items for which there is a bid price or combinations of such items, the remaining portion of such work will be classed as Extra Work. Extra Work also includes work specifically designated as Extra Work in the Plans, Specifications or the Contract Specifications.

Unless otherwise specifically indicated in the Plans or the Specifications, any work or responsibility of the Contractor set forth in the Specifications or on the Plans and not set forth as a separate bid item shall be considered incidental or appurtenant to the work and full compensation for the cost thereof included in the various bid items of work. Such work or responsibility will in no case be considered as Extra Work.

When work is classified as Extra Work by the Engineer, the Contractor shall do such Extra Work and furnish labor, materials, and equipment therefor upon receipt of an approved Contract Change Order or other written order of the Engineer, and in the absence of such approved Contract Change Order or other written order of the Engineer, the Contractor shall not be entitled to payment for such Extra Work. Extra Work, when ordered and accepted, shall be paid for in accordance with the terms of this Section and Section 9.07, "PAYMENT OF EXTRA WORK" of the City Standard Specifications.

## 4.13 NOTICES, CHANGE ORDERS, AND CLAIMS

If the Contractor requests additional compensation, whether money or time, or otherwise believes that it is entitled to a modification of the Contract terms and conditions, then Contractor shall follow the procedures for pursuing such requests specified in the Contract, otherwise Contractor shall have waived its rights to such pursuit and any later attempts to recover such compensation or modification shall be barred.

### *4.13.1 Definition Of "Claim"*

A "Claim" is a separate demand by the Contractor for:

- (a) a time extension,
- (b) payment of money or damages arising from work done by, or on behalf of, the Contractor, payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or
- (c) an amount the payment of which is disputed by the local agency.

However, a "Claim" does not include a proposed change order submitted pursuant to these provisions since a proposed change order is a less formal procedure that is preliminary to a Claim. In addition, a "Claim" does not include vouchers, invoices, progress payment applications, or other routine or authorized forms of requests for progress payments on the Contract. The responsibility to substantiate Claims shall rest with the Contractor.

### *4.13.2 Notice Requirements*

Written notices of potential extra work, potential delay, and/or potential Claims based on Extra Work or delay, shall be submitted to the Engineer by Contractor within seven (7) days of becoming aware of the facts and/or issue creating such potential for Extra Work, delay or Claim, unless such facts and/or issue are, or may soon be, affecting the costs or critical path of the Work, in which case the written notice(s) shall be submitted immediately so the City may take immediate action to mitigate cost and schedule impacts for the Work.

The written notice shall explain the nature of the potential Extra Work, delay or Claim so the Engineer may take such action, if necessary. Failure to timely submit a written notice of potential Extra Work, delay and/or Claim shall act as a waiver by Contractor of any right to later submit a proposed change order or pursue a Claim on that issue. Contractor acknowledges that these written notices are critical to the Owner's management of the project and the mitigation of project costs and scheduling.

#### *4.13.3 Proposed Change Orders*

If Contractor disagrees with an approved change order issued pursuant to Section 4.11, “CHANGES” and Section 4.12 “EXTRA WORK” then Contractor shall submit a written protest pursuant to said Section 4.11 (including but not limited to Section 4-1.05, “Changes and Extra Work,” of the State Standard Specifications). If Contractor otherwise believes that it is entitled to additional compensation for money and/or time (including but not limited to grant of a time extension; payment of money or damages arising from work done by, or on behalf of, the Contractor, payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to; or an amount the payment of which is disputed by the local agency), then Contractor shall submit a proposed change order within twenty (20) days of

- (i) becoming aware of the potential right to additional compensation, or
- (ii) the date by which it should have become aware of the potential right to additional compensation.

Failure to timely submit a proposed change order shall act as a waiver by Contractor of any right to later submit a proposed change order or Claim on that issue. The proposed change order shall indicate the grounds for the additional compensation (money and/or time) requested and the amount of compensation (money and/or time) requested, and Contractor shall include all information supporting the proposed change order.

The City may accept the proposed change order, reject it (in whole or in part), or request additional information. If City does not respond to the proposed change order within thirty (30) days, the proposed change order shall be deemed rejected in whole as of the thirtieth day. If the City requests additional information, then the Contractor shall submit it within fifteen (15) days and the City shall have fifteen (15) days after such submission to accept or reject (in part) the proposed change order. If the City fails to respond within fifteen (15) days after such submission of additional information, then the proposed change order shall be deemed rejected in whole as of the fifteenth day.

Any written protest to an approved change order (see Section 4.11, “CHANGES,” of these Standard Specifications) and any proposed change order (see previous paragraph) shall be certified, pursuant to Section 4.13.5, “Content Of Claim.”

#### *4.13.4 Time For Submittal Of Claim*

Any Claim must be submitted by Contractor within sixty (60) days after (i) written protest to an approved change order under Section 4.11, “CHANGES,” or (ii) City’s rejection of Contractor’s proposed change order under Section 4.13.3, “Proposed Change Orders,” however, notwithstanding the above, any and all Claims must be submitted no later than seven (7) days after the Engineer certifies the Work as complete and ready for acceptance by the City Council.

Failure to timely submit a Claim acts as a complete waiver of Contractor's right to recover money or time on the issues for which a Claim was required. In no event will the Contractor be allowed to reserve its rights to assert a Claim for time extension or additional cost later than as required by this provision unless the Owner agrees in writing to allow such reservation.

Before expiration of the time for submitting a Claim, Contractor may ask once in writing for a fifteen (15) day extension of any deadline for submission of a Claim, and Owner shall grant such extension if reasonable grounds exist. However, no further extensions shall be permitted, and any failure by Contractor to timely ask for an extension waives Contractor's right to an extension.

#### *4.13.5 Content Of Claim*

##### 4.13.5.1 Claim Format

Every Claim shall be in writing. In addition, the Contractor shall certify each and every Claim at the time of submission, as follows:

"I, [name of declarant], declare the following: [Contractor company name] has contracted with [public entity name] for the [name of project] project. I am authorized by my employer ( [contractor company name] ) to prepare the attached claim for compensation (in other words, for money and/or time extensions) to [public entity name] regarding this project (dated \_\_\_\_\_, 20 \_\_, entitled \_\_\_\_\_, and requesting \$ \_\_\_\_\_ and/or \_\_\_\_\_ additional working days), and I prepared said attached claim.

I am the most knowledgeable person at [contractor company name] regarding this claim. I am aware of all law that relates to and governs this claim, including but not limited to California Penal Code section 72, Government Code sections 12650 et seq. (False Claims Act), and Business and Professions Code sections 17200 et seq. (Unfair Business Practices Act).

I am aware that submission or certification of false claims, or other claims that violate law or the contract, may lead to fines, imprisonment, and/or other severe legal consequences for myself and/or [contractor company name].

The attached claim is prepared and submitted in good faith, does not breach the contract between [contractor company name] and [public entity name] for this project, is not a false claim, does not violate any law, satisfies all provisions of the contract, only contains truthful and accurate supporting data, and only requests an amount that accurately reflects the adjustments to money and time for which I honestly and in good faith believe that [public entity name] is responsible under its contract with [contractor company name].

So that I could declare that the statements in this declaration and the attached claim were true and correct, while preparing this declaration and claim I consulted with others

(including attorneys, consultants, or others who work for [contractor company name]) when necessary to assure myself that said statements were true and correct.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_, California. \_\_\_\_\_  
[name of declarant]”

Contractor understands and agrees that any Claim submitted without this certification does not meet the terms of the Contract Documents; that Owner, or Owner's representatives, may reject the Claim on that basis; and that unless Contractor properly and timely files the Claim with the certification, Contractor cannot further pursue the Claim in any forum and all rights to further compensation (money or time) regarding the issues covered by the Claim are waived due to a condition precedent not having been satisfied.

#### 4.13.5.2 Claims For Additional Payment

If the Contractor wishes to make a Claim for additional monetary payment from Owner, the Claim shall include all facts and documents supporting the Claim, including but not limited to (a) the amount being claimed, including calculations, (b) why the claimed cost was incurred, (c) why the claimed cost is the responsibility of the Owner, and (d) why the claimed cost is a reasonable amount.

#### 4.13.5.3 Claims For Additional Time And Cost

##### 4.13.5.3.1 Notice And Extent Of Claim

If the Contractor wishes to make a Claim for an increase in the Contract time, the Claim shall include all facts supporting the Claim, including but not limited to (A) a current schedule and delay analysis explaining (i) the nature of the delay, (ii) the Owner's responsibility for the claimed delay, (iii) the claimed delay's impact on the critical path, and (iv) the claimed delay's impact on completion date (including an analysis of float previously used and still remaining), and (B) all facts and documents supporting any claim for additional compensation related to the increase in Contract time (see 4.13.5.2, "Claims For Additional Payment."

In the case of a continuing delay, only one (1) initial Claim is necessary that is based on estimates of when the continuing delay will end, but within thirty (30) days of the end of the continuing delay an updated final Claim must be submitted.

##### 4.13.5.3.2 Adverse Weather Claims

If unusually severe weather conditions (i.e., those conditions beyond the weather conditions that are within Contractor's scope (see Section 8.09, "TIME OF COMPLETION")) are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were excessive, could

not have been reasonably anticipated, and had an unavoidable adverse effect on the critical path of the scheduled construction.

#### 4.13.5.4 "Pass Through" Claims

If any portion of a Claim is based on a request for additional compensation (money or time) by one of Contractor's subcontractors or suppliers, the Contractor must prepare and submit (as part of its Claim) its own analysis of the subcontractor's request, and the Claim must include a copy of the subcontractor's request along with any other necessary supporting documentation.

In addition to conforming to all requirements of this Section 4.13 regarding claims, the Contractor's analysis of the subcontractor's request must include a detailed explanation by Contractor of why the request by subcontractor or supplier is the City's responsibility, including Contractor's analysis of (a) why the amount of damages is appropriate, (b) how a breach by Contractor caused the subcontractor or supplier to incur these damages, and (c) how the Contractor's breach was caused by a breach by City.

A subcontractor or supplier may not submit a claim directly to the City since it does not have a contract with the City, and a Contractor may not simply forward such a claim to the City.

#### *4.13.6 Procedures For Claims Less Than Or Equal To \$375,000 (Public Contract Code §20104.2)*

##### 4.13.6.1 Claims Less Than \$50,000

For Claims of less than fifty thousand dollars (\$50,000), the City shall respond in writing to any written Claim within 45 days of receipt of the Claim, or may request, in writing, within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the claim the City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the City and Contractor.

The City's written response to the Claim, as further documented, shall be submitted to the Contractor within 15 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

##### 4.13.6.2 Claims Over \$50,000 And Less Than \$375,000

For claims over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the City shall respond in writing to all written Claims within 60 days of receipt of the Claim, or may request, in writing, within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim the City may have against the Contractor. If additional

information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the City and Contractor.

The City's written response to the Claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

#### 4.13.6.3 Meet And Confer

If the Contractor disputes the City's written response, or the City fails to respond within the time prescribed, the Contractor may so notify the City, in writing, either within 15 days of receipt of the City's response or within 15 days of the City's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute.

Upon a demand, the City shall schedule a meet and confer conference within 30 days for settlement of the dispute. The conference may take place during regularly scheduled project meetings.

#### 4.13.6.4 Government Code Claims

Following the meet and confer conference, if the Claim or any portion remains in dispute, the Contractor must file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code (a "Government Code Claim").

The process of filing of a Government Code Claim is specifically required in addition to the contractual claims process in these Standard Specifications; such contractual claims process described above does not act as a substitute for the Government Code Claim process, and the two procedures shall be sequential. Failure to timely file a Government Code Claim shall act as complete waiver by Contractor of the disputed item. The Government Code Claim shall be handled by Contractor and City as required by the Government Code, commencing with Section 900.

For purposes of the applicable Government Code provisions, the running of the period of time within which a Government Code Claim must be filed shall be tolled from the time the Contractor submits his or her written Claim pursuant to this Section 4.12 until the time that such Claim is denied as a result of the meet and confer process in Section 4.13.6.3, including any time utilized by such meet and confer process.

#### *4.13.7 Procedures For Claims Over \$375,000*

Claims over \$375,000 shall be handled by Contractor and City in the same manner as Claims of \$375,000 or less (see Section 4.13.6, "Procedures for Claims Less Than or Equal to \$375,000"), except that City shall (a) respond in writing to all written Claims within 90 days of

receipt of the Claim, or may request, in writing, within 45 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim the Owner may have against the Contractor, and (b) respond within 45 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

#### *4.13.8 Closeout Meet And Confer*

Before the submission of a final payment application, Contractor may request a closeout meet and confer session with the City to discuss any previously submitted Claims that the City did not grant in full. City is under no obligation to meet and confer, but may in its discretion choose to do so. Nothing related to this closeout meet and confer process tolls the running of the period of time for Contractor to present a Government Code Claim pursuant to Sections 4.13.6, "Procedures for Claims Less Than or Equal to \$375,000," and 4.13.7, "Procedures for Claims Over \$375,000."

#### *4.13.9 Continuing Contract Performance*

Despite submission or rejection of a Claim, the Contractor shall proceed diligently with performance of the Contract as directed by City, and the City shall continue to make any undisputed payments in accordance with the Contract.

### 4.14 INTERIM CLEANUP

During the construction of the project, the Contractor shall provide periodic cleanup as the work progresses, such cleanup to be accomplished as soon as practicable and as public necessity and convenience require, as determined by the Engineer. In general, daily interim cleanup will be required.

If the Contractor fails to provide periodic cleanup measures so ordered within a reasonable time period as determined by the Engineer, the shall pay to the City a liquidated damage of a minimum of Two Hundred Fifty Dollars (\$250.00) for each calendar day, or portion thereof, that elapses from the time the penalty is ordered into effect by the Engineer, until periodic cleanup measures ordered by the Engineer are completely carried out and the nuisance eliminated or prevented. Such penalty shall be deducted in accordance with Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS", from any monies owed the Contractor, or levied as a fine in the case of non-public work.

In addition to the liquidated damage as specified above, if conditions warrant, the Engineer may order other forces to provide interim cleanup. The full cost thereof, in addition to the liquidated damage as herein provided, shall be deducted from any monies owed the Contractor or shall be levied as a fine in the case of non-public work. Full compensation for cleanup during

construction shall be included in the prices bid for the various items of work; no separate payment will be made therefor.

#### 4.15 DETOURS

Detours installed or constructed by the Contractor around the work or any portions thereof, whether requested by the Contractor or required by the Plans or the Specifications for use by traffic shall conform to Sections 7.27, "PUBLIC CONVENIENCE", 7.28, "PUBLIC SAFETY", and Section 11.03, "CONSTRUCTION TRAFFIC CONTROL DEVICES".

Unless otherwise specified in the Contract Specifications, payment for installing and removing detours shall be included in the price bid for Traffic Control, or if there is no bid item, included in the various bid items of work. No additional payment will be made therefor.

The Contractor shall be aware that detours which pass through jurisdictions other than the City of Reedley may be subject to special requirements by those jurisdictions. Any costs thereof shall be paid for as above provided.

When traffic is routed through the work, provisions for a passageway through construction operations shall also conform to the foregoing Sections, but will not be considered as detour construction or detour maintenance. This work shall conform to and be paid for as provided in Section 7.27, "PUBLIC CONVENIENCE", unless otherwise specified in the Contract Specifications. In accordance with Section 8.13, "TEMPORARY SUSPENSION OF WORK", the failure or refusal of the Contractor to construct and maintain detours at the proper time or route traffic through the works as required shall be sufficient cause for closing down the work until the detours or rerouting are in satisfactory condition for use by traffic. Any damage caused by the Contractor's operations or by traffic to detours installed solely for the convenience of the Contractor and not required by the Plans, Specifications, or the Engineer, shall be promptly repaired by the Contractor to the satisfaction of the Engineer.

## SECTION 5 - CONTROL OF WORK

### 5.01 AUTHORITY OF THE ENGINEER

The Engineer shall decide all questions which may arise as to the quality or acceptability of materials furnished and work performed and as to the manner of performance and rate or progress of the work, all questions which may arise as to the interpretation of the Plans and Specifications, all questions as to the acceptable fulfillment of the Contract on the part of the Contractor, and all questions as to compensation, including any claims and change orders under Section 4.11, "CHANGES", Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS", and Section 9.07, "PAYMENT OF EXTRA WORK".

The Engineer's decision shall be final and binding upon the Contractor. The Engineer shall also have the authority to enforce and make effective such decisions and orders which the Contractor fails to carry out promptly. In accordance with Section 5.19, "INSPECTION DURING CONSTRUCTION; MEETINGS", the Engineer will delegate authority to representative inspectors to assure compliance with Plans and Specifications.

### 5.02 STANDARDS

The Engineer shall establish such standards as may be necessary for the proper construction of a finished product. In the absence of specific standards, recognized standards of construction or approved practices shall govern the work.

### 5.03 CONTRACTOR'S RESPONSIBILITY FOR THE WORK

Except as specifically provided in these Standard Specifications, until the formal acceptance of the work by the City Council, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from execution or from the nonexecution of the work.

The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by acts of the Federal Government or the public enemy.

The City shall not be held responsible for the care or protection of any material or parts of the work prior to final acceptance, except as expressly provided in the Specifications. The Contractor shall comply with the requirements of Sections 5.09, "PRESERVATION OF PROPERTY", and 7.26, "INJURY OR DAMAGE TO PERSONS OR PROPERTY".

#### 5.04 CONTRACTORS EQUIPMENT

The Contractor shall provide adequate and suitable equipment and means of construction to meet all the requirements of the work. When ordered to do so by the Engineer, the Contractor shall remove unsuitable equipment from the work and discontinue the operation of unsatisfactory equipment. The use of any equipment which is obsolete as to type, in bad condition, or worn out will not be permitted on the work.

#### 5.05 SUITABLE METHODS

The Contractor shall use such methods for the performance of the work embraced under these Specifications as will secure a satisfactory quality of work and rate of progress. Such methods shall meet the approval of the Engineer, and shall be submitted for approval before being used on the work. The Engineer reserves the right, during the progress of the work, to make suggestions and revisions in the methods in order that a high quality of work and satisfactory rate of progress may be obtained. When ordered by the Engineer, the Contractor shall discontinue unsuitable methods of work.

#### 5.06 ORDER OF WORK

Where required by the Plans or Specifications, the Contractor shall follow the sequence of operations as set forth therein.

Full compensation for conforming to those requirements will be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

#### 5.07 SUPERINTENDENCE AND PERSONNEL

The Contractor shall designate in writing before starting work, an authorized representative who shall have the authority to represent and act for the Contractor, to receive suggestions or direction from the Engineer or Inspector and to see them faithfully executed. The Contractor shall provide the name, address, and phone number of each such superintendent or foreman so designated.

When the Contractor is comprised of 2 or more persons, firms, partnerships or corporations functioning on a joint venture basis, the Contractor shall designate in writing before starting work, the name of one authorized representative who shall have the authority to represent and act for the Contractor. The authorized representative shall be present at the site of the work at all times while work is actually in progress on the contract.

When work is not in progress and during periods when work is suspended, arrangements acceptable to the Engineer shall be made for any emergency work which may be required.

Whenever the Contractor or the Contractor's authorized representative is not present on any particular part of the work where it may be desired to give direction, orders will be given by the Engineer which shall be received and obeyed by the superintendent or foreman who may have charge of the particular work in reference to which the orders are given.

Any order given by the Engineer, not otherwise required by the Specifications to be in writing, will on request of the Contractor, be given or confirmed by the Engineer in writing. If any subcontractor, workman, or person employed by the Contractor shall fail or refuse to carry out the directions of the Engineer, or shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, that person shall be removed from the work immediately upon notice by the Engineer and may not be employed again on the work.

All work shall be under general observation and inspection of the Engineer or the Inspector and any work done without the sanction or presence of the Engineer or Inspector will be subject to rejection.

#### 5.08 EMERGENCY AVAILABILITY

The Contractor shall furnish to the Engineer, at the preconstruction conference described in Section 8.03, "PRECONSTRUCTION CONFERENCE," a list of persons, together with their addresses and 24-hour telephone numbers, who are authorized to act on behalf of the Contractor in an emergency arising out of conditions at the work site after normal working hours. The Contractor shall conform to the requirements in Section 7.28, "PUBLIC SAFETY".

#### 5.09 PRESERVATION OF PROPERTY

In accordance with Sections 5.03, "CONTRACTOR'S RESPONSIBILITY FOR THE WORK", and 7.26, "INJURY OR DAMAGE TO PERSONS OR PROPERTY", the Contractor shall be liable for any and all damage done to any public or private property, structure, facility or improvement due to his operations.

Due care shall be exercised to avoid injury to existing street improvements or facilities, roadside trees and landscaping that are not to be removed, pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, all street facilities, and any other improvements or facilities within or adjacent to the work area, or on private property adjacent to the work area, and all such facilities shall be protected from injury or damage. The Contractor shall provide and install suitable, approved safeguards to protect property or improvements from injury or damage.

If property or improvements are injured or damaged by reason of the Contractor's operations, they shall be replaced or restored to a condition as good as when the Contractor entered upon the work or as good as required by the specifications being performed under this Contract. In certain cases, where the Contractor damages an existing facility such as a curb return and or

landing, the Engineer may require the Contractor at his expense to reconstruct the return to meet current Americans With Disabilities Act (ADA) requirements and standards. The Engineer may make or cause to be made such temporary repairs as are necessary to restore to service any damaged facility. The cost of such repairs shall be borne by the Contractor and may be deducted by the City from any monies due or to become due to the Contractor under the Contract.

#### 5.10 PROTECTION OF THE WORK

The Contractor shall provide and maintain proper barricades, fences, signal lights or watchmen to properly protect the work, persons, animals, and property against injury. The cost of such protection shall be included in the amount bid for the various items of work. In accordance with Section 7.28, "PUBLIC SAFETY", the Engineer reserves the right to remedy any situation, condition, or neglect on the part of the Contractor as regards the protection of the work, the public, or property and to deduct the cost of such remedy from money due the Contractor, or levy as a fine in the case of non-public work.

#### 5.11 RIGHTS OF WAY

The City will provide the right of way for the work to be constructed as shown on the Plans. The Contractor shall procure at no cost to the City all temporary construction easements not shown in the Plans, which the contractor may deem necessary to carry out the work to be done under the Contract. The Contractor shall bring said temporary construction easements to a condition at least equal to that existing prior to their use, to the satisfaction of the Engineer.

The Contractor shall not occupy property outside the right-of-way shown on the Plans, except by written agreement with the owner of said property, a copy of which shall be provided to the Engineer. Nothing in these Standard Specifications shall be construed as allowing the Contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the limits of the Contract for any purpose whatsoever, either with or without compensation, in conflict with any agreement between the owner, former owner, or tenant of such land, structure or building.

#### 5.12 DISPOSAL OF MATERIAL OUTSIDE THE RIGHT OF WAY

The Contractor shall make arrangements for the legal disposal of non-hazardous materials outside the right of way and shall pay all costs involved. Disposal of hazardous material shall be handled in accordance with Section 7.17, "SAFETY PROVISIONS". No recyclable material shall be disposed of at any landfill. All disposable recyclable materials shall be disposed in a manner that facilitates recycling. A certificate of compliance stating disposal location and manner of disposal of recyclable materials shall be submitted to the Engineer.

When any material is to be disposed of outside the right of way, the Contractor shall first obtain a written permit from the property owner on whose property the disposal is to be made and

shall file with the Engineer said permit or a certified copy thereof. When material is disposed of as above provided, the Contractor shall conform to all requirements of the City Municipal Code pertaining to grading, hauling and filling of earth, including any permits or bonds so required.

The contractor shall clean up and dispose of all excess materials and other debris in any right of way or ground occupied by him and shall restore utilities and improvements on public or private property that has been used or damaged by his operations.

Full compensation for all costs involved in disposing of materials as specified in this Section 5.12, including all costs of hauling and any landfill or other fees, shall be considered as included in the price paid for the Contract items of work involving such materials and no additional compensation will be allowed therefor. No additional payment will be granted the Contractor for inconvenience or delays encountered in complying with the requirements of this Section 5.12.

### 5.13 ELECTRIC AND WATER SERVICE

The Contractor shall provide and pay for electric service for power and lighting required for the construction of the work of the Contract and shall maintain such service until the completion of the Contract. The Contractor shall make arrangements for and shall acquire a water supply for the work done under the Contract. The Contractor shall pay for all water so used. Water to be used in work contracted to the City may be taken from the City's water system, at a location approved by the City. If taken from the City's water system, the Contractor shall obtain a water meter from the Public Works Department, and pay any deposits or fees required therefor, including charges for water used. Failure to return the meter at specified intervals for reading, and/or late return of the meter when the work is completed, will result in additional fees.

A backflow prevention device may be required by the City and shall be furnished and installed by the Contractor prior to any water being taken from the City's system. Water taken from a source other than the City system shall be approved by the Engineer in advance. Such water shall be chemically and biologically suitable for the intended use. In conformance with Section 31 "LANDSCAPE AND LANDSCAPE IRRIGATION", the water supply for landscape planting and irrigation systems shall be provided by the Contractor in accordance with the Plans and Specifications.

A permanent water meter will be furnished by the City for each irrigation system connection to the City water system unless otherwise specified. The Contractor will be charged for all water consumed through these connections, in addition to water consumed through the hydrant meter, including water consumed for testing purposes and for landscape irrigation through the 90-day maintenance period and up to final acceptance of the work by the Engineer. All costs for furnishing electric service and water, including water consumed for landscape irrigation and irrigation system testing, shall be included in the various related bid items of work; no additional payment will be made therefor.

## 5.14 CONSTRUCTION SURVEYING/STAKING

Unless otherwise specified in the Contract Specifications, construction surveying and staking shall be provided by the Contractor. Surveying and staking shall be conducted only by a person licensed by the State of California to practice Land Surveying. Surveying shall conform to the quality and practice required by the Engineer. The Engineer shall be notified before surveying and/or construction staking commences. The contractor shall furnish cut-sheets prepared by the surveyor to the Engineer immediately upon the setting of the grades. The Contractor shall preserve construction survey stakes and marks for the duration of their usefulness. The Contractor shall be responsible for the replacement cost of any lost or disturbed construction staking necessary to complete the work.

Any deviation of constructed facilities from the grades shown on the Plans and staked in the field shall be the responsibility of the Contractor. Grades for underground conduits will be set at the surface of the ground and the Contractor shall be responsible for transferring such grades to the bottom of the trench.

The Contractor shall preserve property line and corner survey markers, except where their destruction is unavoidable when the Contractor is proceeding in accordance with accepted practice. Markers that are lost or disturbed by his operations shall be replaced at the Contractor's expense by a person appropriately licensed by the State of California for Land Surveying. The costs for furnishing Construction Surveying and Staking by the Contractor shall be included in the amount bid for the various items of work; no separate payment will be made therefor.

**Permanent Survey Markers:** The contractor shall not disturb permanent survey monuments or benchmarks without the consent of the Engineer and shall bear the expense of replacing any that may be disturbed without permission. Any such monument disturbed without permission shall be replaced at the expense of the contractor by a person appropriately licensed by the State of California for Land Surveying. When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the contractor shall adjust the monument cover to the new grade unless otherwise specified.

**Lot Stakes:** The contractor shall preserve property line and corner survey markers except where their destruction is unavoidable, and the contractor is proceeding in accordance with accepted practice. Markers that otherwise are lost or disturbed by his operations shall be replaced at the contractor's expense by a Registered Civil Engineer or Licensed Land Surveyor.

**Survey Service:** The extent that survey stakes will be provided shall be as set forth in the Special Provisions. The contractor shall be responsible for preserving construction survey stakes and marks for the duration of their usefulness. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be by the Engineer at the expense of the contractor.

The contractor shall notify the Engineer at least two (2) working days before he will require survey services in connection with laying out of any portion of the work. The contractor shall, upon request from the Engineer, clear the construction area prior to the setting of any stakes at no additional cost to the City.

**Private Engineer:** Surveying by private engineers for work under control of the City shall conform to the quality and practice required by the Engineer. The Engineer shall be notified before the stakes are set. Private engineers are required to furnish cut sheets to the Engineer immediately upon setting of the grades. On work where staking is done by other than the Engineer, the Engineer will check any staking that is in question. The Engineer shall be the authority to reset grades if a discrepancy exists or order the work corrected by the Engineer responsible for the staking work. No other work shall continue until the stakes ordered to be corrected have been reset to their proper alignment or grade or both.

**Line and Grade:** All work upon completion shall conform to the lines, elevations, and grades shown on the plans. The Contractor shall immediately inform the Engineer in writing of any discrepancies discovered during the course of the work between the Plans and the construction staking, and the Engineer shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

Three consecutive points set on the same slope shall be used together so that any variation from a straight grade can be detected. Any such variation shall be reported to the Engineer. In the absence of such report, the contractor shall be responsible for any error in the grade of the finished work. Any deviation of constructed facilities from the grades shown on the Plans and staked in the field shall be the responsibility of the Contractor.

Grades for underground conduits will be set at the surface of the ground. The contractor shall transfer them to the bottom of the trench.

## 5.15 COOPERATION

The Contractor shall cooperate in all respects with all public and private agencies, including the Alta Irrigation District, Cable TV and Telephone Companies, Pacific Gas and Electric Company, the Reedley City Water, Sewer, Parks, Solid Waste, Streets and Traffic Divisions and the respective Fire and Police Departments.

The Contractor shall comply with the provisions in Section 8.19, "UTILITY AND NON-STREET FACILITIES; POTHOLING". Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to those limits, the Contractor shall cooperate with all the other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

When 2 or more contractors are employed on related or adjacent work, or obtain materials from the same material source, each shall conduct their operations in such a manner as not to cause any unnecessary delay or hindrance to the other. Each contractor shall be responsible to the other for all damage to work, to persons or property caused to the other by their operations, and for loss caused the other due to unnecessary delays or failure to finish the work within the time specified for completion.

#### 5.16 TRAFFIC CONTROL

All traffic and detour patterns shall be as indicated in the Special Provisions or as specified in the permit issued for the work by the city. Any deviations proposed by the contractor shall have the approval of the Engineer.

The contractor shall comply with all of the requirements of the latest publication of the "California Manual on Uniform Traffic and Control Devices for Streets and Highways."

Compliance with the requirements of said manual shall be considered as a minimum requirement and it shall be the responsibility of the contractor to provide additional safety devices when necessary to maintain a safe condition.

It shall be totally the responsibility of the contractor to provide and maintain adequate traffic safety devices and warning signs. If the Engineer or the Inspector of the City notes some deficiency in said devices, the situation shall be corrected immediately by the contractor.

All traffic signs used during the project shall conform in size, shape and color to the latest publication of the "California Manual on Uniform Traffic Control Devices for Streets and Highways".

Full compensation for all costs involved in maintaining traffic control in the vicinity of the work in accordance with the requirements specified shall be included in the lump sum price bid for traffic control. If no bid item is provided for traffic control, the cost therefore shall be included in the various bid items of work.

#### 5.17 MAINTAINING DRAINAGE

The Contractor shall provide and maintain drainage to the area of work. Temporary provisions for drainage of any area during construction where existing drainage facilities have been damaged or altered or where normal drainage patterns of adjacent areas will be interrupted by the Contractor during his operations, shall be made by the Contractor and as directed by the Engineer. The Contractor shall be responsible for all damages to public or private property upstream or downstream of the work incurred due to failure to provide adequate drainage within and through the construction area or due to blockage of existing drainage facilities or pathways at

or upstream from the area of work, or for re-routing flows to areas not historically receiving such drainage.

In the performance of Maintaining Drainage, the Contractor shall comply in all respects with Section 7.21 “STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS”. The costs for Maintaining Drainage by the Contractor shall be included in the amount bid for the various items of work; no separate payment will be made therefor.

#### 5.18 EXISTING STRUCTURES AND UTILITY FACILITIES SHOWN ON THE PLANS

- a. **Location:** Where underground and surface structures of utilities are shown on the plans, the locations, depth and dimensions of such structures or utilities are believed to be reasonably correct, but are not guaranteed. Such structures or utilities are shown for the information of the contractor, but information so given is not to be construed as a representation that such structures or utilities will, in all cases, be found or encountered just where shown, or that they represent all the structures or utilities which may be encountered.

The contractor shall be responsible for precisely locating and preserving said underground or surface structures and utility lines and shall, prior to placing or constructing the proposed facilities, expose and/or verify the locations of said utilities and structures. If the contractor discovers utilities or structures not identified on the plans, he shall immediately notify the Engineer and the utility or structure owner in writing.

At least two (2) working days before entering on the work, the contractor shall request all utility owners having a possible interest in the work area to mark or otherwise indicate the location of their substructure. It shall be the contractor's responsibility to determine the true location and depth of all utilities and service connections. He shall also familiarize himself with the type, material age and condition of any utility which may be affected by the work.

The cost of verifying the locations of said utility facilities indicated on the plans, including exposing them prior to construction, shall be considered as being included in the various bid items of work and no separate payment will be made therefore.

- b. **Relocation:** Whenever it is shown on the plans or Special Provisions that water, sewer, gas or other facilities or structures are to be relocated, such work shall be done by the contractor in cooperation with the owners of such utilities; provided that the owner may direct that the relocation be done by the owner's forces. In such a case, the contractor shall cooperate fully in completing the relocation.

Unless otherwise specified, the cost for relocation of the utilities shall be included in the various bid items of work, and no additional payment shall be made therefore.

Should the contractor desire to have any relocation made of any utility facility, or other improvement, for his convenience in order to facilitate his construction operations, which relocation is in addition to or different from the relocations indicated on the plans or in the Special Provisions, he shall make whatever arrangements are necessary with the owners of such utility for such relocation and bear all expenses in connection therewith.

- c. **Care of Existing Structures and Utilities:** The contractor shall be liable for all damage done to any structure or utility arising through his negligence and carelessness. He shall take care of and maintain all sewers, drains and culverts encountered in the performance of said work, together with the house services. The contractor shall take care of all pipes for water, sewer, gas and all wire conduits as well as the underground structures crossing said work, whether shown on the plans or not.

The contractor shall repair in accordance with the requirements of the owner of the utility or structure, all damage done to any structure or utility through his acts or neglect and shall keep them in repair during the life of his contract. He shall, in all cases, leave them in as good condition as they were previous to the commencement of the work.

Care shall be taken not to move, without the consent of the Engineer, any sewers, drains, culverts, water, gas or other pipes, poles or other structures; and in crossing or running parallel with such structures, they shall be securely hung, braced and supported in place until the work is completed.

The full cost of protection, repair, or replacement of utilities shall be included in the various bid items or work and no additional compensation will be paid therefore.

- d. **Utility Facilities Not Shown on the Plans; Mains and Trunklines:** The contractor will be compensated for the cost of locating, repairing damage not due to his failure to exercise reasonable care, and for removing or relocating main or trunkline utility facilities not indicated in the plans and specifications with reasonable accuracy. Said compensation will be paid for as "extra work," in accordance with Section 4.12 and 9.07 of these City Standard Specifications. Compensation shall include the cost of equipment on the project necessarily idled during such work.

In lieu of relocating an underground utility not shown on the plans, as indicated above, the Engineer may direct that the proposed underground facility be shifted in

location or elevation. In such a case, the additional work resulting therefrom shall be classed as extra work and the increase in compensation will be paid for as specified above, except for shifts in depth or alignment less than one (1) foot, in which case no additional compensation will be paid.

- e. **Limitation of Liability; City:** Except for the assumption of liability as may be required by statute and such liabilities assumed in accordance with Section 5.18 (d) of these Specifications, the City assumes no responsibility or liability in respect to the sufficiency or accuracy of the information or investigation of the location of structures or utility facilities made by it, or in respect to the actual or apparent location of all known structures or utility facilities as indicated on the plans, or in respect to unlooked for developments which may occur as to the location of such structures or utility facilities which may be encountered at places different from that indicated.

### 5.19 INSPECTION DURING CONSTRUCTION; MEETINGS

As provided in Section 5.01, "AUTHORITY OF THE ENGINEER", the Engineer will delegate authority to a representative Inspector who shall at all times have access to the work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge relative to the progress, workmanship, and character of materials used and employed in the work.

The Contractor shall provide facilities necessary to ensure the safety of the Engineer, City inspectors, and the personnel of authorized testing firms as appropriate. The City and its agents, employees, inspectors and testing firms may videotape, audiotape, or photograph any aspect of the Work or Contractor's activities as part of their documentation of the project and certain issues.

Whenever the Contractor varies the day, or period of the day, during which work is performed, he shall give due notice to the Engineer or Inspector so that proper inspection may be provided. Any work done in the absence of the Engineer or Inspector is subject to rejection. For non-public work conducted under a City Permit, reference is made to the City of Reedley Municipal Code regarding inspection fees and re-inspection fees. Such fees shall be applied in accordance with the fee schedule in effect at the time of permit issuance.

The inspection, approval and/or acceptance of the work shall not relieve the Contractor of any obligations to fulfill the Contract as prescribed. Defective work shall be made good and unsuitable materials may be rejected, notwithstanding the fact that such defective work and unsuitable materials may have been previously overlooked by the Engineer or Inspector and accepted, or estimated for payment.

Projects financed in whole or in part with funds from sources other than the City shall be subject to inspection at all times by the agency providing said funds or its authorized agent.

When specified in the Contract Specifications, the Contractor shall meet no less than weekly with the City to review all construction issues. The City shall prepare minutes for each meeting and forward them to Contractor; Contractor's failure to correct the minutes within four (4) days shall be deemed agreement with the content of the minutes. Either party has the right to audiotape or videotape the weekly meeting.

## 5.20 DIFFERING SITE CONDITIONS

During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering those conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification from the Contractor, the Engineer will investigate the conditions, and if the Engineer determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly.

The Engineer will notify the Contractor of the Engineer's determination whether or not an adjustment of the contract is warranted. No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice. No contract adjustment will be allowed under the provisions specified in this section for any effects caused on unchanged work. Any contract adjustment warranted due to differing site conditions will be made in conformance with the provisions in Section 4.11, "CHANGES", and Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS".

## 5.21 REMOVAL OF DEFECTIVE OR UNAUTHORIZED WORK

All work which is defective in its construction or deficient in any of the requirements of the contract documents shall be remedied or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed for such correction. Any work done beyond the lines and grades shown on the Plans or established by the Engineer or any extra work done without written authority will be considered as unauthorized and will not be paid for.

## 5.22 SURFACE RESTORATION

The Contractor shall replace all graded surface material adjacent and/or appurtenant to the work removed, disturbed, or damaged by the Contractor's operations, and shall restore paving, curbing, sidewalks, gutters, landscaping, fences, lawn and other surfaces disturbed, to a condition

equal to that before the work began or as indicated in the Contract Specifications or Plans, and shall furnish all labor and material incidental thereto. Where bid items are not provided for each type of restoration, full compensation therefor shall be included in the amount bid for the various items of Contract work. The Contractor shall comply with the provisions Section 25, "RESTORATION OF SURFACES".

### 5.23 FINAL CLEANUP

When construction is completed, and prior to application for acceptance of the work, the Contractor shall clean all work areas and all grounds occupied by him in connection with the work of all debris, excess materials, temporary structures and equipment. All portions of the work shall be left in a neat, presentable condition. The roadways in which construction operations have been accomplished, as well as all haul roads upon which spillage has occurred, shall be swept clean, as directed by the Engineer. Roads adjacent to construction activity which have received dirt or debris tracked from the construction area shall also be swept and cleaned. Upon completion of Final Cleanup, the Contractor shall notify the Engineer in writing that the work is complete in all parts and requirements and ready for final inspection as provided in Section 5.24, "FINAL INSPECTION". If the Contractor fails to provide Final Cleanup to the satisfaction of the Engineer, a final inspection will not be performed by the Engineer until such cleanup is provided. If the contract time is exceeded due to the Contractor's failure to provide, or is late in providing, the required final cleanup, the provisions of Section 8.16, "TIME OF COMPLETION AND LIQUIDATED DAMAGES", will be applied. All costs for providing Final Cleanup shall be included in the various bid items of work; no additional payment will be made therefor.

### 5.24 FINAL INSPECTION

Whenever the Work provided and contemplated by the Contract has been completed in all parts and requirements and the final cleanup performed in accordance with Section 5.23, "FINAL CLEANUP", the Contractor shall request in writing a final inspection be made by the Engineer. The written request shall include a statement that the Work has been completed in all parts and requirements of the Contract. For projects involving landscaping and irrigation systems, the 90-day maintenance period provisions of Section 31, "LANDSCAPE AND LANDSCAPE IRRIGATION", apply.

The Engineer will determine the adequacy of the final cleanup, and if found not to be in compliance with said Section 5.23, will not make the final inspection and instead direct the Contractor to perform additional cleanup as required until compliance is reached. Upon making a determination that the final cleanup is in compliance with said Section 5.23, the Engineer will conduct a final inspection. Representatives from various City Departments as well as other agencies who will own, operate, and maintain the improvements constructed by the Contractor will participate in the final inspection.

The inspection will be completed within a maximum of ten (10) working days. The time required by the Engineer and others to conduct the final inspection will not be counted against the allotted time for completion of the contract. Upon completion of the final inspection, a list of items needing correction to comply with the contract documents, if any, will be provided by the Engineer to the contractor. The time required to make such corrections will be charged against the allotted time for completion of the Contract. Failure to complete the work in all parts and requirements of the contract including providing Final Cleanup in a timely manner to allow sufficient time to accomplish corrective work, any of which results in an overrun in contract time, the provisions of Section 8.16, "TIME OF COMPLETION AND LIQUIDATED DAMAGES", will be applied.

### 5.25 GUARANTEE OF WORKMANSHIP

In conformance with Section 7.30, "GUARANTEE", the Contractor shall guarantee all materials, equipment and workmanship of the installation and Work for a period of one year from the date of Acceptance of the Work by the City Council. Additional longer guarantees may be required by the Contract Specifications.

Should any material or appliance or any work develop any defect or weakness due, in the opinion of the Engineer, to the use of imperfect materials, equipment or workmanship, or failure to follow the Contract, including the Plans and Specifications, the Contractor shall be notified within the time period of the Guarantee, and shall immediately perform, at Contractor's expense, the necessary repairs or replacements to make the defective item or items suitable and satisfactory.

Expiration of the Guarantee time period shall not void an obligation of the Contractor which is based on a timely notice by the City. Should exigencies necessitate the repairs before the Contractor could be notified, or should the Contractor refuse to make the repairs or replacements within a reasonable period of time, the Engineer shall have the right to make the necessary repairs or replacements at the expense of the Contractor, preserving as far as possible all available evidence of the cause of failure.

This guarantee provision applies to all work performed in City right of way or property, whether by contract with the City or work performed under Encroachment Permit by or for utility or communications companies or other private entities. For work done under Encroachment Permit, failure to correct or pay for defective workmanship or materials may result in denial of future permits to perform work in City rights of way or property. All costs for providing all required Guarantees of Workmanship shall be included in the various bid items; no additional payment will be made therefor.

### 5.26 COST REDUCTION INCENTIVE

The Contractor may submit to the Engineer, in writing, proposals for modifying the Plans, Specifications, or other requirements of the contract for the sole purpose of reducing the total cost

of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, or design and safety standards.

Cost reduction proposals shall contain the following information:

1. A description of both the existing Contract requirements for performing the work and the proposed changes.
2. An itemization of the contract requirements that must be changed if the proposal is adopted.
3. A detailed estimate of the cost of performing the work under the existing contract and under the proposed change. The estimates of cost shall be determined in the same manner as if the work were to be paid for on a force account basis as provided in Section 9-1.04, "Force Account", of the State Standard Specifications.
4. A statement of the time within which the Engineer must make a decision thereon.
5. The contract items of work affected by the proposed changes, including any quantity variation attributable thereto.

The provisions of this Section 5.26 shall not be construed to require the Engineer to consider any cost reduction proposal which may be submitted hereunder; proposed changes in basic design of a bridge or of a pavement type will not be considered as an acceptable cost reduction proposal; and the City will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted pursuant to this section nor for any delays to the work attributable to any cost reduction proposal.

If a cost reduction proposal is similar to a change in the Plans or Specifications under consideration by the City for the project at the time the proposal is submitted, or if the proposal is based upon or similar to these Standard Specifications, the Contract Specifications or Standard Drawings adopted by the City after the advertisement for the contract, the Engineer will not accept the proposal, and the City reserves the right to make the changes without compensation to the Contractor under the provisions of this section.

The Contractor shall continue to perform the work in accordance with the requirements of the contract until an executed change order, incorporating the cost reduction proposal has been issued. If an executed change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision thereon should be made, or such other date as the Contractor may subsequently have specified in writing, the cost reduction proposal shall be deemed rejected. The Engineer shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings in construction costs from the adoption of all or any part of the proposal. In determining the estimated net savings, the right is reserved to disregard the contract bid prices if in the judgment of the Engineer, those prices do not represent a fair measure of the value of work to be performed or to be deleted.

The City reserves the right where it deems such action appropriate, to require the Contractor to share in the City's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering the proposal. Where this condition is imposed, the Contractor shall indicate acceptance thereof in writing, and that acceptance shall constitute full authority for the City to deduct amounts payable to the City from any moneys due or that may become due to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part the acceptance will be by a contract change order, which shall specifically state that it is executed pursuant to this Section 5.26. The change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or that part of it as has been accepted to be put into effect, and shall include any conditions upon which the City's approval thereof is based if the approval of the City is conditional. The change order shall also set forth the estimated net savings in construction costs attributable to the cost reduction proposal effectuated by the change order, and shall further provide that the Contractor be paid 50 percent of that estimated net savings amount.

The Contractor's cost of preparing the cost reduction incentive proposal and the City's costs of investigating a cost reduction incentive proposal, including any portion thereof paid by the Contractor, shall be excluded from consideration in determining the estimated net savings in construction costs. Acceptance of the cost reduction proposal and performance of the work thereunder shall not extend the time of completion of the Contract unless specifically provided for in the contract change order authorizing the use of the cost reduction proposal. The amount specified to be paid to the Contractor in the change order which effectuates a cost reduction proposal shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work thereof pursuant to the change order.

The City expressly reserves the right to adopt a cost reduction proposal for general use on contracts administered by the City when it determines that the proposal is suitable for application to other contracts. When an accepted cost reduction proposal is adopted for general use, only the Contractor who first submitted that proposal will be eligible for compensation pursuant to this section, and in that case, only as to those contracts awarded to that Contractor prior to submission of the accepted cost reduction proposal and as to which the cost reduction proposal is also submitted and accepted.

Cost reduction proposals identical or similar to previously submitted proposals will be eligible for consideration and compensation under the provisions of this Section 5.26 if the identical or similar previously submitted proposals were not adopted for general application to other contracts administered by the City. Subject to the provisions contained herein, the City shall have the right to use all or any part of any submitted cost reduction proposal without obligation or compensation of any kind to the Contractor.

## SECTION 6 - CONTROL OF MATERIALS

### 6.01 SUBMISSION OF DATA WHERE "OR CITY APPROVED EQUAL" IS SPECIFIED

Wherever an article or any class of materials is specified by the trade name or by the name of any particular patentee, manufacturer, or dealer, or by reference to the catalog of any such manufacturer or dealer, it shall be taken as intending to mean and specify the article of material described or any other equal thereto in quality, finish, and durability and equally as serviceable for the purpose for which it is, or they are, intended. The intent of the plans and specifications is to specify high grade standard equipment, and it is not the intent of these plans and specifications to exclude or omit the products of any responsible manufacturer if such products are equal in every respect to those mentioned herein.

Whenever the material or article to be furnished is described in these specifications by trade name, brand name, or other reference is made to specific manufacturers or supplies, "or City approved equal," the person to whom the contract is awarded shall have thirty (30) days after the award of the contract to submit to the Engineer data substantiating a request for the substitution of a "City approved equal" item. The Engineer together with the Public Works Department of the City will make a decision as to whether the product proposed to be furnished is of equal quality and performance and equally suited for the City's purposes.

### 6.02 SAMPLES AND TESTS

At the option of the Engineer, the source of supply of each of the materials shall be approved by the Engineer before delivery is started and before such material is used in the work. Representative preliminary samples of the character and quality prescribed shall be submitted by the contractor or producer of all materials to be used in the work, for testing or examination as desired by the Engineer.

The cost of testing shall be borne by the City for work performed under contract by the City. The cost for repeat testing shall be borne by the contractor. All other tests required for work in City streets and not under contract with the City shall be borne by the contractor or developer.

All tests shall be made under the direction of a registered engineer by a certified testing laboratory, whether the cost therefore is borne by the City or the contractor or developer, and all results shall be furnished to the Engineer when said results are available.

The contractor shall provide adequate notice to the Engineer when he desires the required testing.

Any test of materials furnished by the contractor shall be made in accordance with the commonly recognized standards of national organizations, and such special methods and tests as are prescribed in these specifications.

The contractor shall furnish such samples of materials as are requested by the Engineer without charge. No material shall be used until it has been approved by the Engineer. Samples will be secured and tested whenever necessary to determine the quality of materials by such laboratories as are authorized by the Engineer.

### 6.03 CERTIFICATES OF COMPLIANCE

A Certificate of Compliance stating that the materials to be used in the work comply in all respects with the requirements of the plans and specifications shall be supplied to the Engineer:

1. Before the material is incorporated into the work.
2. For each lot of the material. Identify the lot on the certificate.
3. Signed by the producer of the material and stating that the material complies with the contract.

All materials used on the basis of a Certificate of Compliance may be tested and sampled at any time. The fact that the material is used on the basis of a Certificate of Compliance shall not relieve the contractor of responsibility for incorporating material in the work which conforms to the requirements of the plans and specifications, and any such material not conforming to such requirements will be subject to rejection whether in place or not.

The City reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.

The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer. No additional payment will be made for furnishing certificates and all costs incurred shall be included in the prices bid for other items of work.

### 6.04 LOCAL MATERIALS

Local material is rock, sand, gravel, earth or other mineral material, other than local borrow or selected material, obtained or produced from sources in the vicinity of the work specifically for use on the project. Local material does not include materials obtained from established commercial sources. Local materials shall be furnished by the Contractor from any source the Contractor may elect, except that when the mandatory local material sources of certain materials are designated in the special provisions, the Contractor shall furnish material from those designated mandatory sources.

The Contractor shall make all arrangement necessary to obtain materials from any local material source other than a mandatory local material source. If the Contractor elects to obtain material from any other non-mandatory source, the Contractor shall furnish the Engineer with satisfactory evidence that the Contractor has entered into an agreement with the property owner for obtaining material from that source and with copies of any necessary permits, licenses and environmental clearances before removing any material from those sources.

Unless described in the Contract Specification as a mandatory local material source, or approved in writing by the Engineer, material sources shall not be excavated at locations where the resulting scars will present an unsightly appearance from any street or highway. No payment will be made for material obtained in violation of this provision.

The Contractor shall, at the Contractor's expense, make any arrangements necessary for hauling over local public and private road from any source. Local materials will be subject to the provisions of Section 6.02 "SAMPLES AND TESTS".

Full compensation for furnishing all labor, material, tools, equipment, and incidentals, and for doing all the work involved in conforming to the provisions this Section 6.04, for furnishing and producing materials from any source shall be considered as included in the price paid for the contract item of work involving the material and no additional compensation will be allowed therefor. If there is not bid item for local materials, the cost shall be included in the various bid items of work; no additional payment will be made.

#### 6.05 DEFECTIVE MATERIAL

All materials not conforming to the requirements of these specifications shall be considered as defective, and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work unless otherwise permitted by the Engineer. No rejected material, the defects of which have subsequently been corrected, shall be used until approved by the Engineer.

Upon failure on the part of the contractor to comply with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the contractor.

#### 6.06 GUARANTEE OF MATERIALS AND WORKMANSHIP

The contractor shall guarantee all materials, equipment and workmanship of the installation. Should any material or appliance or any work develop any defect or weakness due, in the opinion of the Engineer, to the use of imperfect materials, equipment or workmanship, or failure to follow the plans and specifications, the contractor shall be notified at once, and he shall immediately, at his own expense, make the necessary repairs or replacements to make the defective

item or items suitable and satisfactory. Should the exigencies be such as to necessitate the repairs before the contractor could be notified, the City shall have the right to make the necessary repairs or replacements at the expense of the contractor, preserving as far as possible all available evidence of the cause of the failure.

This guarantee is not intended to include the damage by the actions of individuals other than the contractor's forces, or by damages due to the activities of other contractors working in the area, either during the time this work is under construction or after its acceptance. Attention is directed to Sections 7.31 "GUARANTEE" of the City Standard Specifications.

#### 6.07 SALVAGE OF MATERIALS

Where indicated on the plans, materials to be salvaged shall remain the property of the City and shall be delivered and deposited by the contractor at the location specified by the Engineer. No separate payment will be made for such salvaging and delivering of material, and the cost thereof shall be included in the various bid items of work. See Section 14.04.04 "Salvage" of these Standard Specifications.

#### 6.08 PRE-JOB TESTS

In accordance with Section 2.05 of the City Standard Specifications, the contractor shall conduct at his expense, prior to bidding any project, any tests he may deem necessary to satisfy himself as to any existing oil or underground conditions that may exist at the work site. Submission of a bid shall be deemed conclusive evidence that the contractor has conducted such tests.

#### 6.09 FEDERALLY FUNDED PROJECTS

The control of materials for federally funded projects shall conform to the most current version of the City of Reedley Quality Assurance Program (QAP). The most current version of the QAP can be found on the City's website under the Engineering Department's Technical Library.

## SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITIES

### 7.01 LAWS TO BE OBSERVED

The contractor shall keep himself fully informed of all existing State and National laws and all municipal ordinances and regulations of the City and County which in any manner affect those engaged or which in any way affect the conduct of the work, and of all such orders and decrees of bodies of tribunals having any jurisdiction or authority over the same.

### 7.02 ALIEN LABOR

The contractor shall forfeit as a penalty to the City, twenty-five (\$25.00) dollars for each alien knowingly employed in the execution of the contract, by him or by any subcontractor under him, on any of the work herein mentioned, for each calendar day, or portion thereof, during which such alien is permitted or required to labor in violation of the provisions of the CA Labor Code and in particular, Sections 1850 to 1854 thereof, inclusive.

### 7.03 HOURS OF LABOR

Eight hours constitutes a legal day's work. The contractor shall forfeit, as a penalty to the City, twenty-five (\$25.00) dollars for each worker employed in the execution of the contract by the contractor or any subcontractor under him for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of the Labor Code, and in particular, Sections 1810 and 1815 thereof, inclusive, except that work performed by employees of contractors in excess of eight (8) hours per day, and forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay, as provided in CA Labor Code Section 1815.

### 7.04 TRAVEL AND SUBSISTENCE

The contractor, and each subcontractor under him, shall pay travel and subsistence payments to each workman needed to execute the work, as such travel and subsistence payment are defined in the applicable collective bargaining agreements filed in accordance with Section 1773.8 of the Labor Code.

### 7.05 PREVAILING WAGE; PAYROLL

The contractor shall forfeit as penalty to the City twenty-five (\$25.00) dollars for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for any work done under the contract by him or by any subcontractor under him in violation of the

provisions of the Labor Code, and the contractor shall comply in particular with the provisions of Section 1775 thereof.

The City will not recognize any claim for additional compensation because of the payment by the contractor of any wage rate in excess of the prevailing wage rate. The possibility of wage increases in one of the elements to be considered by the contractor in determining his bid will not, under any circumstances, be considered as the basis of a claim against the City.

In accordance with the provisions of Section 1770 of the California Labor Code, copies of the prevailing rate of per diem wages as determined by the Director of the Department of Industrial Relations are on file in the office of the City Engineer and will be made available to any interested party on request. The successful bidder shall post a copy of such determination at each job site.

If specified in the Special Provisions, or if requested by the Engineer, certified copies of payrolls shall be submitted within ten (10) calendar days following the close of the normal pay period or periods. If certified copies of the contractor's payrolls are requested by the Engineer or specified to be furnished in the Special Provisions, payment for furnishing said certified copies of payrolls shall be considered as included in the various contract items of work and no additional payment will be made therefore.

#### 7.06 LABOR DISCRIMINATION

No discrimination shall be made in the employment of persons within public works because of race, color, or religion of such persons and every contractor for public works violating this section is subject to the penalties imposed for a violation of Chapter 1 of Part VII, Division 2 of the Labor Code, in accordance with the provisions of Section 1735 of said Code.

#### 7.07 APPRENTICES

In accordance with the provisions of Section 1777.5 of the Labor Code, and in accordance with regulations of the California Apprenticeship Council, properly indentured apprentices shall be employed in the prosecution of the work. Information relative to number of apprentices, identification, wages, hours of employment and standards of working conditions shall be obtained from the Director of the Department of Industrial Relations of the State of California.

The contractor herein is hereby designated as the "prime contractor" and as such is responsible for the compliance with Section 1777.5 of the Labor Code relating to apprentices, craftsmen or tradesmen, and shall hold the City harmless in all respects from any failure to do so.

## 7.08 REGISTRATION OF CONTRACTORS

No contract will be awarded to a contractor who has not been licensed in accordance with the provisions in Chapter 791, Statutes of 1929, as amended.

## 7.09 PATENTS

The contractor shall assume all responsibilities and costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and shall indemnify and hold harmless the Engineer, City, and their duly authorized representatives from all suits at law or actions of every nature for or on the account of the use of any patented materials, equipment, devices, or processes used on or incorporated in the work.

## 7.10 PERMITS AND LICENSES

The contractor shall procure all permits and licenses, pay all charges and fees, and give all notice necessary and incidental to the due and lawful prosecution of the work.

## 7.11 RESPONSIBILITY FOR DAMAGE

The City, the City Council, the County of Fresno, the State of California, the United States of America or the Engineer shall not be answerable or accountable in any manner for any loss or damage that may happen to the work or any part thereof, or any material or equipment used in performing the work, or for injury or damage to any person or persons, either worker or public, or for damage to adjoining property from any cause whatsoever during the progress of the work or at any time before final acceptance.

The contractor shall indemnify and hold harmless the City, the City Council, the County of Fresno, the State of California, the United States of America and the Engineer from any suits, claims or actions brought by any person or persons or on account of any injuries or damages sustained or arising in the construction of the work or in consequence thereof. The City Council may retain so much of the money due the contractor as shall be considered necessary, until disposition has been made of such suit or claims for damages as aforesaid.

The provisions of this section requiring indemnification of the County of Fresno, the State California, and the United States of America shall apply only if Federal funding administered through the County of Fresno or State of California is funding any portion of the work to which these Standard Specifications apply.

## 7.12 PRESERVATION OF PROPERTY

Due care shall be exercised to avoid injury to existing highway improvements or facilities, utility facilities, adjacent property, and roadside trees and shrubbery that are not to be removed

and pole lines, fences, signs, survey markers and monuments, building and structures, conduits, pipe lines under or above ground, sewer and water lines, all highway facilities, and any other improvements of facilities within or adjacent to the highway shall be protected from injury or damage, and if ordered by the Engineer, the contractor shall provide and install suitable safeguards, approved by the Engineer, to protect such objects from injury or damage.

If such objects are injured or damaged by reason of the contractor's operations, they shall be replaced or restored to a condition as good as when the contractor entered upon the work, or as good as required by the specifications being performed under the contract. The Engineer may make or cause to be made such temporary repairs as are necessary to restore to service any damaged highway facility and utility facilities. The cost of such repairs shall be borne by the contractor and may be deducted from any monies due or to become due to the contractor under the contract.

### 7.13 INSURANCE AND LIABILITY

#### *7.13.1 Hold Harmless*

The Contractor shall indemnify, defend, and hold harmless the City and its officers, officials, employees, agents, and volunteers from and against all claims, damages, losses, actions, suits, demands, liability, and expenses including attorney fees arising out of the performance of the work described herein, caused in whole or in part by any act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of the City.

The provisions of Section 7.01, "LAWS TO BE OBSERVED", Section 7.26, "INJURY OR DAMAGE TO PERSONS OR PROPERTY", and Section 7.09, "PATENTS", also apply.

#### *7.13.2 Insurance Requirements For Contractors*

The Contractor shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

The following insurance requirements are minimum, and may be amended by the Contract Specifications to include increased coverage limits and expanded coverage including Course of Construction (Builder's Risk) Insurance. The Course of Construction policy shall name the City as Loss Payee.

### Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Insurance Services Office (ISO) Commercial General Liability coverage (occurrence Form CG 00 01) or ISO form (Form CG 00 09 11 88) Owners and Contractors Protective Liability Coverage Form – Coverage for Operations of Designated Contractor.
2. Insurance Services Office Form CA 00 01 covering Automobile Liability, Code 1 (any auto).
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance which shall be in compliance with the provision of the Labor Code of the State of California and during the performance of the work will continue so to comply with said provisions of said code. Contractor shall supply the City with certificates of insurance evidencing that Worker's Compensation Insurance is in effect and providing that the City will receive ten (10) days notice of cancellation. If the contractor self-insures Worker's Compensation, Certificate of Consent of Self-Insure shall be provided to the City.
4. Builder's Risk (Course of Construction) insurance covering all risks of loss less policy exclusions.
5. Surety bonds as described below.
6. Professional Liability (if Design/Build).

### Minimum Limits of Insurance Contractor shall maintain limits no less than:

1. General Liability: (Including operations, products and completed operations.) This coverage is to be maintained for 10 years after the completion of the Contract. \$5,000,000 \* per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: \$2,000,000 \* per accident for bodily injury and property damage.
3. Workers' Compensation: As required by the State of California.
4. Employer's Liability: \$1,000,000 \* per accident for bodily injury or disease.
5. Builder's Risk (when required by the Contract Specifications): Completed value of the project with no coinsurance penalty provisions.
6. Professional Liability: \$1,000,000 \* as needed for design/build. This coverage is to be maintained for 3 years after expiration of the Contract \*

**\*These amounts are standard amounts and may vary by project. Unless otherwise specified in the Contract Special Provisions, the Contractor shall provide the coverage amounts above.**

Deductibles and Self-Insured Retentions:

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either

- (a) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers or
- (b) the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

Other Insurance Provisions:

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City, its officers, officials, employees, and volunteers are to be covered as insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the contractor; and with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance, or as a separate owner's policy.
2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City.
4. Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code. Acceptability of Insurers Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable by to the City.

Only California admitted insurers may be used. Insurance is to be placed only with California admitted insurers or insurers which are currently licensed by the State Insurance Commissioner, and are unless otherwise acceptable to the City.

Verification of Coverage:

Contractor shall furnish the City with original certificates and endorsements, including amendatory endorsements, effecting coverage required by this clause. All certificates and

endorsements are to be received and approved by the City before work commences; however, failure to do so shall not operate as a waiver of these insurance requirements. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these Specifications at any time.

Waiver of Subrogation:

Contractor hereby agrees to waive subrogation which any insurer of contractor may acquire from contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. The workers' compensation policy shall be endorsed to contain a waiver of subrogation in favor of the City for all work performed by the contractor, its agents, employees, independent contractors and subcontractors.

Subcontractors:

Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

Surety Bonds:

The Contractor shall provide the following surety bonds: Bidder's Bond; Performance Bond; and Payment Bond, all in the amounts specified in Section 3.05, "REQUIRED CONTRACT SECURITIES, INSURANCE CERTIFICATE, BUSINESS LICENSE."

All costs for compliance with this Section 7.13 shall be included in the various items of work. No separate payment will be made therefor.

7.14 CONTRACTOR'S RESPONSIBILITY FOR WORK

Except as provided in these Specifications, until the formal acceptance of the work by the City Council, the contractor shall have the charge and the care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from execution or from the non-execution of the work. The contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by acts of the Federal Government or the public enemy.

The contractor shall check with the utility companies for the exact location of all existing underground installations. The lines as shown on the plans may not conform to the exact location

in the field and the contractor shall protect all existing lines and shall replace or repair any damage at his expense and no additional compensation will be charge against the City.

Attention is directed to Sections 6.06 and 7.11 of these City Standard Specifications.

#### 7.15 NO PERSONAL LIABILITY

Neither the City Council, the Engineer, nor any other officer or authorized assistant or agent shall be personally responsible for any liability arising under the contract.

#### 7.16 RESPONSIBILITY OF CITY

The City shall not be held responsible for the care or protection of any material or parts of the work prior to final acceptance except as expressly provided in these Specifications.

#### 7.17 SAFETY PROVISIONS

The contractor shall conform to the rules and regulations pertaining to safety established by the State Division of Occupational Safety and Health. All regulations included in the California Occupational Safety and Health Act of 1973 shall be complied with.

- a. **Job Safety and Special Worker Protection from Toxic or Explosive Gases:**  
The contractor shall comply with the provisions of the Construction Safety Orders, Tunnel Safety Orders and General Safety Orders issued by the State Division of Occupational Safety and Health, as well as all other applicable laws, ordinances and regulations.

In conformance with said Safety Orders, the contractor shall protect workers from toxic or explosive gases by providing whatever testing equipment and other special equipment that may be needed to detect the presence of and to remove such toxic or explosive gases found to exist in any underground facilities involved in the work, whether these facilities are newly constructed or existing.

The above requirements of the State Division of Occupational Safety and Health are minimum requirements. In addition, the contractor shall provide, for the life of the contract, similar protection for any person, including the Engineer or any of his authorized representatives, subcontractors, or any other person authorized or required to enter such underground facilities for inspection, repairs, or any other reason.

Full compensation for all costs involved in providing such job safety and special worker protection, except those pertaining to the hazards of caving ground in

excavation, shall be included in the amounts bid for the various items of work, and no separate payment will be made therefore.

- b. **Worker Protection at Excavations:** As required in Section 7.17.1 of these Specifications, the contractor shall comply with the provisions of the Construction Safety Orders, Tunnel Safety Orders, and General Safety Orders issued by the State Division of Occupational Safety and Health, as well as all other applicable laws, ordinances and regulations, as they pertain to the protection of workers from the hazard of caving ground.

#### *7.17.1 Worker Protection From Caving Ground In Excavations*

The Title 8 Construction Safety Orders of the Division of Occupational Safety and Health shall apply to all excavations. In compliance with Sections 341 and 341.1 of Title 8, California Code of Regulations, and Section 6500 of the State Labor Code, for any trenches or excavations that are 5 feet or more in depth, the Contractor must obtain a permit from the State Division of Occupational Safety and Health and submit a copy of the permit to the City. The permit may be either a Project Permit (project specific) or an Annual Permit. The contractor shall comply with all the requirements of the permit and those of the Safety Orders.

In addition to the above permit requirement, in compliance with the provisions of State Labor submit to the Engineer, in advance of any excavation, a detail plan showing the design Code Section 6705, for trenches or excavations five feet or more in depth, the contractor shall implement shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trenches or excavations.

If such plan varies from the shoring system standards of the State Division of Occupational Safety and Health, the plan shall be prepared, stamped and signed by a Civil or Structural Engineer registered in the State of California. Nothing in this subsection shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the DOSH Construction Safety Orders.

The requirements as above set forth by the State Division of Occupational Safety and Health and the State Labor Code for the provision of worker protection from the hazard of caving ground are minimum requirements.

In addition, the Contractor shall provide, for the life of the Contract, the same protection for any person, including the Engineer or any of his authorized representatives, subcontractors, or any other person required to be exposed to such hazard in the performance of the work, inspection of the work, or any other reason.

Payment for worker protection from caving ground in excavations during construction shall be made at the price bid therefor; no additional payment will be made. Payment shall include all materials, labor and equipment necessary to adequately brace, shore, shield or slope all excavations

and trenches as required by and the Division of Occupational Safety and Health Title 8 Construction Safety Orders. Also included are any costs incurred by the Contractor in obtaining all required OSHA permits and preparing a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection as required by State Labor Code Section 6705.

If the bid item therefor is based on a lump sum amount, payment will be pro-rated on the basis of the ratio of completed length of trench or other excavation requiring Worker Protection to the total length of trench or other excavation requiring Worker Protection.

#### *7.17.2 Trenches And Excavations 4 Feet Or Less In Depth Below The Surface*

If the Contractor encounters conditions at the Site which are subsurface or otherwise concealed physical conditions, which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the Contractor shall be given to the City promptly before conditions are disturbed and in no event later than ten (10) days after first observance of the conditions. The City will promptly investigate such conditions, and if they differ materially and cause an increase or decrease in the Contractor's cost of, time required for, or performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum, Contract Time, or both.

If the City determines that the conditions at the Site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the City shall so notify the Contractor in writing, stating the reasons. Claims by Contractor in opposition to such determination must be made within ten (10) days after the City has given notice of the decision. If the City and the Contractor cannot agree on an adjustment in the Contract Sum or the Contract Time, Contractor shall proceed pursuant to Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS."

#### *7.17.3 Trenches And Excavations Greater Than 4 Feet In Depth; Hazardous Waste*

Pursuant to Section 7104 of the State Public Contract Code, whenever the work requires digging trenches or other excavations that extend deeper than four feet below the surface, the following provisions apply:

- A. The contractor shall promptly, and before the following conditions are disturbed, notify the Engineer, in writing, of any:
  - 1. Material that the contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

2. Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.
  3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
- B. The Engineer shall promptly investigate the conditions, and if he finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order in accordance with Section 4.11, "CHANGES".
- C. In the event that a dispute arises between the Engineer and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

The Contractor shall comply with the requirements in Section 5.12, "DISPOSAL OF MATERIAL OUTSIDE THE RIGHT OF WAY".

#### 7.18 VEHICLE CODE

Pursuant to the authority contained in Vehicle Code Section 591, the City has determined that within those areas that are within the limits of the project and are open to traffic, the Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code.

In accordance with the statement in Vehicle Code Section 591, this section shall not relieve the Contractor or any person from the duty in exercising due care. The Contractor shall take all necessary precautions for safe operation of the Contractor's equipment and the protection of the public from injury and damage from the Contractor's equipment.

#### 7.19 AIR POLLUTION AND DUST CONTROL

For all projects, the Contractor shall comply with the State air pollution control rules, regulations, ordinances, and statutes which apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, and statutes, specified in Section 11017 of the Government Code. The Contractor shall also comply with all of the requirements of Regulation VIII of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

It will be the Contractor's responsibility to contact SJVAPCD to determine the requirements of said regulation and any costs related to compliance therewith. All costs for

compliance, including any permit fees, shall be include in the carious items of work; no separate or additional payment will be made therefor.

In addition to the foregoing requirements, for project specified in the Contract Specifications to be subject to Rule 9510 of the SJVAPCD, Contractors shall, before submitting a bid, contact SJVAPCD and determine the project-specific requirements of said Rule. Any project-specific permit fee will be paid by the City. All other costs for compliance with the Rule 9510 requirements, including submittal of all required documentation during the life of the project, shall be included in the various items of work. No separate or additional payment will be made therefor.

In addition to or in conformance with permits issued by the SJVAPCD, the City requires that the contractor shall maintain dust control about the site of the work, including any haul roads to or from the site, by whatever means are necessary, such as watering, sweeping or oiling, so as to cause the least possible dust nuisance to the public. Any dust control measure ordered by the Engineer shall be promptly and immediately carried out.

Water for dust control purposes will be furnished as specified in the Special Provisions or these Standard Specifications. The contractor shall furnish his own equipment for transporting and applying water. Such equipment shall meet the approval of the Engineer. The contractor shall provide, at all times, an approved backflow prevention device between the public water supply and his equipment for applying or transporting water or when the Engineer determines that a backflow condition could be caused by the method or equipment used to draw water from the public supply.

If the contractor fails to provide dust control measures so ordered within a reasonable time period as determined by the Engineer, the contractor or developer shall pay to the City a penalty of Fifteen (\$15.00) Dollars for each one-half (1/2) hour, or portion thereof, that elapses from the time the penalty is ordered into effect by the Engineer, until dust control measures ordered by the Engineer are completely carried out and the dust nuisance eliminated or prevented.

Such penalty shall be deducted from any monies owed the contractor or levied as a fine against the developer. In addition to the penalty as specified above, if conditions warrant, the Engineer may order City forces to eliminate or prevent the dust nuisance. The full cost thereof, in addition to the penalty as herein provided, shall be deducted from any monies owed the contractor or shall be levied as a fine against the developer.

Full compensation for dust control shall be included in the amount bid for the various items of work and no separate payment will be made therefore, unless otherwise specified in the Special Provisions.

## 7.20 WATER POLLUTION PREVENTION

The Contractor shall exercise every reasonable precaution and shall conduct and schedule operations so as to protect all storm drain systems, storm water retention/detention basins, irrigation canals, or natural stream located within, adjacent to, or in any way connected with, the project from pollution with mud, silt, fuels, oils, bitumen, calcium chloride, pesticides, herbicides, and any other harmful materials. The Contractor shall conduct water pollution prevention on all contracts awarded by the City, but for projects of one (1) acre or greater, Section 7.21 “STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS” shall apply.

## 7.21 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

The following provisions are required for all construction contracts awarded by the City for sites one (1) acre in size or greater. Their purpose is to provide detailed instructions to contractors to ensure that construction practices do not cause pollutant discharges to the above-described storm water conveyance/storage systems. Contractors are encouraged to use these similar requirements in their contracts with subcontractors. The requirements are based upon Best Management Practices developed by the California Storm Water Quality Task Force as presented in the California Storm Water Best Management Practices Handbook Construction Activity. The Fresno Metropolitan Flood Control District has developed a model Storm Water Pollution Prevention Plan (SWPPP). Whether or not such provisions are included in subcontracts, the Contractor is responsible for compliance by others retained by the Contractor in the performance of the Contract.

The goal of these requirements is to prevent as much as possible the pollution of storm water conveyance/storage systems by storm water runoff from construction sites by keeping storm water runoff containing pollutants out of drainage systems for sufficient time to reduce pollutant loads, reducing the exposure and discharge of materials and wastes to storm water, and by reducing erosion and sedimentation.

The work for which a Contract is awarded is subject to the provisions and requirements of the State General Construction Activity Storm Water Permit (General Construction Permit). The Contractor shall be responsible for complying with all General Construction Permit requirements, as adopted and enforced by the State Water Resources Control Board (SWRCB) in August 1999, including any future revisions to that permit. The Contractor shall indemnify, and hold harmless the City for failure to comply with any provision or requirement of the General Construction Permit.

To insure permit compliance, the Contractor is directed to the official web site for the California Storm-water Quality Association (CASQA) <http://www.cabmphandbooks.com/Construction.asp>. The Contractor can obtain copies of the State General Construction Permit, Notice of Intent (NOI) and Notice of Termination (NOT)

forms, instructions for completing the forms, and a Model Construction Activities Storm Water Pollution Prevention Plan (SWPPP).

In summary, the Contractor shall be required to comply with the following permit requirements. These requirements include:

#### *7.21.1 Preparation Of Notice Of Intent And Vicinity Map*

Unless otherwise provided in the Contract Specifications, the City shall, at its expense, prepare and submit the executed NOI, map and permit fee to the SWRCB for General Construction Permit coverage prior to commencement of construction. The Contractor shall receive a copy of the executed NOI from the City.

#### *7.21.2 Preparation Of A Storm Water Pollution Prevention Plan (SWPPP)*

The Contractor shall prepare a SWPPP that is project specific. At a minimum the SWPPP must address: general project information; a construction activity schedule; pollutant sources and best management practices (BMPs); maintenance, inspection, and repair of BMPs; Contractor training; site stabilization; a post construction management plan an overall permit compliance plan, and certifications. The Contractor shall submit a draft SWPPP for review, approval, and certification by the City no later than two weeks after receipt of the Notice of Award.

Within 24 hours of approval by the City, the Contractor shall provide the City with a complete copy of the certified SWPPP. Any amendments to the SWPPP shall also be submitted to the City for review, approval and certification. Within 24 hours of approval, the Contractor shall provide the City with documentation and certification of such amendments.

#### *7.21.3 Implementation Of SWPPP*

The Contractor shall be responsible for implementing and maintaining the SWPPP at all times throughout the entire construction site and for the duration of the project, including both dry and wet weather seasons. The Contractor shall maintain a copy of the SWPPP on-site for the duration of the contract, and shall prepare all required inspection, maintenance and training documentation with the SWPPP and shall provide same upon request by agency or City enforcement personnel.

#### *7.21.4 Site Stabilization*

All soil disturbed by the work shall be stabilized by methods approved by the Engineer prior to terminating permit coverage.

### *7.21.5 Preparation Of NOT And Post Construction Storm Water Management Plan*

Following completion of the construction project, the Contractor shall submit a completed Notice of Termination (NOT) and PCSWMP to the City for review, approval, and signature. Within 24 hours of approval, the Contractor shall provide the City with a final copy of the project's PCSWMP. The City shall submit the executed NOT to the Central Valley Regional Water Quality Control Board (RWQCB) for termination of General Construction Permit coverage.

### *7.21.6 Payment*

Unless otherwise provided by the Contract Specifications, and with the exception of the NOI fee, all costs for compliance with this Section 7.21, including preparation of the SWPPP, all inspection and other required reports, documentation, training, preparation of the PCSWMP and NOT, and any and all work associated with the maintenance of BMPs, shall be included in the price bid therefor. If no bid item is provided, the cost shall be included in the various items of work; no separate payment will be made therefor.

## 7.22 USE OF PESTICIDES

The Contractor shall comply with all rules and regulations of the California Department of Food and Agriculture, the Department of Public Health, the Department of Industrial Relations and all other State, Federal or Local agencies which govern the use of pesticides required in the performance of the work on the contract. Pesticides shall include but shall not be limited to herbicides, insecticides, fungicides, rodenticides, germicides, nematocides, bactericides, inhibitors, fumigants, defoliants, desiccants, soil sterilants and repellents. Any substance or mixture of substances intended for preventing, repelling, mitigating, or destroying weeds, insects, diseases, rodents, or nematodes and any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant shall be considered a pesticide.

## 7.23 PAYMENT OF TAXES

The contract prices paid for the work shall include full compensation for all taxes which the Contractor is required to pay, whether imposed by Federal, State or local government, including, without being limited to, Federal Excise Tax.

No tax exemption certificate nor any document designed to exempt the Contractor from payment of any tax will be furnished to the Contractor by the City as to any tax on labor, services, materials, transportation, or any other items furnished pursuant to the contract.

## 7.24 PERMITS AND LICENSES

Unless otherwise provided in the Contract Specifications, the Contractor shall procure all required permits and licenses and give all notice necessary and incidental to the due and lawful

prosecution of the work. The Contractor shall secure any required permits from the appropriate agencies prior to making any preliminary soil investigations in public street rights-of-way, and shall abide by the provisions of said permits.

The Contractor and all subcontractors must comply with the Business License provisions of Section 3.05, "REQUIRED CONTRACT SECURITIES, INSURANCE CERTIFICATE, BUSINESS LICENSE".

For all non-public work, an Encroachment Permit is required from the City Engineering Department before any work in street or other City right of way is commenced. For public work for which a Contract has been awarded by the City, the Contractor must obtain an Encroachment Permit from the City Engineering Department, prior to commencing work unless otherwise specified by the Contract Specifications.

Satisfactory evidence of obtaining all required permits and licenses, including the Contractor's and subcontractors' business licenses, shall be submitted to the Engineer with the executed contract and other documents required by the Specifications. The Contractor shall abide by the conditions of said permits and licenses and perform all work governed by said permits and licenses in conformance therewith and as directed by the Engineer. Compliance with this Section 7.10 shall be precedent to, and a condition of, issuance of the "Notice to Proceed."

Except as provided in Section 7.19, "AIR POLLUTION AND DUST CONTROL", relating to Rule 9510, and unless otherwise provided in the Contract Specifications, full compensation for all costs involved in procuring all permits and licenses as indicated herein, including all fees and charges therefor, shall be included in the amount bid for the various items of work; no separate payment shall be made therefor.

## 7.25 SANITARY REGULATIONS

Necessary housing accommodations shall be provided by the Contractor for the workmen for changing clothes and for protection during inclement weather. Toilet accommodations shall also be maintained for the use of employees on the work. The accommodations shall be in approved locations properly screened from public observation and shall be maintained in a strictly sanitary manner. The Contractor shall obey and enforce all State, County, and City sanitary regulations and orders, and shall take precautions against infectious diseases and the spread of same, and shall maintain at all times satisfactory sanitary conditions around all shanties, tool and supply houses and on all other parts of the work.

The cost of compliance with this Section 7.25 shall be included in the various bid items of work; no separate payment will be made therefor.

## 7.26 INJURY OR DAMAGE TO PERSONS OR PROPERTY

Reference is made to Section 5.03, "CONTRACTORS RESPONSIBILITY FOR THE WORK", Section 5.09, "PRESERVATION OF PROPERTY", Section 7.13, "INSURANCE AND LIABILITY", and Section 7.26, "INJURY OR DAMAGE TO PERSONS OR PROPERTY". Neither the City Council, the Engineer, nor any other officer, authorized agent, employee or volunteer shall be personally responsible for any liability arising under the Contract. The Contractor shall indemnify and hold harmless the City, the City Council, the Engineer, and all City Officers, Employees, agents and volunteers from any suits, claims, damages, losses, liability, demands, or actions brought by any person or persons for or on account of any injuries or damage sustained in or arising out of the construction of the Work or in consequence thereof. The City Council may retain as much of the money due the Contractor as shall be considered necessary until disposition has been made of such suits or claims for damages as aforesaid.

If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, any of the other party's employees or agents, or others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding ten (10) days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a Claim for additional cost or time related to this Claim is to be asserted, it shall be made as provided in Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS".

## 7.27 PUBLIC CONVENIENCE

This Section 7.27 defines the Contractor's responsibility with regard to convenience of the public and traffic in connection with the Contractor's operations. Section 7.28, "PUBLIC SAFETY", provides requirements relating to the Contractor's responsibility for the safety of the public. The provisions in Section 7.28 are in addition to the provisions in this Section 7.27, and the Contractor will not be relieved of the responsibilities as set forth in Section 7.28 by reason of conformance with any of the provisions in this Section 7.27.

The Contractor shall adhere to the provisions of Section 4.15, "DETOURS", and Section 11, "TRAFFIC CONTROL; CONSTRUCTION TRAFFIC CONTROL DEVICES", concerning traffic control requirements, flagging and traffic-handling equipment and devices used in carrying out the provisions in this Section 7-27 and said Section 7-28, and for provisions relating to the passage of traffic over or around the work by detours, and other traffic.

In the event of a suspension of the work, the provisions of Section 8.13, "TEMPORARY SUSPENSION OF WORK", will apply.

The Contractor shall so conduct operations as to offer the least possible obstruction and inconvenience to the public and shall have under construction no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public. Unless otherwise

provided in the Contract Specifications or approved by the Engineer, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible. Where possible, traffic shall be routed on new or existing paved surfaces.

Existing traffic signals and highway lighting within the project area or affected by the work shall be kept in operation for the benefit of the traveling public during progress of the work. Unless otherwise provided in the Contract Specifications, the Contractor shall be responsible for routine maintenance of existing systems.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners. Convenient access to driveways, houses, and buildings along the line of the work shall be maintained and temporary approaches to crossings or intersecting streets shall be provided and kept in good condition. When the abutting property owner's access across the right of way line is to be eliminated, or to be replaced under the contract by other access facilities, the existing access shall not be closed until the replacement access facilities are usable. Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at the Contractor's expense.

Water or dust palliative shall be applied if ordered by the Engineer for the alleviation or prevention of dust nuisance as provided in Section 7.19, "AIR POLLUTION AND DUST CONTROL".

The Contractor will be contacted when a situation or condition is identified as a PUBLIC INCONVENIENCE. An appropriate response time will be granted (usually 24 hours). The contractor must resolve the issue within the response time granted. Liquidated damages will accrue at the rate of \$250 per calendar day for each day beyond the resolution date that the situation remains unresolved. The City may, at its option, take corrective action following the expiration of the granted time. All costs incurred by the City for taking such corrective action, plus a \$250 administrative fee, will be deducted from monies owed the Contractor or billed to the Contractor in the case of nonpublic work being done under permit.

The foregoing process shall apply to all Contracts awarded by the City and also to Encroachment Permits issued by the City to Contractors for non-public work. The provisions of Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS", will apply.

Full compensation for conforming to the provisions in this Section 7.27 shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

## 7.28 PUBLIC SAFETY

The Contractor shall provide for the safety of traffic and the public during construction. The Contractor's attention is directed to the provisions of Section 7.13, INSURANCE AND

LIABILITY””, Section 7.26, “INJURY OR DAMAGE TO PERSONS OR PROPERTY”, and Section 7.27, “PUBLIC CONVENIENCE”, relating to the Contractor's responsibility for providing for the convenience and safety of the public in connection with the Contractor's operations.

The provisions of Section 11, "TRAFFIC CONTROL; CONSTRUCTION TRAFFIC CONTROL DEVICES", concerning flagging and traffic-handling equipment and devices used in carrying out the requirements of Section 7.27, “PUBLIC CONVENIENCE”. apply to this Section 7.28.

Whenever the Contractor's operations create a condition hazardous to traffic or to the public, the Contractor shall, at the Contractor's expense and without cost to the City, furnish, erect and maintain those fences, temporary railing (Type K), barricades, lights, signs and other devices and take such other protective measures that are necessary to prevent accidents or damage or injury to the public. Fences, temporary railing (Type K), barricades, lights, signs, and other devices furnished, erected and maintained by the Contractor, at the Contractor's expense, are in addition to any construction area traffic control devices for which payment is provided for elsewhere in these specifications.

The Contractor shall also furnish such flaggers as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered, and payment therefor will be made as provided in Section 11, "TRAFFIC CONTROL; CONSTRUCTION TRAFFIC CONTROL DEVICES".

Signs, lights, flags, and other warning and safety devices and their use shall conform to the requirements set forth in Part 6 of the most current version of the California Manual on Uniform Control Devices (CA MUTCD). Signs or other protective devices furnished and erected by the Contractor, at the Contractor's expense, as above provided, shall not obscure the visibility of, nor conflict in intent, meaning and function of either existing signs, lights and traffic control devices or any construction area signs and traffic control devices for which furnishing of, or payment for, is provided elsewhere in the specifications. Signs furnished and erected by the Contractor, at the Contractor's expense, shall be approved by the Engineer as to size, wording and location.

The installation of general roadway illumination shall not relieve the Contractor of the responsibility for furnishing and maintaining any of the protective facilities herein before specified.

All movements of workmen and construction equipment on or across lanes open to public traffic shall be performed in a manner that will not endanger public traffic and shall be in conformance with Section 7.18 “VEHICLE CODE”.

When leaving a work area and entering a roadway carrying traffic, the Contractor's equipment whether empty or loaded shall in all cases yield to traffic.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, and at the end of each day's work and at other times when construction operations are suspended for any reason, the Contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.

Temporary facilities which the Contractor uses to perform the work shall not be installed or placed where they will interfere with the free and safe passage of public traffic. Temporary facilities which could be a hazard to public safety if improperly designed shall comply with design requirements specified in the contract for those facilities or, if none are specified, with standard design criteria or codes appropriate for the facility involved. Working drawings and design calculations for the temporary facilities shall be prepared and signed by an engineer who is registered as a Civil Engineer in the State of California and shall be submitted to the Engineer for approval pursuant to Section 4.05, "WORKING DRAWINGS" of the City Standard Specifications. The submittals shall designate thereon the standard design criteria or codes used. Installation of the temporary facilities shall not start until the Engineer has reviewed and approved the drawings.

Should the Contractor appear to be neglectful or negligent in furnishing warning devices and taking protective measures as above provided, the Engineer may direct attention to the existence of a hazard and the necessary warning devices shall be furnished and installed and protective measures taken by the Contractor at the Contractor's expense. Should the Engineer point out the inadequacy of warning devices and protective measures, that action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate the obligation to furnish and pay for these devices and measures.

In accordance with Section 5.08, "EMERGENCY AVAILABILITY" in the event a condition or situation develops either during or after normal work hours which requires the attention of the Contractor, the following process applies:

If the condition or situation presents a clear and imminent public hazard and is deemed by the Engineer to be an EMERGENCY, and in the event the Contractor fails to immediately respond the Engineer's direction to correct the condition, or attempts to contact the after-hours emergency response personnel of the Contractor fail, or in the event contact is made and the Contractor is either unwilling or unable to respond in a timely manner to the condition or situation deemed an emergency by the Engineer, then the Engineer shall mobilize immediately the resources necessary to respond to the situation.

In the event a condition or situation is deemed by the Engineer to present a potential public hazard and is considered to be URGENT, and upon notification thereof by the Engineer to the Contractor the condition is not corrected within 3 hours, or in the event attempts to contact the after-hours emergency response personnel of the Contractor fail, or in the event contact is made and the Contractor is either unwilling or unable to respond within three hours of contact, then the condition or situation deemed a HAZARD will be upgraded to an EMERGENCY by the Engineer, and the appropriate measures as above provided will be taken.

Due care will be taken to effect only those measures necessary to remove the emergency or urgent condition or situation. The Contractor will be invoiced for all direct costs incurred by the City, plus an emergency response fee of \$500 and an administrative fee of \$250. Once additional resources are deployed by the Engineer to resolve the emergency, the Contractor may still participate to reduce the cost of the deployment by the Engineer. All costs incurred by the City for taking such corrective action will be deducted from monies owed the Contractor. Parties not under contract to the City but subject to these Standard Specifications will be billed for the City's costs.

The foregoing process shall apply to all Contracts awarded by the City and also to Encroachment Permits issued by the City to Contractors for non-public work. The provisions of Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS", will apply.

Except as otherwise provided in this Section 7.28 or in the Contract Specifications, full compensation for conforming to all of the provisions in this Section 7.28 shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

#### 7.29 VERBAL STATEMENTS NOT BINDING

It is understood and agreed that the written terms and provisions of the Contract shall supersede all verbal statements of the Engineer or other representatives of the City and such statements shall not be effective, or be construed as entering into or forming a part of, or altering in any way whatsoever the written agreement.

#### 7.30 GUARANTEE

Whether working under a City Contract or under Encroachment Permit for Utility, Communications, or private work, the Contractor shall guarantee the proper installation and performance of all equipment, facilities and materials installed, including all landscape plantings and irrigation systems, or work performed pursuant to the Plans, Contract Specifications, these Specifications, or City Encroachment Permit, for a period of one year from the date of the Acceptance of the Work by the City Council, or other period set forth in the Contract Specifications. Any failure of equipment, facilities, landscape planting, or workmanship prior to the end of the one-year or other specified period shall be repaired or corrected by the Contractor at his sole expense in accordance with instructions of the Engineer. The provisions of Section 5.25, "GUARANTEE OF WORKMANSHIP", also apply.

#### 7.31 ASSIGNMENT OF CONTRACT

The contractor shall not assign this contract, or any part thereof, without the approval of the City, not without the consent of surety unless the surety has waived its rights to notice of

assignment. All assignments of funds are subject to the prior lien for services rendered or materials supplied for the performance of the work called for in favor of all persons, forms or corporations rendering such services or supplying materials.

### 7.32 AMENDMENTS TO CONTRACTS

Each and every provisions of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and this contract shall be read and enforced as though it were included herein, and if through mere mistake, or otherwise, any such provision is not inserted, or is not correctly inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

### 7.33 TERMINATION OR MODIFICATION OF CONTRACT, ENVIRONMENTAL REASONS

City may terminate, amend or modify the contract for environmental considerations. In the event of such termination, modifications or amendment, the notification to the contractor thereof will include a statement of the compensation payable, if any, by reason of such termination, modification or amendment. The provisions of Section 9.11 “NOTICE OF POTENTIAL CLAIM” of these Specifications shall apply to the filing and determination of any claim or claims of contractor in connection with such termination, modification or amendment. In the event of termination, the thirty (30) day period therein referred to shall commence to run from the date of the notification of termination.

### 7.34 CITY'S RIGHT TO WITHHOLD PAYMENT

The City may withhold or nullify the whole or any part of any partial or final payment to such extent as may reasonably be necessary to protect the City from loss on account of:

- a. Defective work not remedied, irrespective of when any such work be defective.
- b. Claims or liens filed or reasonable evidence indicating probable filing of claims or liens.
- c. Failure of the contractor to make payments properly for labor, material, equipment, or other facilities, or to subcontractors.
- d. A reasonable doubt that the work can be completed for the balance unearned.

Whenever the City shall, in accordance herewith, withhold any monies otherwise due the contractor, written notice of the amount withheld and the reason therefore shall be given to the contractor and when the contractor shall remove the grounds for such withholding, the City shall promptly pay to the contractor the amount withheld.

### 7.35 PROPERTY RIGHTS OF MATERIALS

Nothing in the contract shall be construed as vesting in the contractor any right of property in the materials used after they have been attached or affixed to the work or the soil, or after payment has been made for ninety (90%) percent of the value of materials delivered to the site of the work, or stored subject to or under the control of the City. All such materials shall become the property of the City upon so being attached or affixed or upon payment of ninety (90%) percent of the value of the materials delivered to the site of the work or stored subject to or under the control of the City.

### 7.36 RIGHTS IN LAND AND IMPROVEMENTS

Nothing in these specifications shall be construed as allowing the contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the limits of the contract for any purpose whatsoever, either with or without compensation, in conflict with any agreement between the City, and Owner, former owner, or tenant or such land, structure or building.

The contractor shall not occupy property outside the right-of-way as shown on the plans or maps unless he enters into a rental agreement with the Owner. The agreement will be based on the fair rental values.

### 7.37 ACCEPTANCE OF CONTRACT

When the Engineer has made the final inspection and determines that the contract has been completed in all respects in accordance with the plans and specifications, the City Council, through the City Clerk, will issue a Notice of Completion of the contract, and immediately upon and after issuance of said Notice of Completion, unless otherwise provided in the Special Provisions, the contractor will be relieved of the duty of maintaining and protecting the work as a whole, will not be required to perform any further work thereon, and will be relieved of his responsibility for injury to persons or property or damage to the work which occurs after the formal acceptance by the City Council.

## SECTION 8 - PROGRESS AND PROSECUTION

### 8.01 SUBCONTRACTORS

Section 2.11, "DESIGNATION OF SUBCONTRACTORS", sets forth the requirement that any subcontractor who performs in excess of one half of one percent (1/2 %) of the original contract price, or in the case of a street project so designated by the City, one half of one percent (1/2 %) or \$10,000, whichever is greater, shall be designated on the List of Contractors form included in the bid package or to be obtained from the office of the City Engineer at City Hall. At the time of the bid opening, the Contractor shall include in the bid package the List of Subcontractors sheet completely filled out. Information on the form include the names of the subcontractors, their respective contact information, California DIR registration number, item of work to be subcontracted, and where working on a federally funded project, the dollar amount of work to be performed.

In accordance with Section 4109 of the State Public Contract Code, subcontracting of any portion of the work in excess of one-half of one percent of the Contractor's total bid for which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity. It will be the Contractor's responsibility to submit to the Engineer the facts constituting a public emergency or necessity. If approved by the Engineer, a finding in writing will made a part of the public record setting forth the City's decision and the reasons therefor.

The Contractor shall give personal attention to the fulfillment of the contract and shall keep the work under the Contractor's control. No subcontractor will be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor and the Contractor will be held responsible for their work, which shall be subject to the provisions of the contract and specifications. When a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the Engineer, the subcontractor shall be removed immediately on the requisition of the Engineer and shall not again be employed on the work. The Contractor shall be responsible for the coordination of all trades, subcontractors, and material handlers engaged in the work. Neither the City nor the Engineer will undertake to settle any differences between the Contractor and its subcontractors or between subcontractors. Subcontracts shall include provisions that the contract between the City and the Contractor is part of the subcontract, and that all terms and provisions of the contract are incorporated in the subcontract.

Subcontracts shall also contain certification by the subcontractor that the subcontractor is experienced in and qualified to do, and knowledgeable about, the subcontracted work. Copies of subcontracts shall be available to the Engineer upon written request, and shall be provided to the Engineer at the time any litigation against the City concerning the project is filed.

Pursuant to the provisions of Section 6109 of the Public Contract Code, the Contractor shall not perform work under the contract with a subcontractor who is ineligible to perform work on the project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

The purchase of concrete, liquid asphalt, paving asphalt, pipelines, valves, fire hydrants, casing, or any other materials produced at and supplied from established and recognized commercial plants, together with delivery of such materials to the site of the work by means of vehicles owned or operated by such plants or by recognized commercial hauling companies, shall not be considered as subcontracting under these Standard Specifications.

Nothing contained in the Contract documents shall create any contractual relation between any subcontractor and the City.

## 8.02 COMMENCEMENT OF THE WORK

Unless otherwise provided in the Special Provisions for a project, contractor shall commence work under the contract within fifteen (15) calendar days after issuance of the Notice to Proceed and shall diligently prosecute the same to completion within the time limit provided in the Special Provisions. Should the contractor begin work in advance of receiving the Notice to Proceed, as above provided, any work performed by him in advance of said date of approval shall be considered as having been done by him at his own risk and as a volunteer unless said contract is approved.

## 8.03 PRECONSTRUCTION CONFERENCE

Prior to construction and when set forth in the Contract Specifications or at the discretion of the Engineer, a meeting will be called by the Engineer with the Contractor, subcontractors and interested agencies or parties affected by the work, to discuss the proposed work. The preconstruction meeting shall be the proper time and place for the Contractor to submit to the Engineer required documents per the City of Reedley Standard Specifications including, as a minimum, the following:

- Construction Schedule - Section 8.04
- Traffic Management (Control) Plan - Section 11
- Names of Superintendent - Section 5.07
- Emergency Contact List - Section 5.08
- Proposed Notice to Residents - Section 8.08
- Temporary Easements - Section 5.11
- Request for City Approved Water Source - Section 5.13

#### 8.04 CONSTRUCTION SCHEDULE

After notification of award and prior to start of any work, at the pre-construction conference the Contractor shall submit to the Engineer for acceptance his proposed construction schedule. Acceptance or lack of rejection by City of a proposed construction schedule shall not be deemed approval and shall not create responsibility on the part of the City for any defects or mistakes in the schedule. The Contractor bears sole responsibility for the accuracy, utility and reasonableness of the schedule. The construction schedule shall be in the form of a tabulation, chart, or graph and shall be in sufficient detail to show the chronological relationship of all activities of the project including, but not limited to, estimated starting and completion dates of various activities, (including early and late dates and float for each activity), procurement of materials, the critical path, and scheduling of equipment. The construction schedule shall be consistent in all respects with the time and order of work requirements of the Contract.

The Contractor shall submit an updated schedule on a monthly basis that includes an accurate as-built schedule and the current as-planned schedule. The Contractor shall submit its daily logs for the month with the updated schedule. Float shall be used by the parties on a “first come, first serve”. If the Contractor desires to make a significant change in his method of operations after commencing construction, he shall submit to the Engineer a revised construction schedule in advance of beginning revised operations. If the Contractor’s actual progress falls behind the scheduled progress, within seven (7) days of a City request the Contractor shall prepare and submit a recovery plan. The recovery plan must include a revised schedule that would recover the lost time and still complete the Work by the scheduled completion deadline. The recovery plan shall also list any additional costs that would be incurred by Contractor during implementation of the recovery plan. If the City directs Contractor to implement the recovery plan, then Contractor shall do so. If the Contractor believes that it is entitled to additional compensation (money or time) for implementing the recovery plan, then Contractor shall observe the Claims and change order procedures in Sections 4.11, “CHANGES”, and 4.13, “NOTICES, CHANGE ORDERS, AND CLAIMS”.

All schedules submitted by the Contractor shall be certified as true and correct.

The Contractor may not maintain any Claim or cause of action against the City for damages incurred as a result of its failure or inability to complete the Work in a shorter period than established in the Contract. The parties stipulate that the period set forth in the Contract is a reasonable time within which to perform the Work.

#### 8.05 SEQUENCE AND PROGRESS OF THE WORK

Unless otherwise provided in the Contract Specifications, the Contractor shall direct the order and sequence of work and coordinate the construction of the several parts of the Contract to a successful completion as rapidly as possible. If the Engineer determines, at any time, that appliances used, or to be used, are insufficient or improper for securing the quality of work required

or the required rate of progress, the Engineer may order the Contractor to increase efficiency, or to improve their character. The Contractor shall conform to such order; but the failure of the Engineer to demand any increase of such efficiency or any improvement shall not release the Contractor from the obligation to secure the quality of work, or the rate of progress specified.

#### 8.06 ASSIGNMENT OF CONTRACT

The Contractor shall not assign the Contract or any part thereof, without the approval of the City or without the consent of surety unless the surety has waived its rights to notice of assignment. Consent will not be given to any proposed assignment which would relieve the original Contractor or the Contractor's surety of their responsibilities under the contract. All assignments of funds are subject to the prior lien for services rendered or materials supplied for the performance of the work called for in favor of all persons, firms, or corporation rendering such services or supplying materials, and all deductions provided for in the contract and particularly all monies withheld, whether assigned or not, shall be subject to being used by the City for the completion of the work in the event that the Contractor should be in default therein.

#### 8.07 PROGRESS OF THE WORK

The contractor shall notify the Engineer forty-eight (48) hours prior to beginning any work and the contractor shall submit for the Engineer's approval a schedule of operations at the time notification of commencement of work is given.

#### 8.08 NOTICE TO RESIDENTS

Not less than two (2) calendar days nor more than five (5) calendar days prior to proceeding with the work in any given area, the Contractor shall notify in writing all residents and tenants directly affected by the construction work. Such notice shall provide the nature of the work, the approximate time for the completion of work, and any anticipated inconveniences. The notice shall be on the contracting firm's letterhead and shall be signed and shall include the project superintendent's name and telephone number. Prior to commencing work in each given area, the Contractor shall furnish the Engineer a copy of the notice given to residents and tenants and shall certify the date, location and method by which the notice was delivered. The Contractor shall also comply with the requirements of Section 11.02.01, "TRAFFIC CONTROL PLAN; NOTIFICATIONS".

For every occurrence when property access, sewer service or water source is to be interrupted by the Contractor's work, the Contractor shall give written notice to all affected residents/tenants not less than two (2) calendar days nor more than five (5) calendar days prior to said interruption. The notice(s) shall be in addition to the initial notice to residents described above.

All costs for compliance with this Section 8.08 shall be included in the various bid items of work; no additional payment will be made therefor.

### 8.09 TIME OF COMPLETION

The Contractor shall complete all or any designated portion of the work called for under the contract in all parts and requirements within the time set forth in the Contract Specifications. The current controlling operation or operations (i.e., the critical path) is to be construed to include any work (e.g., an operation or activity, or a settlement or curing period) considered at the time by the Engineer and the Contractor, which, if delayed or prolonged, will delay the time of completion of the contract.

For contracts whose completion schedule is based on working days, a working day is defined as any day, except as follows:

Saturdays, Sundays and legal holidays declared by the City;

Days on which the Contractor is prevented by inclement weather or conditions resulting immediately therefrom adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 75 percent of the normal labor and equipment force engaged on that operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations; or

Days on which the Contractor is prevented, by reason of requirements in the Contract Specifications, from working on the controlling operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations.

Should the Contractor prepare to begin work at the regular starting time of any day on which inclement weather, or the conditions resulting from the weather, or the condition of the work, prevents the work from beginning at the usual starting time and the crew is dismissed as a result thereof and the Contractor does not proceed with at least 75 percent of the normal labor and equipment force engaged in the current controlling operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations, the Contractor will not be charged for a working day whether or not conditions should change thereafter during that day and the major portion of the day could be considered to be suitable for those construction operations.

Determination that a day is a non-working day by reason of inclement weather or conditions resulting immediately therefrom, shall be made by the Engineer. The Contractor will be allowed fifteen (15) days from the issuance of the weekly statement of working days in which to file a written protest setting forth in what respects the Contractor differs from the Engineer; otherwise, the decision of the Engineer shall be deemed to have been accepted by the Contractor as correct. The Engineer will furnish the Contractor a weekly statement showing the number of

working days charged to the contract for the preceding week, the number of working days of time extensions being considered or approved, the number of working days originally specified for the completion of the contract and the number of working days remaining to complete the contract and the extended date for completion thereof, except when working days are not being charged in conformance with the provisions in Section 8.13, "TEMPORARY SUSPENSION OF WORK", of these Specifications.

For contracts whose completion schedule is based on calendar days, a calendar day shall mean every day of the calendar, including weekends and holidays. Exclusions for inclement weather which prevents the Contractor from performing, as above provided for working days will be permitted unless otherwise specified in the Contract Specifications.

### 8.10 CLEAN-UP DURING CONSTRUCTION

Clean-up during construction shall include, but not be limited to, the removal of all excess soil and other materials or debris from the construction area, and sweeping and cleaning affected streets, and shall be accomplished as soon as practicable and as public necessity and convenience require, as determined by the Engineer.

Failure to comply with the time requirements set forth by the Engineer shall be sufficient cause for the Engineer to temporarily suspend any portion of the work, or all work, until deficiencies are corrected, in accordance with Section 8.07 of these Specifications.

Haul roads to and from excavation sites shall be cleaned and swept periodically during hauling operations. The Engineer may specify, whenever conditions warrant, the intervals at which cleaning and sweeping shall occur. Such prescribed intervals may vary between daily cleaning to weekly cleaning, as conditions may warrant.

No separate payment for clean-up during construction shall be made, and full compensation therefore shall be considered to be included in the various contract bid items of work.

### 8.11 FINAL CLEAN UP

See Section 5.23

### 8.12 CHARACTER OF WORKMEN

If any subcontractor or person employed by the contractor shall fail or refuse to carry out the directions of the Engineer or shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the requisition of the Engineer, and such person shall not again be employed on the work.

### 8.13 TEMPORARY SUSPENSION OF WORK

The Engineer shall have the authority to suspend the work wholly or in part, for such period as he may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as he may deem necessary, due to the failure on the part of the contractor to carry out orders given, or to perform any provisions of the work. The contractor shall immediately obey such order of the Engineer and shall not resume the work until the conditions are favorable and methods are corrected, as ordered or approved in writing by the Engineer.

In the event that a suspension of Work is ordered as provided above, and should that suspension be ordered by reason of the failure of the Contractor to carry out orders or to perform any provision of the contract; or by reason of weather conditions being unsuitable for performing any item or items of Work, which Work, in the sole opinion of the Engineer, could have been performed prior to the occurrence of the unsuitable weather conditions had the Contractor diligently prosecuted the Work when weather conditions were suitable; then Contractor shall not be entitled to compensation (money or time) for the suspension, and the Contractor, at the Contractor's expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by traffic during the period of that suspension as provided in Sections 7.27, "PUBLIC CONVENIENCE", and 7.28, "PUBLIC SAFETY", and as specified in the Contract Specifications. In the event that the Contractor fails to perform the Work above specified, the City may perform that Work and the cost thereof will be deducted from moneys due or to become due the Contractor.

In the event that a suspension of Work is ordered by the Engineer due to unsuitable weather conditions, and in the sole opinion of the Engineer, the Contractor has prosecuted the Work with energy and diligence prior to the time that operations were suspended, the cost of providing a smooth and unobstructed passageway through the Work will be paid for as Extra Work as provided in Section 4.12, "EXTRA WORK", or at the option of the Engineer, that Work will be performed by the City at no cost to the Contractor. If the Engineer orders a suspension of all of the Work or a portion of the Work which is the current controlling operation (i.e., critical path) due to unsuitable weather conditions, and in the sole opinion of the Engineer, the Contractor has prosecuted the Work with energy and diligence prior to the time that operations were suspended, then Contractor shall be entitled to a time extension for the period of the suspension. If the portion of Work suspended is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of time extension will be made on the basis of the then current controlling operation or operations.

If a suspension of Work is ordered by the Engineer, due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the contract, the days on which the suspension order is in effect shall be considered for time extension only if permitted under Section 8.09, "TIME OF COMPLETION".

Should the contractor continue working after receiving a written order from the Engineer to suspend such work, no payment will be made to the contractor for that portion of the work performed during such suspension.

Should the contractor temporarily suspend work for any reason for a period of twenty-four (24) hours or more, exclusive of Saturdays, Sundays or Holidays, he shall notify the Engineer twenty-four (24) hours in advance of reinstating any construction activity.

#### 8.14 RIGHT OF WAY DELAYS

The City makes a diligent effort at securing a clear right of way for the performance of the work required by the contract. For some contracts, it is in the best interests of the City and/or the public to award a contract before all utility relocations, utility undergrounding, right of way purchases, removal of obstructions, relocation of underground facilities by others, or other potential causes of delay are removed. Where known, these will be shown on the Plans with the actions to be taken, and enumerated in the Contract Specifications. The City will make every effort to ascertain the approximate time required to clear the right of way and so indicate in the Contract Specifications. The contractor shall also make a diligent effort by contacting the owner/agency/company of the time expected to clear the right of way before submitting a bid. In so doing, the contractor shall include in his costs any delays that can be expected or result from such relocations or acquisitions. The Engineer may grant a time extension deemed warranted due to such delays, or may temporarily suspend the contract in accordance with Section 8.13, "TEMPORARY SUSPENSION OF WORK". Section 7102 of the State Public Contract Code notwithstanding, no additional compensation will be paid for such delays.

If new and unforeseen right of way delays not contemplated before the award of the contract causes the Contractor to sustain a loss which could not have been avoided by the judicious handling of forces, equipment, and plant, there shall be paid to the contractor that amount that the Engineer may find to be a fair and reasonable compensation for that part of the Contractor's actual loss that, in the opinion of the Engineer, was unavoidable. Payment will be determined on the basis of extra work on a force account basis, or as otherwise agreed to by and between the Engineer and the Contractor, in accordance with Section 4.12, "EXTRA WORK".

#### 8.15 USE OF COMPLETED PORTIONS; CITY'S RIGHT TO COMPLETE

The City shall have the right to take possession of, use, or maintain and protect any completed portions of the Work. However, such possession, use, or maintenance and protection shall not be deemed as accepting any Work, regardless of whether it has or has not been completed in accordance with the Contract documents.

The City has the right to perform some or all of the Contractor's remaining Work if the Contractor fails or refuses to carry out the Work in accordance with the Contract Documents. The City may exercise this right at any time during the Contractor's work, including the closeout or

punch list phases. The City shall first provide written notice to Contractor of Contractor's failure or refusal to perform in accordance with the Contract Documents, and such notice shall demand commencement or correction of such failure or refusal to perform within a reasonable time not to be less than seven (7) days. Such notice need not specifically refer to this provision.

If the Contractor fails to commence correction within said reasonable time, or ever fails to continue correction after expiration of said reasonable time, the City may instruct Contractor to stop performing such Work and notify Contractor that City shall perform such Work itself. Any direction to Contractor to not perform such Work shall act as a deletion of such Work from Contractor's scope of Work, and City may accept the Contractor's remaining contractual scope of Work as complete (pursuant to Section 8.18, "ACCEPTANCE OF CONTRACT") even though the deleted Work may not have been performed yet by City. City may perform the deleted Work at any time by whatever reasonable method the City may deem expedient without prejudice to other remedies the City may have. In the event the City takes bids to complete the Work so deleted, Contractor shall not be eligible for the award of the contract.

The Contractor will be invoiced all of the City's costs of performing the deleted Work, including compensation for additional professional and internally generated services and expenses made necessary by such deletion. The City may withhold the estimated costs from any retention release and/or progress payments due the Contractor, pursuant to Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS". If retention and payments withheld then or thereafter due the Contractor are not sufficient to cover the City's actual costs of completing the deleted Work, the Contractor shall pay the difference to the City. Prior to performing any of the deleted work itself, City may, at its option, tender completion of the work to the Contractor's surety for completion by someone other than Contractor.

#### 8.16 LIQUIDATED DAMAGES

It is agreed by the parties to the contract that in case all the work called for under the contract is not completed before or upon expiration of the limit as set forth in the Special Provisions, damage will be sustained by the City, and that it is and will be impracticable to determine the actual damage which the City will sustain in the event of and by reason of such delay; and it is therefore agreed that the contractor will pay to the City the sum, as provided in the project specific bid and contract documents, per day for each and every days delay beyond the time prescribed to complete the work; and the contractor agrees to pay such liquidated damages as herein provided, and in case the same are not paid, agrees that the City may deduct the amount thereof from any money due or that may become due the contractor under the contract.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the specified time, the City shall have the right to extend the time for completion or not, as may seem best to serve the interest of the City; and if the City decides to extend the time limit for the completion of the contract; the City shall further have the right to charge the contractor, his heirs, assigns or sureties, and to deduct from the final payment

for the work, all or in any part, as the City may deem proper, of the actual cost of engineering, inspection, superintending, and any overhead expense which are directly chargeable to the contract, and which accrue during the period of such extension, except that the cost of final surveys and preparation of final estimate shall not be included in such charges.

The contractor shall not be assessed with liquidated damages nor the cost of engineering and inspection during any delay in the completion of the work caused by an act of God or of the public enemy, acts of the City, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delays of subcontractors due to such causes; provided, that the contractor shall, within fifteen (15) days from the beginning of such delay notify the Engineer in writing of the causes of the delay, and his finding of the facts thereon shall be final and conclusive.

### 8.17 TERMINATION OF CONTRACT

If the contractor should be adjudged as bankrupt, or if he makes a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he or any of his subcontractors should persistently violate any of the provisions of the contract, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough skilled workmen or proper materials, or if he should fail to make prompt payment to the subcontractors or for materials or labor, or persistently disregard laws, ordinances or the instructions of the Engineer, then the City may, upon certificate of the Engineer when sufficient cause exists to justify such action, serve written notice upon the contractor and his surety of its intention to terminate the contract, and unless within five (5) days after the serving of such notice, such violations shall cease and terminate.

In the event of such termination, the City shall immediately serve written notice thereof upon the surety and the contractor, and the surety shall have the right to take over and perform the contract, provided, however, that if the surety within ten (10) days after the serving of the notice of termination does not give the City written notice of its intention to take over and perform the contract or does not commence performance thereof within the ten (10) days stated above from the date of serving of such notice, the City may take over the work and prosecute the same to completion by contract or by any other method it may deem advisable, for the account and at the expense of the contractor, and the contractor and the surety shall be liable to the City for any excess cost occasioned the City thereby, and in such event the City may, without liability for so doing, take possession of and utilize in completing the work such materials, appliances, plant and other property belonging to the contractor as may be on the site of the work and necessary therefore. In such case the contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price shall exceed the expenses of finishing the work, including compensation for additional managerial and administration services, such excess shall be paid to the contractor. If such expense shall exceed such unpaid balance, the contractor shall pay the difference to the City. The expense incurred by the City, as herein provided, and damage incurred through the contractor's default, shall be certified by the Engineer.

## 8.18 ACCEPTANCE OF CONTRACT

When the Engineer has made the final inspection as provided in Section 5.24, "FINAL INSPECTION", and determines that the Work has been fully performed, the Engineer will certify the Work as ready for Acceptance and recommend that the City Council formally accept the Work, and immediately upon and after the Acceptance of the Work by the City Council, the Contractor will be relieved of the duty of maintaining and protecting the work as a whole, and the Contractor will not be required to perform any further work thereon except for warranty work; and the Contractor shall be relieved of the responsibility for injury to persons or property or damage to the work which occurs after the formal Acceptance by the City Council. Within ten (10) days of Acceptance by the City Council, the City shall record a Notice of Completion with the Fresno County recorder's office.

Acceptance of any Work shall not be deemed a waiver of the City's rights to remedy by the Contractor of (a) defective Work covered by warranty or guarantee for which the City gives timely notice to Contractor, and (b) latent defects resulting from defective materials or workmanship discovered after the City's recording of its Notice of Completion.

## 8.19 UTILITY AND NON-STREET FACILITIES; POTHOLING

Attention is directed to Sections 4.07, "EXISTING FACILITIES AND STRUCTURES SHOWN ON PLANS", and 5.10, "PRESERVATION OF PROPERTY". The Contractor shall protect from damage utility and other non-street facilities that are to remain in place, or to be installed, relocated or otherwise rearranged. As used in this Section 8.19, "non-street facilities" means any above or below ground facilities which are not a part of the roadway structural section, curb and gutter, and sidewalk. Utility shall include sewer, water, recycled water, storm drain, and irrigation pipelines, above and below ground electrical and gas facilities, cable or other communications facilities.

It is anticipated that some or all of the utility and other non-street facilities, both above ground and below ground, that are required to be rearranged (as used herein, rearrangement includes installation, relocation, alteration or removal) as a part of the street improvement will be rearranged in advance of construction operations. Where it is not anticipated that the rearrangement will be performed prior to construction, or where the rearrangement must be coordinated with the Contractor's construction operations, the existing facilities that are to be rearranged will be indicated on the plans or in the Contract Specifications. Where a rearrangement is indicated on the plans or in the Contract Specifications, the Contractor will have no liability for the costs of performing the work involved in the rearrangement unless the Plans or Contract Specifications indicate such rearrangement is to be performed by the Contractor.

The right is reserved to the City and the owners of facilities, or their authorized agents, to enter upon the street right of way for the purpose of making those changes that are necessary for

the rearrangement of their facilities or for making necessary connections or repairs to their properties. In compliance with Section 5.15, "COOPERATION", the Contractor shall cooperate with forces engaged in this work and shall conduct operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by the other forces. Wherever necessary, the work of the Contractor shall be coordinated with the rearrangement of utility or other non-street facilities, and the Contractor shall make arrangements with the owner of those facilities for the coordination of the work.

The Contractor shall be aware of the possible existence of underground main or trunk line facilities not indicated on the Plans or in the Contract Specifications and to the possibility that underground main or trunk lines may be in a location different from that which is indicated on the Plans or in the Contract Specifications.

**Prior to commencing any trenching, excavation, or boring operations, or any work that may damage any of the facilities or interfere with their service, the Contractor shall, by potholing or other means approved by the Engineer, ascertain the exact location and depth of underground main or trunk line facilities whose presence is indicated on the Plans or in the Contract Specifications, the location of their service laterals or other appurtenances, and of existing service lateral or appurtenances of any other underground facilities which can be inferred from the presence of visible facilities such as buildings, meters and junction boxes, or manholes.**

If the Contractor cannot locate an underground facility whose presence is indicated on the Plans or in the Contract Specifications, the Contractor shall so notify the Engineer in writing. If the facility for which the notice is given is in a substantially different location from that indicated on the plans or in the special provisions, the additional cost of locating the facility will be paid for as extra work as provided in Section 4.12, "EXTRA WORK".

If the Contractor discovers underground main or trunk lines not indicated on the plans or in the Contract Specifications, the Contractor shall immediately give the Engineer, and the Utility Owner if not the City, written notification of the existence of those facilities. The main or trunk lines shall be located and protected from damage as directed by the Engineer, and the cost of that work will be paid for as extra work as provided in said Section 4.12. The Contractor shall, if directed by the Engineer, repair any damage which may occur to the main or trunk lines. The cost of that repair work, not due to the failure of the Contractor to exercise reasonable care, will be paid for as extra work as provided in said Section 4.12. Damage due to the Contractor's failure to exercise reasonable care shall be repaired at the Contractor's cost and expense.

Where it is determined by the Engineer that the rearrangement of an underground facility is essential in order to accommodate the street or underground improvement and the Plans and Specifications do not provide that the facility is to be rearranged, the Engineer will provide for the rearrangement of the facility by other forces or the rearrangement shall be performed by the Contractor and will be paid for as extra work as provided in said Section 4.12. Alternatively, the

Engineer may direct the rearrangement of the street or underground improvement if movement of the underground facility is not essential.

Should the Contractor desire to have any rearrangement made in any utility facility, or other improvement, for the Contractor's convenience in order to facilitate the Contractor's construction operations, which rearrangement is in addition to, or different from, the rearrangements indicated on the Plans or in the Contract Specifications, the Contractor shall make whatever arrangements are necessary with the owners of the utility or other non-street facility for the rearrangement and bear all expenses in connection therewith.

The Contractor shall immediately notify the Engineer of any delays to the Contractor's operations as a direct result of underground main or trunk line facilities which were not indicated on the Plans or in the Contract Specifications or were located in a position substantially different from that indicated on the Plans or in the Contract Specifications, or as a direct result of utility or other non-highway facilities not being rearranged as herein provided (other than delays in connection with rearrangements made to facilitate the Contractor's construction operations or delays due to a strike or labor dispute). These delays will be considered right of way delays within the meaning of Section 8.14, "RIGHT OF WAY DELAYS", and compensation for the delay will be determined in conformance with the provisions in said Section 8.14. The Contractor shall be entitled to no other compensation for that delay.

Any delays to the Contractor's operations as a direct result of utility or other non-highway facilities not being rearranged as provided in this Section 8.19, due to a strike or labor dispute, will entitle the Contractor to an extension of time as provided in Section 8.16, "TIME OF COMPLETION AND LIQUIDATED DAMAGES". The Contractor shall be entitled to no other compensation for that delay.

Potholes or other excavations performed to determine the location of Utility and Non-Street Facilities, and which potholes or excavations will remain outside the area to be excavated for improvements shown on the Plans or specified in the Contract Specifications, shall be backfilled, compacted, and the surface thereof restored in accordance with Section 19-3, "Structure Excavation and Backfill" of the most current version of the State Standard Specifications. Exception: Potholes or other excavations of diameter (or equivalent dimension if non-circular), of 9 inches or less, or any other pothole or excavation because of depth, shape, or other cause determined by the Engineer not to be feasible to apply the methods of said Section's, shall be backfilled in accordance with the following manner: The bottom 1 foot of the pothole or other excavation shall be backfilled with clean sand; the remainder of the pothole or other excavation shall be backfilled with slurry cement conforming to Section 19-3.02E, "Slurry Cement Backfill," of the State Standard Specifications. The type of surface restoration for such locations shall be directed by the Engineer.

## SECTION 9 - MEASUREMENT AND PAYMENT

### 9.01 MEASUREMENT OF QUANTITIES

- A. All work to be paid for at a contract price per unit of measurement will be measured by the Engineer in accordance with the U.S. Customary Units of Measurement. A ton shall consist of 2,000 pounds avoirdupois.
- B. Quantities of work shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing, and timber shall be considered as being the true length measured along the longitudinal axis.
- C. Volumetric quantities will be determined by the Engineer, and shall be the product of the mean area or vertical or horizontal sections and the intervening horizontal or vertical dimension.

When payment is to be made on the basis of weight, the weighing shall be done on scales furnished by and at the expense of the Contractor, or on other sealed scales regularly inspected by the State of California, Department of Food & Agriculture, Division of Measurements & Standards, or its designated representative. All scales shall be suitable for the purpose intended and shall conform to the Specifications of the State of California, Department of Food & Agriculture, Division of Measurements & Standards.

The scales shall be operated by a weigh-master licensed in accordance with the provisions of the California Business and Professions Code. The Contractor shall furnish a Public Weighmaster's certificate, or a Private Weigh-master's certificate of certified daily summary weight sheets. The operator of each vehicle shall obtain a weight or load slip from the weigher and deliver said slip to the Engineer at the point of delivery of the material.

Other materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in these Specifications, or the Contract Specifications for the particular items involved.

Full compensation for all expense involved in conforming to the requirements specified for measuring and weighing materials shall be considered as included in the unit price paid for the materials being measured or weighed and no additional compensation will be allowed therefor.

### 9.02 COST BREAKDOWN

Upon request of the Engineer, the contractor shall submit in a form acceptable to the Engineer, a schedule showing the subdivision of his contract into its various parts, stating quantities and prices for each item, to be made a basis for checking or computing monthly estimates, if such payments are specified. The prices shall include all costs of each item. The schedule of values shall be

balanced and shall not shift excessive portions of the contract price into any particular part of the Work, especially parts of the Work being performed earlier in the schedule. No payment will be made to the contractor until such schedule has been submitted to and approved by the Engineer, if required by him.

### 9.03 CERTIFIED WEIGHTS

When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system and in accordance with Section 9 of the State of California Standard Specifications.

The contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing the actual weights. The City will accept the certificates as evidence of the weights delivered.

### 9.04 FULL COMPENSATION INCLUDED IN BID AMOUNT

The lump sums and/or unit prices shown in the proposal shall include full compensation for all work and expenses appurtenant to the accomplishment of the project described in these specifications in the manner indicated herein including, but not limited to, all items delineated in these contract documents for which specific bid items are not set up in the Proposal.

### 9.05 FINAL PAY ITEMS

When an item of work is designated as (F) or (S-F) in the Engineer's Estimate, or is otherwise indicated in the Contract Specifications as a Final Pay Item, the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as (F) or (S-F) or indicated otherwise as a final pay item in the Engineer's Estimate shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantities shown in the Engineer's Estimate for a final pay item and the quantity or summation of quantities for the same item shown on the Plans, payment will be based on the quantity shown in the Engineer's Estimate.

#### 9.06 SCOPE OF PAYMENT

The Contractor shall accept the compensation provided in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed Work, for performing all Work contemplated and embraced under the Contract; also for loss or damage arising from the nature of the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the Work until the acceptance by the City and for all risks of every description connected with the prosecution of the Work; also for the expenses incurred in consequence of the suspension or discontinuance of the Work as provided in the Contract; and for completing the Work according to the Plans and Specifications. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of the obligation to make good any defective work or material.

No compensation will be made in any case for loss of anticipated profits.

The lump sums and/or unit prices shown in the bid proposal shall include full compensation for all Work and expenses appurtenant to the accomplishment of the project described in these Standard Specifications in the manner indicated herein, including all items delineated in the Contract documents for which specific bid items are not set up in the bid proposal. The Contractor shall proportionally spread all incidental costs associated with the work for which there are no separate bid items into the amount bid for those items of work for which there are bid items, and no separate or additional payment will be made for any requirement of the Contract not specifically listed on the bid proposal.

#### 9.07 PAYMENT OF EXTRA WORK

Extra work, when ordered and accepted, shall be paid for under a written contract change order in accordance with the terms therein provided. Payment for extra work will be made at the unit price or lump sum price previously agreed upon by the contractor and the Engineer and approved by the City.

When extra work is to be paid for on a force account basis, the contractor shall receive actual cost of all materials furnished by him as shown by his paid vouchers, plus fifteen (15%) percent, and for all labor for the said extra work he shall receive the actual wages paid in the accomplishment of said work, the rates for which shall have been previously determined and agreed to in writing by the Engineer and by the contractor plus fifteen (15%) percent. The price paid for labor by the contractor shall include all payments imposed by State and Federal laws. The contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental

Rates”: which is in effect on the date upon which work is accomplished regardless of ownership of such equipment and any rental or other agreement, if such may exist, for use of such equipment entered into by the contractor. Said publication is hereby made a part of these Standard Specifications.

If it is deemed necessary by the Engineer to use equipment unlisted in the said publication, a suitable rental rate for such equipment will be established by the Engineer. The contractor may furnish any cost data which might assist the Engineer in the establishment of such rental rate. The rental rates paid as above provided shall include the cost of fuel, oil, lubrication supplies and small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. To the equipment rental rate thus established shall be added the amount of fifteen (15%) percent.

The contractor shall maintain his records in such a manner as to provide a clear distinction between the direct costs of extra work paid for on a force account basis and the costs of other operations.

The contractor shall furnish the Engineer report sheets in duplicate of each day's extra work paid for on a force account basis no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the contractor, subcontractor, or other forces. The daily report sheet shall provide names or identifications and classifications of workmen, the hourly rate of pay and hours worked, and also the size, type and identification number of equipment and hours operated.

Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily report sheets, if available. Said daily report sheets shall be signed by the contractor or his authorized agent.

The Engineer will compare his records with the daily report sheets furnished by the contractor, make any necessary adjustment, and compile the costs of work to be paid for on a force account basis. The Compilation, when agreed upon and signed by both parties, shall become the basis of payment for the work performed.

Payment as provided above shall constitute full compensation for the contractor for performance of work paid for on a force account basis, and no additional compensation will be allowed therefor.

## 9.08 PARTIAL (“PROGRESS”) PAYMENTS AND RETENTIONS

By the twentieth day of each month, the Contractor shall, on forms approved by the Engineer, furnish the Contractor’s estimate of work completed prior to that date based on the schedule of values submitted by the Contractor pursuant to Section 9.02, “COST BREAKDOWN”.

The estimate and application must include the Contractor's previous month's daily logs and updated monthly schedule, or the City has the right to reject it. For materials delivered to the site and which are eligible for partial payment, the amount of any material to be considered in making an estimate will in no case exceed the amount thereof which has been reported by the Contractor to the Engineer on forms approved by the Engineer properly filled out and executed, including accompanying documentation as therein required, less the amount of the material incorporated in the work to the time of the estimate. Only materials to be incorporated in the work will be considered. The estimated value of the material established by the Engineer will in no case exceed the contract price for the item of work for which the material is furnished. Payment requests submitted after the 20th day of the month will not be processed for payment in the following month, but will be processed for payment in the next succeeding monthly payment period, when such payment will become due and payable.

The Engineer shall review, and revise if necessary, the Contractor's progress payment application. If the City determines that the application is not a proper payment request, the City shall return it to Contractor as soon as practicable with an explanation of why it is not proper, but not later than seven (7) days after receipt. If the Contractor and City cannot agree on the amount of work performed or other aspects of the application, then the Contractor shall resubmit using the Engineer's version. (If the Contractor feels that it should be paid more, it may follow the claims process under Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS"). The City shall make the payment within thirty (30) days of the Contractor's submittal of an undisputed and properly submitted payment application.

The City shall retain five (5) percent of the estimated value of the work done and five (5) percent of the value of materials so estimated to have been furnished and delivered and unused as part security for the fulfillment of the contract by the Contractor. At the discretion of the Engineer, at any time after fifty (50) percent of the work has been completed, if the Engineer finds that satisfactory progress is being made, the City may reduce the amount retained from any of the remaining partial progress payments in accordance with Section 9203 of the State Public Contract Code.

The City shall pay monthly to the Contractor, while carrying on the Work, the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provisions of the Contract. No monthly estimate or payment shall be required to be made when, in the judgment of the Engineer, the Work is not proceeding in accordance with the provisions of the contract. No monthly estimate or payment shall be construed to be an acceptance of any defective work or improper materials. Attention is directed to the prohibitions and penalties pertaining to unlicensed contractors as provided in Business and Professions Code Sections 7028.15(a) and 7031.

## 9.09 STOP NOTICES; CITY’S RIGHT TO WITHHOLD PAYMENTS

In addition to the five (5) percent withheld pursuant to Section 9.08, “PARTIAL (“PROGRESS”) PAYMENTS AND RETENTIONS,” the City may withhold or nullify the whole or any part of any partial or final progress payment or any release of retention, to such extent as may reasonably be necessary to protect the City from loss on account of:

- a. Defective work not remedied, irrespective of when any such work be defective;
- b. Failure of the Contractor to make proper payments for labor, material, equipment, other facilities, or to subcontractors;
- c. Any penalties provided in these Standard Specifications for failure of the Contractor to carry out specific orders of the Engineer.
- d. Stop Notices pursuant to Civil Code section 3186, unless the Contractor at its sole expense provides a bond or other security satisfactory to the City in the amount of at least one hundred twenty-five percent (125%) of the claim, in a form satisfactory to the City, which protects the City against such claim. Any stop notice release bond shall be executed by a California admitted, fiscally solvent surety, completely unaffiliated with and separate from the surety on the payment and performance bonds, that does not have any assets pooled with the payment and performance bond sureties. The City may also withhold for the estimated reasonable cost of stop notice litigation to be incurred. For any stop notice resolved and/or released, the City may withhold for any reasonable cost of litigation actually incurred for that stop notice;
- e. Liquidated damages against the Contractor, whether already accrued or estimated to accrue in the future;
- f. Reasonable doubt that the Work can be completed for the unpaid balance of any Contract Sum or by the completion date;
- g. Damage to the property or work of the City, another contractor, or subcontractor;
- h. Unsatisfactory prosecution of the Work by the Contractor, and/or failure to perform all required Work;
- i. Failure to store and properly secure materials;
- j. Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed change orders, and verified reports;
- k. Failure of the Contractor to maintain and submit record as-built drawings;
- l. Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- m. Unauthorized deviations from the Contract Documents;
- n. Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates;
- o. Subsequently discovered evidence or observations nullifying the whole or part of a previously issued Change Order or Certificate for Payment;
- p. Previous overpayment to Contractor;

- q. Credits owed to the City for reduced scope of work or work that the City otherwise permits Contractor to not perform, and such credits will be based on the reasonable bid value of the unperformed work, including markups for overhead and profit;
- r. The estimated value of performing work deleted pursuant to Section 8.15, "USE OF COMPLETED PORTIONS; CITY'S RIGHT TO COMPLETE"
- s. False claims by Contractor;
- t. Breach of any provision of the Contract Documents;
- u. Potential loss, liability or damages to the City that is potentially caused by the Contractor; and
- v. As permitted by other provisions in the Contract.

The City shall provide written notice to Contractor of items for which the City is withholding from a payment at the time that the payment is being processed. To claim wrongful withholding by the City, or if Contractor otherwise disputes any amount being withheld, Contractor must follow the claim procedures of Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS". Upon request of the Contractor from whose payment or release the City withheld funds, the Contractor shall be given a written copy of the City's reasons for withholding. When the grounds for withholding funds are removed, payment or release shall be made for amounts withheld because of them. No interest shall be paid on any amounts withheld due to the failure of the Contractor to perform in accordance with the terms and conditions of the Contract Documents.

In addition to withholding amounts permitted by the Contract and statutes (including but not limited to Public Contract Code section 7107), the City may withhold an additional 50% contingency from any progress payment or retention release for any unknown, uncertain or estimated withhold amount. Once the withhold amount becomes known and certain, then the City shall continue to withhold the known and certain amount and credit, pay or release the remainder, if any, to Contractor. If the known and certain amount exceeds the amount previously withheld, then the City may withhold more from Contractor to cover the excess amount, if unpaid contract funds or retention funds are available for withholding.

The City's withholdings of any unpaid or unreleased amounts for costs, damages and claims against the Contractor shall take priority over any third party claims against the unpaid or unreleased amounts, including stop notices.

Any overpayment to the Contractor by the City, and any failure to withhold an amount from payment that the City had the right to withhold, shall not constitute a waiver by the City of its rights to withhold for such amounts from future payments to the Contractor or to otherwise pursue those amounts from the Contractor.

For any stop notice enforcement action against the City filed by any of the Contractor's subcontractors or suppliers of any tier, the Contractor shall defend and indemnify the City, and its officers, agents and employees, against any and all liability, loss, and damages.

## 9.10 PAYMENT OF WITHHELD FUNDS (Substitutions for 5% retention)

Reference is made to the retention provisions of Section 9.08, "PARTIAL ("PROGRESS") PAYMENTS AND RETENTIONS". Upon the Contractor's request, pursuant to Public Contract Code Section 22300, the City will make payment of funds withheld from progress payments to ensure performance of the contract if the Contractor deposits in escrow with the City or with a bank acceptable to the City, securities equivalent to the amount withheld. The Contractor shall be beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon. Upon satisfactory completion of the Contract, the securities shall be returned to the Contractor.

Alternatively, upon the Contractor's request, the City will make payment of retentions earned directly to an escrow agent. The Contractor may direct the investment of the payments into securities, and the Contractor shall receive the interest earned on the investments upon the same terms provided for securities deposited by the Contractor. Upon satisfactory completion of the contract, the Contractor shall receive from the escrow agent all securities, interest and payments received by the escrow agent from the City, pursuant to the terms in Section 22300 of the Public Contract Code.

Securities eligible for investment shall include those listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by the Contractor and the City.

The escrow agreement used pursuant to this Section 9.10 shall be substantially similar to the "Escrow Agreement for Security Deposits In Lieu of Retention" in Section 22300 of the Public Contract Code, deemed as incorporated herein by reference. The Contractor shall obtain the written consent of the surety to the agreement.

Any of the alternatives to the retentions normally withheld by the City are subject to the provisions of Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS", and to the approval of the City Finance Director.

## 9.11 NOTICE OF POTENTIAL CLAIM

The contractor shall not be entitled to the payment of any additional compensation for any act or failure to act by the Engineer including failure or refusal to issue a change or order, or for the happening of any event, thing, occurrence, or other cause unless he shall have given the Engineer due written notice of potential claim as hereinafter specified.

The written notice of potential claim shall set forth the reasons for which the contractor believes additional compensation will or may be due, the nature of costs involved, and, in so far as possible, the amount of the potential claim. The said notice as above required must have been

given to the Engineer prior to the time that the contractor shall have performed the work giving rise to the potential claim for additional compensation.

It is the intention of this Section 9.11, that differences between the parties arising under and by virtue of the contract, be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The contractor hereby agrees that he shall have no right to additional compensation for claim that may be based on any such act, failure to act, event, thing, or occurrence, for which no written notice of potential claim as herein required was filed.

In the event that a dispute over the conduct or payment of any portion of the Work was not resolved by issuance of a contract change order or other agreement between the Contractor and the Engineer, and it is the intent of the Contractor to submit a formal claim to resolve the matter, the Contractor shall file with the Engineer a written notice of such intent pursuant to Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS". Such notice of potential claim shall be filed at the earliest possible time to permit early resolution, if possible, but in any case, within 5 calendar days of the time the dispute first arose. The notice shall provide the nature and circumstances involved in the dispute, which shall remain consistent throughout the dispute.

## 9.12 PROGRESS PAYMENTS

The contractor shall, once each month, cause an estimate in writing to be made of the total amount of the work done and acceptable material furnished and delivered by the contractor on the ground and not used, or acceptable materials furnished and stored for use on the contract, if such storage is within the limits of the project, and is subject to or under the control of the City at the time of such estimate, and the value thereof. The Engineer shall have the authority to adjust the items as submitted on the estimate in accordance with his judgement of the amount of work performed or materials on hand.

The City shall retain five (5%) percent of the value of the materials so estimated to have been furnished and delivered and unused or furnished and stored as afore-mentioned as part security for the fulfillment of the contract by the contractor. The City shall also retain five (5%) percent of the value of all work done from each monthly payment. In accordance with the provisions of California Government Code Section 4590, substitution of securities may be made for any monies withheld by the City to insure performance under this contract. At the request and expense of the contractor, securities equivalent to the amount withheld pursuant to this Section 9.10 shall be deposited with the City or with a State or Federally chartered bank as the escrow agent, who shall pay such monies to the contractor upon satisfactory completion of the contract and the expiration of the specified time following recordation of the Notice of Completion as set forth in these Standard Specifications or the Special Provisions during which said amounts are subject to lien by labor and materials suppliers. Securities eligible for investment under this Section shall include those listed in California Government Code Section 16430, or bank or

savings and loan certificates of deposit. The contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive the interest thereon.

The City shall pay monthly to the contractor while carrying on the work the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provisions of the contract. No such estimate or payment shall be required to be made when, in the judgement of the Engineer, the work is not proceeding in accordance with the provisions of the contract, or when, in his judgement, the total value of the work done since the last estimate amounts to less than three hundred (\$300.00) dollars.

No such estimate or payment shall be considered to be an acceptance of any defective work or improper materials.

The contractor shall request such payment on a form approved by the Engineer which shall be properly completed and executed.

The estimated value of the work shall in no case exceed the price for the contract item of work in which the material is to be incorporated.

### 9.13 FINAL PROGRESS PAYMENT

Provided no notices of potential claim, proposed change orders, or claims are pending under Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS", the Engineer shall, after the completion of the Contract, make a final estimate of the amount of work done thereunder and the value of such work; and the City shall pay the entire sum so found to be due after deducting therefrom five (5) percent of the final estimate, or other amounts as provided in Section 9.08, "PARTIAL ("PROGRESS") PAYMENTS AND RETENTIONS" and Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS," to be retained following completion of the work.

If a notice of potential claim, proposed change order, or claim is pending under Section 4.13, "NOTICES, CHANGE ORDERS, AND CLAIMS" and is not resolved in time necessary for the processing of the final monthly progress payment as provided in the above paragraph, the Engineer shall cause a semifinal estimate to be prepared, and the Contractor shall be paid any amounts due less any retentions as provided in Section 9.08, "PARTIAL ("PROGRESS") PAYMENTS AND RETENTIONS" and Section 9.09, "STOP NOTICES; CITY'S RIGHT TO WITHHOLD PAYMENTS". Upon resolution of the procedures under said Section 4.13, a final estimate will be prepared as above provided, and a final progress payment shall be made.

### 9.14 FINAL PAYMENT

The Engineer shall, after the completion of the contract, make a final estimate of the amount of work done thereunder, and the value of such work, and the City shall pay the entire sum

so found to be due after deducting therefrom five (5%) percent of the final estimate to be retained following final acceptance of the work. The final retained payment shall not be due and payable until the expiration of thirty-five (35) days from the date of recordation of the notice of completion.

It is mutually agreed between the parties to the contract that no certificate given or payments made under the contract, except the final certificate or final payment, shall be conclusive evidence of the performance of the contract, either wholly or in part, and no payment shall be construed to be an acceptance of any defective work or improper materials.

And the contractor further agrees that the payment of the final amount due under the contract, and the adjustment and payment for any work done in accordance with any alterations of the same, shall release the City, the City Council, and the Engineer from any and all claims or liability on account of work performed under the contract or any alteration therefore.

#### 9.15 FINAL PAYMENT TO RELEASE OWNER

The acceptance, without notice of potential claim, by the Contractor of the final payment shall be and shall operate as a release to the Owner (City) of all claims and all liability to the Contractor for all things done or performed for or relating to the work and for every act and neglect of the City and others relating to or arising out of the work, excepting only the Contractor's claims, if any, for amounts withheld by the City, upon final payment. However, no payment, final or otherwise, shall operate to release the Contractor or his sureties from any obligation upon or under this Contract or the Contractor's bond.

#### 9.16 PAYMENT OF RETENTION

Retention shall be released at the latest sixty (60) days after the occurrence of any of the definitions of "Completion" for purposes of Public Contract Code Section 7107 (see definitions of "Completion" in Section 1.03h). Any final payment and release of retentions will exclude any amounts withheld in conformance with Section 9.09, "STOP NOTICES; RIGHTS OF THE CITY TO WITHHOLD PAYMENTS", and Public Contract Code section 7107. When specified in the Contract Specifications, certain portions of the amount retained pursuant to Section 9.08, "PARTIAL ("PROGRESS") PAYMENTS AND RETENTIONS", may be withheld until the satisfactory completion of a ninety (90) day maintenance period required for work pertaining to the installation of landscaping and irrigation facilities in accordance with Sections 31.04 "INSTALLATION AND MAINTENANCE".

## SECTION 10 – MOBILIZATION

Mobilization shall consist of preparatory work and operations, including those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

The contract lump sum price paid for mobilization shall include full compensation for furnishing all labor, materials, equipment and incidentals, and for doing all the work involved in mobilization as specified herein.

If the contract does not include a contract pay item for mobilization as above specified, full compensations for any necessary mobilization required shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

## SECTION 11 – TRAFFIC CONTROL; CONSTRUCTION TRAFFIC CONTROL DEVICES

### 11.01 OVER-ALL

This work shall consist of providing for the convenience and safety of traffic in connection with the Contractor's operations. Traffic control shall be furnished, provided and maintained in accordance with Section 11.02.01, "Traffic Control Plan; Notifications," by the Contractor at all times throughout the life of the Contract. All traffic control devices used in the performance of traffic control shall conform to the requirements of Section 11.03, "CONSTRUCTION TRAFFIC CONTROL DEVICES." The Contractor shall also comply with the provisions of Section 7.27, "PUBLIC CONVENIENCE", Section 7.28 "PUBLIC SAFETY" and Section 12 TEMPORARY TRAFFIC CONTROL of the State Standard Specifications.

### 11.02 TRAFFIC CONTROL

#### *11.02.01 Traffic Control Plan; Notifications*

A. Traffic Control Plan: Unless otherwise specified in Contract Specifications, a Traffic Control Plan shall be prepared by the Contractor for all Contracts, and submitted to the Engineer for approval prior to beginning construction. Construction shall not begin without an approved plan. The Traffic Control Plan shall conform to the requirements of this Section 11, "TRAFFIC CONTROL; CONSTRUCTION TRAFFIC CONTROL DEVICES," and Part 6 of the California MUTCD. Where road closures are anticipated or required, the Contractor shall comply with Section 4.15, "DETOURS", and Section 11.02.04, "ROAD CLOSURES," for special plan preparation requirements.

B. Notifications: At least forty eight (48) hours in advance of beginning work in any street, alley, or other public thoroughfare, the Contractor shall notify the Engineer, the City Police and Fire Departments, all ambulance companies, and any other jurisdictional agencies involved and comply with their requirements regarding traffic control and public convenience and safety.

In addition, the Contractor shall keep the City Fire Department, Police Department and ambulance companies informed at all times as to the exact location and progress of the work and shall notify them immediately of any streets closed to traffic or impassable for fire fighting or other safety equipment.

In accordance with Section 8.08, "NOTICE TO RESIDENTS", residents along the work area shall be provided passage as far as practicable, as determined by the Engineer. Convenient access to driveways, houses and businesses along the road, street, alley or other work area shall be maintained; temporary trench crossings shall be provided and maintained in good condition as

required to provide said access. All costs for providing all noticing specified herein shall be included in the cost of providing traffic control.

#### *11.02.02 Contractor's Operations*

The Contractor shall so conduct his operations as to cause the least possible obstruction and inconvenience to public traffic and abutting property owners (or tenants), and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights and safety of the public. Unless otherwise provided by the Contract Specifications or approved by the Engineer, all traffic shall be permitted to pass through the work.

The Contractor shall provide such flagmen, and furnish, erect, and maintain such fences, barriers, lights, and signs as are necessary to give adequate warning to the public at all times throughout the duration of the contract that the road, street, or other work area is under construction and of any dangerous condition to be encountered as a result thereof. Traffic control conforming to Part 6 of the California MUTCD shall be maintained at all times in, through, and surrounding the construction site. Compliance with the requirements of said manual shall be considered as a minimum requirement and the Contractor shall provide additional safety devices when necessary to maintain a safe condition. The Contractor may be required to cover certain signs which regulate or direct public traffic to roadways that are not open to traffic. The Engineer will determine which signs shall be covered.

Safe, adequate, continuous and unobstructed pedestrian and vehicular access shall be maintained to fire hydrants, residences, commercial and industrial establishments, etc., unless other arrangements satisfactory to the owners have been made. Safe and adequate pedestrian zones and public transportation stops, as well as pedestrian crossings of the work at intervals not exceeding 300 feet also shall be maintained unless otherwise approved by the Engineer.

Where public traffic and/or emergency vehicles must be routed over areas under construction, the contractors operations shall be conducted in such a manner as to provide a smooth and stable roadway surface at all times when the specific area is not under actual construction. Dust control conforming to Section 7.19, "AIR POLLUTION AND DUST CONTROL," shall be provided at all times. Alternating traffic over work areas, use of one-way traffic control with flaggers, or any other methods used by the Contractor shall be approved by the Engineer and shall conform to Part 6 of the California MUTCD.

#### *11.02.03 Flaggers*

Flaggers while on duty and assigned to traffic control or to give warning to the public that the street or other area is under construction and of any dangerous conditions to be encountered as a result thereof, shall perform their duties and shall be provided with the necessary equipment in conformance with Part 6 of the California MUTCD. The equipment shall be furnished and kept clean and in good repair by the Contractor at the Contractor's expense.

#### *11.02.04 Road Closures*

Where road closures and detours are required by the Contract Specifications or the plans, the Contractor shall implement such closures in accordance with the provisions thereof. Notifications shall be provided in accordance with Section 11.02.01, "TRAFFIC CONTROL PLAN; NOTIFICATIONS."

Where road closures are prohibited by the Contract Specifications and work must pass through or over areas of construction, the Contractor shall conduct his operations in accordance with Section 11.02.02, "CONTRACTOR'S OPERATIONS."

Where road closures are not prohibited by the Contract Specifications, and the Contractor for his own convenience requests a closure, such request shall be made to the Engineer in writing not less than ten (10) working days prior to the requested date of closure. Such request shall be accompanied by a Traffic Management Plan (Road Closure and Detour Plan) prepared by a Civil or Traffic Engineer registered by State of California. The Plan shall conform to the appropriate Part(s) of the California MUTCD. The Engineer shall respond to the Contractor not less than four (4) working days prior to the requested date of closure. If approved by the Engineer, the Contractor shall implement the plan as prepared, including any amendments made by the Engineer thereto. Notifications shall be made in accordance with Subsection 11.02.01, "TRAFFIC CONTROL PLAN; NOTIFICATIONS."

Where the Engineer determines that non-emergency traffic or other conditions warrant closure of a road, the Engineer may direct the Contractor to immediately prepare a Traffic Management Plan no later than twenty four (24) hours for review by the Engineer. Alternatively, the City may prepare such Plan. The Contractor shall implement the Plan at the time prescribed by the Engineer.

Changed conditions considered to be dangerous or emergencies requiring immediate closure of a road shall immediately be brought to the Engineer's attention. If deemed warranted by the Engineer, the Contractor shall immediately implement the closure in accordance with the instructions given by the Engineer.

#### *11.02.05 Deficiencies*

Should the Contractor appear to be neglectful or negligent in furnishing warning devices and taking protective measures as provided in Section 11.02.02, "CONTRACTOR'S OPERATIONS," the Engineer may direct the Contractor's attention to the existence of a hazard and the necessary warning devices shall be furnished and installed and protective measures taken by the Contractor at the Contractor's expense. Should the Engineer point out the inadequacy of warning devices and protective measures, that action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate the obligation to furnish and pay

for these devices and measures.

Reference is made to Section 7.28, "PUBLIC SAFETY", and the penalties described therein for failure to correct hazards identified by the Engineer. In addition to penalties to correct hazardous conditions, the Contractor shall pay a penalty of \$250.00 per day for each day in which work is begun prior to implementing traffic control in conformance with this Section 11. In conformance with Section 9.09, "STOP NOTICES; RIGHT TO WITHHOLD PAYMENTS," said costs and penalties shall be deducted from any monies owed the Contractor or shall be invoiced to the Contractor.

### 11.03 CONSTRUCTION TRAFFIC CONTROL DEVICES

All traffic control devices required in these specifications and furnished by the Contractor shall conform to the requirements of Section 12, "Temporary Traffic Control," of the State Standard Specifications. All references therein to the MUTCD and MUTCD California Supplement shall mean the California MUTCD as defined in Section 1.03, "DEFINITIONS".

### 11.04 MEASUREMENT AND PAYMENT

Unless otherwise provided in the Contract Specifications, all costs for providing Traffic Control and Construction Area Traffic Control Devices as required in this Section 11 shall be measured and paid for at the lump sum price bid for Traffic Control, and includes compensation for furnishing all labor, materials, tools, equipment, signs, devices, pavement markings, channelizers, flaggers as required, road closures and detours as shown on the Plans or specified in the Contract Specifications, temporary fences, securing approval of traffic control plans, notifications, providing convenient access to adjacent residences and businesses, all devices required for the control of traffic as herein provided, and all incidentals and work required for furnishing Traffic Control and Construction Area Traffic Control Devices.

At the discretion of the Engineer, monthly progress payments may be prorated on the basis of the ratio that the completed dollar amount of the work bears to the total contract dollar amount, less any other prorated items.

Where no bid item for Traffic Control is provided, all costs for providing Traffic Control and Construction Area Traffic Control Devices shall be included in the various bid items of work; no additional payment will be made therefor.

Where road closures and detours are provided for the convenience of the Contractor which are not otherwise shown on the Plans to be constructed, all costs shall be borne by the Contractor for such road closures and detours, including preparation of the required Traffic Management Plan. No additional payment will be made therefor.

Where the Engineer determines that non-emergency, emergency, or hazardous conditions not created by the Contractor, nor are due to the failure of the Contractor to act or use due diligence and care in performance of the work, warrants road closures and detours which are not otherwise shown on the Plans to be constructed, the cost thereof shall be paid for as extra work in accordance with Section 9.07, "PAYMENT OF EXTRA WORK", including preparation of a Traffic Management Plan if so directed by the Engineer.

Where road closures and detours are made necessary due to conditions created by the Contractor, or due to the failure of the Contractor to act or use due diligence and care in the performance of the work, and where no closure or detour was otherwise contemplated, the Contractor shall be responsible for the cost thereof including the cost of preparing a Traffic Management Plan. No additional payment will be made therefor.

## SECTION 12 - CLEARING AND GRUBBING

### 12.01 DESCRIPTION

This work shall consist of removing all objectionable material from within the street or alley right-of-way, along the site of pipeline construction or fence construction, and such other areas as may be designated on the plans or Special Provisions to be cleared and grubbed. Clearing and grubbing operations shall be performed in advance of construction operations and in accordance with these Standard Specifications and with the appropriate sections of the State of California Standard Specifications.

### 12.02 PROTECTION OF EXISTING IMPROVEMENTS

The contractor's attention is directed to Section 7.12, "PRESERVATION OF PROPERTY" of these Standard Specifications. Only those items or areas designated or marked shall be removed or cleared.

### 12.03 CONSTRUCTION

Clearing and grubbing shall conform to the provisions in Section 17-2 "CLEARING AND GRUBBING" of the State of California Standard Specifications and these provisions.

Unless otherwise specified, the entire area within the project limits shall be cleared and grubbed. No payment will be made to the contractor for clearing and grubbing outside these limits, unless such work is authorized by the Engineer.

All of the work shown on the plans and included in these Standard Specifications and the Special Provisions that is located in the public streets in the City of Reedley shall be done in accordance with City Ordinances regulating the use of public streets within the City, except as otherwise provided herein.

The contractor shall inform himself as to all regulations and requirements of the City of Reedley and shall conduct his operations in compliance therewith.

The contractor shall remove and dispose of all pavement, vegetation growth, such as brush, trees, stumps, roots, grass, and all rubbish, debris, or structures from the work site or other areas designated to be cleared and grubbed. No such material will be allowed in or under backfill material or embankments. Trees and other vegetation not to be removed shall be protected from damage in accordance with Section 7.12 of these Specifications.

Within the limits of clearing, all stumps, large roots, buried logs, and all other organic material shall be removed three (3) feet below the existing ground surface or six (6) feet below finished grade, whichever is deeper.

Concrete removal shall conform to the provisions in Section 15, "EXISTING FACILITIES," of the State of California Standard Specifications and these provisions. Where a portion of an existing concrete facility is to be removed, it shall be cut to a minimum depth of one and one-half (1 1/2") inches with an abrasive type saw at the first scoring line at, or outside, the planed joint and removed without damage to any portion that is to remain in place. If curbs and gutters cannot be cut off square and neat, the entire curb and gutter shall be removed to the nearest weakened plane or expansion joint. No patching at expansion joints will be permitted.

All concrete (Portland or Asphalt) and oil dirt within the right-of-way shall be removed by the contractor unless designated to remain on the plans. Existing drain wells, drainage structure, irrigation lines, structures and headwalls to be abandoned shall be removed to at least three (3') feet below the surface and backfilled. Manholes to be abandoned shall be abandoned as specified in Sections 29.02, "MANHOLES AND MATERIALS," of these Standard Specifications.

Where existing house foundations and floor slabs overlap into the project area, the whole foundation will be removed. The portion beyond and outside the project area will be considered within the project area and included in the bid price of removing concrete.

Tree branches extending over the roadway which interfere with the work shall be trimmed by the City at the request of the contractor upon 48 hours prior notice to the time such removal is required.

#### 12.04 REMOVAL AND DISPOSAL OF MATERIALS

Disposal of removed material shall be done in accordance with State of California Standard Specifications, Section 17 "DISPOSAL OF MATERIALS" and the Special Provisions.

Compensation for all costs involved in disposing of materials as specified including all costs of hauling shall be included in the payment for clearing and grubbing as stated herein or in the Special Provisions and no additional payment will be made therefore.

#### 12.05 PAYMENT

Where a contract item is provided, clearing and grubbing will be paid for on a lump-sum basis. Where no contract item is provided, the cost for clearing and grubbing shall be included in the various bid items requiring clearing and grubbing or as set forth in the Special Provisions and no additional payment will be made therefore.

The lump-sum price paid, or the price paid when included with other items, for clearing and grubbing shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in clearing and grubbing as shown on the plans, as specified in these Specifications, or the Special Provisions, and as directed by the Engineer, including the removal and disposal of all the resulting materials.

## SECTION 13 - EARTHWORK

### 13.01 DESCRIPTION

This work shall consist of performing all excavation and/or placing compacted fill to prepare the roadway prism and area adjacent thereto for the placement of improvements as shown on the plans.

The work shall also include any excavation and backfilling required to install structures, sewer pipelines, storm drain pipelines, water lines, and other underground conduits, and their appurtenances at the locations and to the lines and grades as shown on the plans, as shown on the Standard Plans, and as specified in these Standard Specifications, the Special Provisions, and in conformance with Section 19, "EARTHWORK," of the State of California Standard Specifications and as directed by the Engineer.

### 13.02 PRESERVATION OF PROPERTY

The contractor's attention is directed to Section 7.12 of these specifications regarding preservation of existing improvements and utilities.

Prior to starting excavation and subgrade preparation, the contractor shall lower all existing manholes and water valve casings and lids to a depth of six (6") inches below the finish elevation of the subgrade.

All frames and lids for manholes and water valves shall be inspected by the Engineer and judged as to their suitability for reuse on the job. If they are found unsuitable, they shall be salvaged in accordance with Section 6.07 of these Standard Specifications. New lids and frames will be supplied by the City, unless otherwise specified in the Contract Special Provisions. No additional payment will be made to the contractor for salvaging the unsuitable frames and lids and utilizing those supplied by the City.

The existing frame and lid for manholes, if in acceptable condition, may be temporarily mortared to the existing manhole cone or the contractor shall supply a temporary metal lid to cover the opening of the manhole and store the existing manhole frame and lid for use later to raise the manhole to grade.

Water valve casings shall be lowered to six (6") inches below the finish elevation for the subgrade and covered, if in acceptable condition, with the existing valve cover or covered with some other means acceptable to the Engineer.

Prior to covering up any manholes or water valves that have been lowered, the contractor shall reference their locations so as to facilitate the raise of the manholes or water valves to grade at a later date.

The contractor shall return after the final street paving has been placed and raise to grade in accordance with Sections 27, "SEWER AND STORM DRAIN PIPE," 29, "SEWER AND STORM DRAIN STRUCTURES," and 30, "DOMESTIC WATER FACILITIES," of these Specifications for all manholes and water valves lowered as a result of roadway excavation.

Payment for lowering, protecting and returning to raise to grade manholes and water valves shall be made on the unit price bid per each and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and doing all work involved in lowering, protecting, covering, and returning to raise to grade all manhole and water valves as shown on the plans, on the Standard Plans, and as specified in these Standard Specifications, the Special Provisions, and as directed by the Engineer.

### 13.03 DISPOSAL OF UNSUITABLE AND EXCESS MATERIAL

All excess and unsuitable material shall be removed and disposed of in accordance with this Section 13.03 and State of California Standard Specifications.

Unsuitable material encountered below the natural ground surface in embankment areas or below the grading plane in excavation areas shall be excavated and disposed of as directed by the Engineer. Unsuitable material is defined as material the Engineer determines to be:

A. of such unstable nature as to be incapable of being compacted to specified density using ordinary methods at optimum moisture content; or

B. too wet to be properly compacted and circumstances prevent suitable in-place drying prior to incorporation into the work; or

C. otherwise unsuitable for the planned use.

The presence of excessive moisture in a material is not, by itself, sufficient cause for determining that the material is unsuitable.

When unsuitable material is removed and disposed of, the resulting space shall be backfilled with material suitable for the planned use.

### 13.04 ROADWAY EXCAVATION

- a. **Description:** Roadway excavation shall consist of all excavation involved in the grading and construction of roadway improvements, including paving, concrete curbs and gutters, sidewalks, alley approaches, driveway approaches, and valley gutters. All work shall conform to this Section 13.04, Section 19-2, "ROADWAY EXCAVATION", of the State of California Standard Specifications and these provisions.
- b. **Compaction:** Relative compaction within the public right-of-way shall be determined by Test Method California No. 216.

Compactive effort shall be applied to all areas where pavement or concrete improvements are to be placed or constructed. The relative compaction under paving areas and under curb and gutter shall be ninety-five (95%) percent and under sidewalks shall be ninety-five (95%) percent to a depth of six (6") inches below the finish grade of the subgrade in excavation. The relative compaction of all embankment material shall be ninety (90%) percent unless the special provisions require a higher relative compaction.

The cost of compaction under paving areas shall be included in the cost of roadway excavation.

The cost of compaction under concrete improvements shall be included in the various bid items for concrete improvements.

No compaction tests of subgrade shall be made until such time as the subgrade is finished to within one-tenth of one foot (0.1') of finished subgrade and the Engineer has been notified of the time that such compaction tests will be made. The Engineer shall specify the locations where compaction tests are to be made.

- c. **Imported Borrow:** All imported borrow shall have a minimum "R" value of 50 unless the Plans or Special Provisions indicate otherwise. Testing to determine the "R" value of the imported borrow shall be made in accordance with Test Method California No. 301 of the State of California Standard Specifications and shall be at the expense of the Contractor.
- d. **Subgrade:** The preparation of subgrade for all paved areas shall conform to the provisions of Section 19 of the State of California Standard Specifications and these provisions. Relative compaction of the subgrade shall be 95%.

The subgrade shall be accurately graded and compacted to proper profile and cross section and at elevations which will result in the proper final grades when the specified thicknesses of aggregate subbase, base, and/or paving have been applied.

The finished subgrade shall not vary from the planned grade by more than 0.05 foot at any point. The contractor shall not place any aggregate subbase or base material or asphalt paving until the subgrade is in a condition satisfactory to the Engineer.

- e. **Miscellaneous Highway Facilities:** The removing, reconstructing, adjusting, remodeling, and salvaging of the various highway facilities shall conform to the provisions in Section 15 of the State Standard Specifications and these provisions.

All miscellaneous highway facilities within the highway right-of-way noted on the plans to be removed, shall be removed and disposed of by the contractor.

- f. **Payment:** Quantities of roadway excavation shall be paid at the contract unit price per cubic yard and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals required to excavate, grade, and compact the subgrade and to remove, replace, adjust, remodel, and salvage any existing highway improvements designated in the Special Provisions in order to perform the required work on the subgrade and no additional payment will be made therefore.

### 13.05 TRENCH AND STRUCTURE EXCAVATION

- a. **Description:** Trench and structure excavation shall consist of performing all excavation required to properly install or construct the various types of pipelines, conduits, and their appurtenant structures. All excavations shall be made in accordance with the Trench Construction Safety Orders issued by the Division of Occupational Safety and Health of the Department of Industrial Relations of the State of California and these Standard Specifications.
- b. **Permits:** The contractor shall obtain permits from the State Division of Occupational Safety and Health or any other permit that may be required by the work or as required by law, prior to commencing any excavation within the street, with no additional compensation therefore.
- c. **Trench and Structure Excavation:** Excavations shall be made to the depths and widths required to accommodate construction of pipelines and structures to specified dimensions, and to the lines and grades indicated on the plans and, in the case of sewer and water house branches, in accordance with the Standard Plans. Storm drain laterals, (pipelines that connect the storm drain inlet to the main storm drain) shall be installed at the depth and grade specified by the Engineer after exposing of existing intersecting utilities by the contractor.

The location of subsurface utilities or other obstructions may necessitate a change in location or depth of the main pipeline, house service or lateral, which depth or surface location shall be determined in the field by the Engineer.

The contractor, however, shall allow in his bid price for the various house service or lateral pipe installation quantities full compensation for any increase or decrease in anticipated depth of trench because of the location of intersecting utilities, shown on the plans or not.

When a trench or structure site is to be located in an existing paved area, the existing paving to be removed shall be cut by methods approved by the Engineer along neat lines on each side of the trench or around the structure site. Existing paving at any location shall be removed from proposed trench areas or structure sites no sooner than forty-eight (48) hours prior to excavation at that location. No paving shall be removed on Friday unless excavation and follow-up work will occur the same day.

Existing paving, when removed, shall be kept separated from the material which is to be returned to the excavation. Failure to comply with this requirement shall be grounds for rejection of the material for use as backfill.

Structures and pipes shall be constructed or placed as soon as practicable after excavation, but in no case shall a trench be excavated more than sixteen (16) hours before pipe construction. No trench shall be excavated on Friday that is not to receive pipe on the same day.

Not more than 600 linear feet of trench shall be open ahead of any storm drain, sewer water pipeline, or any conduit in any street or alley, except that upon written permission of the City Engineer such trenches may be opened for a distance of not more than 1,200 linear feet where public traffic will not be seriously inconvenienced.

Trenches for pre-cast pipe shall be graded and prepared to provide a firm and uniform bearing throughout the entire length of the pipe.

Trenches for cast-in-place pipe shall be graded and prepared to provide full, firm and uniform support by undisturbed earth or compacted fill throughout the bottom two hundred and twenty (220°) degrees of the pipe periphery.

For pre-cast pipe trenches, if rock, hardpan or like materials are encountered, it shall be removed to a depth of six (6") inches below the grade of the bottom of the pipe. The space shall be backfilled with suitable material containing sufficient moisture to produce maximum compaction, and shall be free from lumps or other unsuitable material. The imported earth shall be compacted to the satisfaction of the Engineer, and finish graded to the original lines and grades as provided above

for pre-cast and cast-in-place pipe. No additional payment will be made for such excavation or backfill.

In all trenches or structure sites where a firm foundation is not encountered, such as soft, spongy, or otherwise, unsuitable material, the material shall be removed to a minimum of twelve (12") inches, or to a depth determined by the Engineer, below the bottom of the pipe or structure, and the space backfilled with suitable material containing sufficient moisture to produce maximum compaction. The backfill material shall be free from lumps or other unsuitable material, and when compacted to the satisfaction of the Engineer shall be finish graded as provided above for pre-cast and cast-in-place pipe, or as required by the Engineer for structures. No additional payment will be made for such additional excavation or backfill.

All existing gas pipes, water pipes, conduits, sewers, drains, fire hydrants, and other structures which are not, in the opinion of the Engineer, required to be changed in location shall be carefully supported and protected from injury by the contractor, and in case of injury, shall be restored by him, without additional compensation, to as good a condition as that in which they were found and to the satisfaction of the owner and the Engineer, in accordance with Section 7.12, of these Standard Specifications.

d. **Maintaining Drainage Within Trenches and Structures:** Reference is made to Section 4.10 "WORK TO BE DONE" of these Standard Specifications. The contractor shall keep trench and structure excavations as dry as practicable throughout the construction period. Payment for cost or repair of trenches damaged because of failure to provide temporary drainage control shall be included in the various bid items of work and no additional compensation will be paid therefore.

e. **Disposal of Excess Materials:** The contractor shall acquire a suitable site for the disposal of excess material, including existing paving removed for trenching operations, in accordance with Section 13.03 of these Standard Specifications.

Full compensation for acquiring the site and disposing of excess material shall be included in the prices paid for the various items of work requiring excavation.

f. **Payment:** Trench excavation and structure excavation will be paid for in accordance with the provisions specified in the various sections of these Standard Specifications covering construction requiring trench or structure excavation.

### 13.06 TRENCH AND STRUCTURE BACKFILL

- a. **Description:** Trench and structure backfill shall consist of the proper backfilling of trenches and around structures after the placement or construction of the various types of pipelines, conduits and their appurtenant structures. All work shall be done in accordance with these Standard Specifications.
- b. **Material for Trench and Structure Backfill:** Unless otherwise specified, shall be native material free from debris, lumps, hardpan chunks, paving material, organic matter or other deleterious or unsuitable substances. Backfill material shall be approved by the Engineer before being used in the work.
- c. **Trench Backfill; Pre-Cast Pipe:** Backfill for trenches in which pre-cast pipe has been installed shall be placed in two phases, classified as Initial Backfill and Final Backfill.

Prior to Initial Backfill, the trench shall be over-excavated a minimum of 4" and sand placed to grade and compacted prior to placing pipe.

Initial backfill for pipes up to and including fifteen (15") inches in inside diameter shall consist of placing and firmly compacting by hand tamping, in six (6") inch lifts, sand at optimum moisture under the haunches, on each side, and on the top of the pipe to an elevation of twelve (12") inches above the top of the pipe.

Initial backfill for pipes of inside diameter greater than fifteen (15") inches shall consist of placing and firmly compacting sand under the haunches of the pipe, as directed by the Engineer, so as to form a firm bedding for the pipe. The material shall be placed and compacted to an elevation of twelve (12") inches above the top of the pipe to prevent movement of the pipe during jointing operations or during final backfill and compaction operations.

Final backfill shall consist of placing backfill material into the remaining trench cavity following completion of initial backfill. Backfill material shall be returned to the trench in lifts not to exceed nine (9") inches in depth. Each lift shall be jetted to the bottom of the lift prior to placement of the next lift of backfill material. In no case shall backfill material be allowed to free-fall directly onto the pipe. Final backfill shall be accomplished as soon as practicable, except that for mortar joint concrete pipe final backfill shall not be placed until, in the opinion of the Engineer, the cement in the joints has acquired a suitable degree of hardness. In no case, however, shall final backfill follow initial backfill by more than twenty-four (24) hours, not initial excavation by more than forty-eight (48) hours.

At locations where traffic, safety, or other considerations warrant, the Engineer may order the immediate backfill of trenches, regardless if the pipe was installed or not.

Where pipe was not installed, the trench shall not be re-excavated until provisions are made to prevent the conditions which caused the backfill to be ordered. No additional compensation will be paid for backfill and re-excavation.

- d. **Trench Backfill; Cast-in-Place Concrete Pipe:** Backfill for trenches in which cast-in-place concrete pipe has been constructed shall consist of placing backfill material into the remaining trench cavity. Backfill shall be accomplished as soon as practicable and shall follow pipe construction by no more than two (2) working days, provided that in no case shall backfill material be placed over the pipe sooner than twenty-four (24) hours following construction of the pipe. Backfill material shall be returned to the trench in lifts not to exceed nine (9') feet in depth. Each lift shall be jetted prior to placement of the next lift of backfill material. In no case shall backfill material be allowed to free-fall directly onto the pipe.

Compaction of backfill shall conform to the requirements of Sections 13.06 of these Standard Specifications.

- e. **Structure Backfill:** Structure backfill shall consist of placing and compacting backfill material around structures to the lines designated on the plans or directed by the Engineer.

Compaction shall conform to the requirements of Section 13.06 of these Specifications.

- f. **Backfilling; General:** Where an excavation or trench crosses a street or alley intersection, the excavation and backfilling shall be completed within twenty-four (24) hours, or bridging capable of supporting vehicular traffic shall be provided for access across said excavation or trench.

An excavation within a street or alley for the purpose of boring or jacking pits or for the installation of structures shall be properly barricaded and protected and may be left open for a period of seven days and then must be backfilled, unless an extension of time is approved by the Engineer in writing.

Within 24 hours after the trench has been backfilled, all street crossing shall be surfaced with temporary surfacing of two (2") inches of cold mix surfacing which shall be placed and maintained as specified in Section 25 "RESTORATION OF SURFACES" of these Standard Specifications. Nothing herein shall be construed to mean that permanent surfacing cannot immediately be placed provided subgrade, subbase, and base compaction requirements are satisfied.

- g. **Compaction:** Trench and structure backfill shall be placed and compacted in uniform layers and shall be brought up uniformly on all sides of the structure, facility, or pipe utilizing approved compaction equipment. The thickness of each

layer of backfill shall not exceed 0.67 feet before compaction except that when compaction by ponding or jetting is permitted, said thickness shall not exceed four (4') feet. Compaction of trench and structure backfill may be accomplished by jetting only with prior approval of the Engineer. Such jetting, if approved, shall be supplemented by approved compaction equipment. Relative compaction of trench and structure backfill shall be determined by the laboratory standard of test procedure Test Method California No. 216. Trench or structure backfill shall have a relative compaction of not less than ninety (95%) percent. Base material shall have a minimum relative compaction of ninety-five (95%) percent.

The contractor shall contact the Department of Public Works concerning the use of water from the City's water system for any construction activities.

Compaction for trenches in which pre-cast pipe has been placed may proceed immediately following placement of final backfill.

Compaction for trenches in which cast-in-place pipe has been placed or excavation sites in which structures have been constructed shall proceed according to the following requirements. Jetting may proceed no sooner than forty-eight (48) hours after construction of the pipe or structure; follow-up compaction using equipment which imparts load on the pipe or structure shall not proceed for a minimum of seven (7) days following placement of the pipe or structure, unless this requirement is specifically waived by the Engineer, or is otherwise specified.

- h. **Measurement and Payment:** Trench and Structure backfill and compaction will be paid for in accordance with the provisions specified in the various sections of these Specifications covering construction requiring trench or structure backfill.

## SECTION 14 – REMOVING EXISTING FACILITIES

### 14.01 GENERAL

This work shall consist of removing existing facilities which interfere with construction within the area to be cleared and grubbed as specified in Section 12, "CLEARING AND GRUBBING", or within any area of construction or reconstruction shown in the Plans or specified in the Specifications, or as directed by the Engineer. Removed facilities shall be disposed of, salvaged, relaid, reset, relocated or reconstructed as shown on the Plans or specified in the Contract Specifications.

Trenches, holes, depressions and pits caused by the removal of existing facilities shall be backfilled with embankment material as provided in Section 13, "EARTHWORK". Trenches, holes, depressions and pits caused by the removal of street or other facilities that are in surfaced areas, otherwise to remain undisturbed, shall be backfilled with materials equal to or better in quality and to the same thicknesses as the surrounding materials.

### 14.02 PRESERVATION OF PROPERTY

Existing facilities which are to remain in place shall be protected in conformance with the provisions of Sections 5.03, "CONTRACTOR'S RESPONSIBILITY FOR THE WORK", 5.10, "PRESERVATION OF PROPERTY", 7.13, "INSURANCE AND LIABILITY", Section 7.26, "INJURY OR DAMAGE TO PERSONS OR PROPERTY", and Section 8.19, "UTILITY AND NON-STREET FACILITIES; POTHOLING".

### 14.03 TRAFFIC SIGNAL DETECTION LOOPS

Traffic Signal Detection Loops may exist as far as 300 feet or more from a signalized intersection. After calling for USA mark-outs, the Contractors working within such an area must meet with the Engineer or approved representative at the project site to physically review all detection loops in the area in order to minimize damage to the existing loops that are to remain. Any loops that are to remain which are damaged by the Contractor's operation shall, at the Contractor's expense, be replaced in accordance with the provisions in Section 86, "Traffic Signals and Intersection Safety Lighting," of the 2018 Standard Specifications and as directed by the Engineer.

### 14.04 MISCELLANEOUS FACILITIES

#### *14.04.01 Description*

Miscellaneous facilities shall include all structures, drainage, irrigation, water and sewer facilities, water wells or cisterns, drain wells, septic tanks or pits, leach fields, right of way and traffic control facilities including traffic signal detection loops, mail boxes, fences, walls, survey

monuments, corners, or other markers, private driveways or approaches, and any other miscellaneous improvements or facilities not mentioned in this Section 14.04 but located within the area to be cleared and grubbed, constructed, or reconstructed, except concrete, bridges and concrete culverts which are provided for in Sections 14.05, "REMOVING CONCRETE", and 14.06, "BRIDGE, CONCRETE CULVERT REMOVAL".

#### *14.04.02 Removal Methods*

Removing or abandoning existing facilities which interfere with construction or which are directed to be removed or abandoned by the Engineer shall be performed as shown on the Plans, as specified in the Specifications, or as directed by the Engineer.

##### 14.04.02(A) Well Abandonment

All existing drainage or supply wells, within the limits of the project, which are not in use or intended for future use shall be abandoned in accordance with State of California Bulletin 74-81, Water Well Standards, as amended by Bulletin 74-90, Fresno County Health Department regulations, and the Reedley Standard Drawing therefor. The Contractor performing the well abandonment shall be licensed to perform such work (Class C-57) in accordance with the provisions of the State Business and Professions Code, Chapter 9, Division 3.

The Contractor shall obtain a permit for the work from the Reedley Building Division prior to performing the well abandonment, and shall coordinate with the Building Division for inspection of the work as required. The exposed well shall be securely covered during all periods of inactivity with a suitable cover sufficiently anchored to prevent hazard to the public and/or contamination of the well.

##### 14.04.02(B) Obliterating Roads And Detours

Unless otherwise specified in the special provisions, obliteration shall consist of placing an earth cover of not less than 0.5-foot in thickness or shall consist of rooting, plowing, pulverizing, or scarifying to a minimum depth of 0.5-foot or to the bottom of the impermeable underlying base, whichever is the greater.

When obliteration is accomplished by rooting, plowing, pulverizing, or scarifying, the bituminous material shall be broken up into pieces not larger than 4 inches in greatest dimension and mixed with an equal amount of underlying material. After obliteration, the area shall be graded, as directed by the Engineer, so that it will blend in with the surrounding terrain and be well-drained.

If the Contractor elects to obliterate surfacing by placing an earth cover, the existing base and surfacing shall be scarified for its full depth and broken up so that the material contains no lumps larger than 12 inches in greatest dimension before the earth cover is placed.

Wherever a portion of existing surfacing is to be obliterated, the outside edge of the

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existing surfacing, which is to remain in place, shall be sawed to a neat line, prior to obliteration operations.

14.04.02(C) Traffic Stripes And Pavement Markings

Where shown on the Plans or specified in the Contract Specifications, traffic stripes and pavement markings (paint and thermoplastic) to be removed shall be accomplished by wet sandblasting or other approved methods which will cause the least possible damage to the pavement.

Dry sandblasting may be used in selected areas only with the permission of the Engineer and with approval of the air pollution control authority having jurisdiction over the area in which the work will be performed. Alternate methods of removal require prior approval of the Engineer.

Pavement marking images shall be removed in such a manner that the old message cannot be identified. Where grinding is approved by the Engineer for use, the pavement marking image shall be removed by grinding a rectangular area. The minimum dimensions of the rectangle shall be the height and width of the pavement marking.

Residue resulting from removal operations shall be removed from pavement surfaces by sweeping or vacuuming before the residue is blown by the action of traffic or wind, migrates across lanes or shoulders, or enters into drainage facilities. Traffic stripes shall be removed before any change is made in the traffic pattern.

Traffic Stripes and Pavement Markings designated to be removed and not to receive a pavement surface treatment per Section 25.02, "PAVEMENT REPLACEMENT," shall be removed completely as herein specified and the surface sealed with a "Walkmaster" or an equivalent slurry approved by the Engineer. Any voids created by grinding shall be filled using a Type II slurry approved by the Engineer.

All existing striping, stenciling, or other markings, whether shown for removal or not, that will be in conflict with the intent of any new striping shown on the Plans or specified in the Contract Specifications, shall be removed. Where Traffic Striping or Pavement Markings are to be removed and not to be followed by any of the applications described below, the pavement shall be sealed as specified in the Contract Specifications. If not specified, the Contractor shall seal the pavement using a method to be approved by the Engineer.

Traffic stripes and Pavement Markings to be removed for various pavement surface treatment operations shall comply with the following:

Preparation for Fog Seal or Slurry Seal.

In addition to the provisions of above, for Fog Seal and Slurry Seal applications, the Contractor shall protect existing permanent raised pavement markers from damage or coating. Damaged or coated markers shall be replaced in accordance with Section 84

“MARKINGS” of the State Standard Specifications, at the contractor’s expense.

Preparation for Cape Seal.

In addition to the provisions of above, for Cape Seal applications the Contractor shall remove permanent raised pavement markers in conformance with Section 32, “TRAFFIC STRIPES, SIGNS, AND PAVEMENT MARKINGS,” of these Standard Specifications and at the completion of work replace them in accordance with Section 84 “MARKINGS” of the State Standard Specifications.

Preparation for Overlay.

Unless the Plans or Contract Specifications require otherwise, for Overlay applications, the Contractor shall only remove permanent raised pavement markers in conformance with Section 14.04.02(D) “PAVEMENT MARKERS,” and at the completion of work replace them in accordance with Section 32, of these Standard Specifications.

The Contractor shall remove the existing paint and thermoplastic stripping, pavement markings or raised pavement markers where required, no earlier than five (5) days before the start of any of the applications specified in (2) above. After removing the existing paint, markings, or markers, unless otherwise authorized by the Engineer, the Contractor shall immediately install temporary reflectorized markers which shall be left in place until beginning the applicable application.

Extra caution shall be required at locations with traffic signal loops where pavement markings or striping must be removed. Loops are located just below surface grade. Temporary reflective road marker tabs, manufactured by Hye Lites, Davidson Plastic Co. MV Plastic Chip Seal Marker or approved equal, shall be placed in accordance with the manufacturer’s specifications but not more than 15-foot intervals. Temporary reflective road marker tabs shall also be placed at all stop bars that are removed and shall have a minimum of six (6) reflectors or as directed by the Engineer.

All temporary markers shall be completely removed prior to the applicable applications specified in (2) above and reinstalled upon completion of the application prior to installation of permanent striping. All protective covers of markers left in place shall be removed after the application for nighttime reflectivity and visibility. Prior to the application of paint, thermoplastic stripping, and pavement markings, temporary road marker tabs shall be removed completely. Re-installation of Traffic Stripes and Pavement Markings shall comply with Section 32 “TRAFFIC STRIPES, SIGNS, AND PAVEMENT MARKINGS.

14.04.02(D) Pavement Markers

Where removal of existing raised pavement markers is called for on the Plans and/or Contract Specifications, markers including underlying adhesive shall be removed by an approved method that will result in the least possible damage to the pavement or other surfacing. Damage to the pavement or surfacing caused by pavement marker removal shall be repaired by the Contractor at the Contractor's expense by methods

acceptable to the Engineer. Pavement markers, whether shown for removal or not, that will be in conflict with the intent of any new striping diagram, shall be removed. During the removal of ceramic type pavement markers, screens or other protective devices shall be furnished to contain any fragments as provided for in Section 7.18, "PUBLIC SAFETY." Fragments resulting from the removal of pavement markers shall be removed from the roadway before the lane or lanes are opened to traffic.

Removal shall be at the direction of the Engineer. The cost thereof shall be included in the various items of work; no additional compensation will be paid therefor.

14.04.02(E) Traffic Signs

All traffic signs and street signs within the limits of the improvement, if required, shall be removed, salvaged and stockpiled at locations designated by the Engineer. The Contractor shall install (and ultimately remove) temporary traffic control devices, if required, at locations designated by the Engineer. Traffic control signs and street signs previously removed and salvaged shall be replaced upon completion of the work.

*14.04.03 Disposal*

Removed existing facilities that are not to be salvaged or reused in the work shall become the property of the Contractor and shall be disposed of as provided in Section 5.12, "DISPOSAL OF MATERIAL OUTSIDE THE RIGHT OF WAY".

*14.04.04 Salvage:*

Materials from existing facilities which are shown on the Plans or specified in the Contract Specifications to be salvaged, shall remain the property of the City. Salvaging shall include the removal, disassembly, preparation, marking, bundling, packaging, tagging, hauling and stockpiling of salvaged materials or facilities to the location specified in the Contract Specifications. Materials include parts, articles and equipment of assembled facilities. Salvaging does not include the preparation of existing material that is to be reused in the work.

Materials from an existing facility to be salvaged shall be salvaged; except, when only specific materials from the facility are designated to be salvaged, the remaining materials from that facility shall be removed and disposed of.

Materials to be salvaged shall not be removed until their use is no longer required as determined by the Engineer. Salvaged materials shall be cleaned of earth and other foreign materials. Adhering concrete shall be removed from salvaged materials.

When practicable, salvaged materials shall be hauled directly to the location specified in the Contract Specifications and stockpiled; however, salvaged materials may be temporarily stored at a location selected by the Contractor and approved by the Engineer, and later hauled to and stockpiled at the final location. Materials which are lost for any reason before stockpiling at the final location shall be either replaced by the Contractor at the Contractor's expense, or, at the

discretion of the Engineer, the estimated cost of replacement may be deducted from any moneys due or to become due to the Contractor.

Materials designated to be salvaged that are damaged, as determined by the Engineer, shall be segregated from undamaged material. The damaged material shall become the property of the Contractor and shall be disposed of outside the right of way in conformance with the provisions in Section 5-12, "Disposal of Material Outside the Right of Way."

Materials to be salvaged that are damaged as a result of the Contractor's operations shall be repaired by the Contractor, at the Contractor's expense, to the satisfaction of the Engineer. Materials that are damaged beyond repair as a result of the Contractor's operations shall be disposed of outside the highway right of way as provided in said Section 5.12 and replaced at the Contractor's expense, or, at the discretion of the Engineer, the estimated cost of replacement may be deducted from any moneys due or to become due to the Contractor. Replacements for lost or damaged materials shall be of the same kind and of the same or better quality and condition as the lost or damaged materials were prior to removal.

Salvaged material shall be packaged and bundled as specified in the Contract Specifications or as directed by the Engineer, except that frames and covers or frames and grates of existing manholes, inlets, or other facilities such as water valve frames and lids, shall be match-marked in pairs.

#### *14.04.05 Reconstruction:*

Existing facilities that are shown on the Plans or specified in the Contract Specifications to be reconstructed or re-installed at existing or new locations shall conform to the design of the existing facilities and shall be equal in all respects to the best portions of the existing facilities. The work of reconstruction shall be performed in accordance with the Plans, Contract Specifications, and the requirements of these Specifications for new work of similar character, which apply to the type of facility to be reconstructed, adjusted, modified, remodeled, re-laid, relocated or reset. Where an existing facility not conforming to current Americans With Disabilities Act (ADA) Standards is to be replaced, unless otherwise shown on the Plans or specified in the Contract Specifications, the new facility shall be constructed to meet current ADA standards as directed by the Engineer.

Materials to be reused shall not be removed until their use is no longer required as determined by the Engineer. Materials to be reused in the work shall be cleaned of earth and other foreign materials. Adhering concrete shall be removed from materials to be reused in the work. Materials shown on the Plans or specified in the Contract Specifications to be reused in the work that are damaged as a result of the Contractor's operations shall be repaired by the Contractor, at the Contractor's expense, to the satisfaction of the Engineer. Materials that are damaged beyond repair as a result of the Contractor's operations shall be disposed of outside the right of way in conformance with the provisions in Section 5.12, "DISPOSAL OF MATERIAL OUTSIDE THE RIGHT OF WAY".

Material from existing facilities to be reused in the work that, in the opinion of the Engineer, is unsuitable for use in the work shall become the property of the Contractor and shall be disposed of in conformance with the provisions in said Section 5.12. The unsuitable material shall be replaced with material of a kind and quality equal to the best material in the existing facility. Furnishing of material to replace unsuitable materials as ordered by the Engineer will be paid for as extra work as provided in Section 4.12, "EXTRA WORK".

14.04.05(A) Frames, Covers, Grates, And Manholes

Frames, covers or grates of existing manholes, water valve covers, inlets or other facilities shall be adjusted to grade with new materials in accordance with the provisions of these specifications, the Contract Specifications, and the Standard Drawings. In the absence of any requirements set forth by the foregoing, raising existing facilities to grade shall be accomplished using new materials similar in character to those in the original structure. Existing facilities being adjusted to grade shall be cleaned internally of all mud and debris down to and including the bottom of the manhole, other structure, or water valve box, regardless of whether the material was present prior to beginning of construction.

After the existing cover or grate frame has been removed, the top of the structure to be raised shall be trimmed to provide a suitable foundation for the new material. When reconstruction or adjustment of a concrete drainage or other facility requires partial removal of concrete, sufficient concrete shall be removed to permit new reinforcing steel to be spliced to existing reinforcing steel as specified in Section 52 of the State Standard Specifications. Existing reinforcement that is to be incorporated in new work shall be protected from damage and shall be thoroughly cleaned of adhering material before being embedded in new concrete.

Concrete removal shall be performed without damage to the portion that is to remain in place. Damage to the existing concrete, which is to remain in place, shall be repaired to a condition equal to that existing prior to the beginning of removal operations. The cost of repairing existing concrete damaged by the Contractor's operations shall be at the Contractor's expense.

If a manhole cover that is raised to grade is unstable or noisy under traffic, the conditions shall be corrected by placing a coil of asphalt saturated rope, a plastic-type washer or asphaltic compounds approved by the Engineer, on the cover seat.

Facilities located in the pavement area shall not be constructed to final grade until the adjacent pavement or surfacing has been completed. All facilities shall be raised to final grade within 10 calendar days of being covered with final paving. The Engineer shall approve the order in which facilities are raised.

Portions of manholes that are to be lowered shall be removed as directed by the Engineer. Where insufficient depth will exist to allow the proper use of grade adjusting rings to raise the cover to final pavement grade, the manhole shall be lowered to an approximate depth of 3.5 feet below finished grade and shall then be reconstructed with

the proper taper to finished grade. When existing manholes or inlets are to be abandoned, pipes entering the manhole or inlet shall be securely closed by a tight fitting plug or wall of minor concrete not less than 0.5-foot thick, or by a tight brick wall not less than 0.67-foot thick with cement mortar joints. Minor concrete shall conform to the provisions in Section 90-02, "Minor Concrete," of the State Standard Specifications. The bases of manholes or inlets shall be broken in a manner to prevent entrapment of water. Unless otherwise specified by the Contract Specifications, the manhole or inlet shall be demolished to an elevation 3.5 feet below finished grade and backfilled in conformance with the provisions in Section 19-3.03(E), "Structure Backfill."

#### 14.04.05(B) Fences

Corner posts with braces shall be placed at the junctions of reconstructed fences and existing cross fences and the two fences properly fastened thereto. Gates to be reused shall be installed in reconstructed fences at the locations designated by the Engineer. Clearing required for reconstructed fences shall conform to the provisions in Section 12, "CLEARING AND GRUBBING". Removing and reconstructing fence shall be performed in a manner that will prevent the escape of any animals contained within the fenced area.

#### 14.04.05(C) Extending Pipes

Existing pipe shall be extended as shown on the Plans or specified in the Contract Specifications and shall conform to the requirements for installing new pipe. Existing headwalls, endwalls, or other structures shall be removed and disposed of or moved to the extended location as shown on the Plans or directed by the Engineer. When headwalls or endwalls are to be moved, the pipe shall be cut with smooth edges at a point about one foot back of the headwall or endwall along a plane perpendicular to the center line of the pipe. The headwall or endwall shall then be moved and placed in its new location and the new pipe shall be connected to the existing pipe as shown on the plans or as directed by the Engineer.

#### *14.04.06 Measurement*

The work performed under this Section 14.04, "MISCELLANEOUS FACILITIES", will be measured by units specified in the Contract Specifications for the various work described. In the absence of a contract item setting forth methods of measurement, the cost of the work involved shall be considered as included in the price paid for other various items of work, and no measurement is required.

#### *14.04.07 Payment*

When the contract includes separate items with unit or lump sum prices for removing, salvaging, adjusting, modifying, remodeling, abandoning, obliterating, relaying, reconstructing, relocating or resetting any of the miscellaneous facilities, the quantities will be paid for at the contract unit or lump sum price for the item of work involved. If no contract items are provided, then the cost thereof shall be considered to be included in the various other items of work. No additional payment will be made therefor.

Payments shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in completing the operations as shown on the Plans, as specified in the Specifications, and as directed by the Engineer.

Full compensation for all excavation and backfill required to remove, dispose of, salvage, relay, reset, relocate and reconstruct facilities for which payment is not otherwise provided, shall be considered as included in the contract unit or lump sum price paid for the item of work involved and no separate payment will be made therefor. If no contract items are provided, then the cost thereof shall be considered to be included in the various other items of work. No additional payment will be made therefor.

Full compensation for removal of existing striping, pavement markings, and raised pavement markers where required, including additional grinding outside the limits of the existing pavement marking image to obtain a rectangular area, and placement and removal of temporary pavement markings, and repainting or remarking, shall be considered as included in the contract price paid for the item of work involved and no additional compensation will be allowed therefor. If no contract items are provided, then the cost thereof shall be considered to be included in the various other items of work. No additional payment will be made therefor.

Full compensation for removing, preparing, disassembling, packaging, bundling, tagging, hauling and stockpiling of salvaged materials including any temporary storage prior to stockpiling and disposal of unwanted portions of facilities or damaged materials, shall be considered as included in the contract price paid for the item involved and no separate payment will be made therefor. In the absence of a contract item, the cost thereof shall be considered as included in the various other items of work. No additional payment will be made therefor.

When the contract does not include separate items for removing any of the existing facilities encountered within the area to be cleared and grubbed or the removal is not included in another item, then payment for removing the facilities shall be considered as included in the contract prices paid for clearing and grubbing or excavation of the type in which the facilities are located. If the contract does not include items for clearing and grubbing or excavation, then removing the existing facilities within the area to be cleared and grubbed will be considered as being included in the various items of work, and no additional payment will be made therefor.

When an existing facility which is outside the area to be cleared and grubbed is shown on the Plans or specified in the Contract Specifications to be removed and the contract does not include an item for its removal, or its removal is not included in another item, then payment for removing the facility will be considered as included in the contract price paid for clearing and grubbing. If the contract does not include an item for clearing and grubbing, then the cost thereof shall be considered as included in the various items of work and no additional payment will be made therefor.

If the Engineer orders the removal of a facility which is not shown on the Plans or specified in the Contract Specifications to be removed, then removing the existing facility will be paid for

as extra work as provided in Section 4.12, "EXTRA WORK".

## 14.05 REMOVING CONCRETE

### *14.05.01 Description*

Concrete shall be removed at the locations shown on the Plans or described in the Contract Specifications, or where directed by the Engineer. Removal shall be to the lines and elevations shown, specified, or determined by the Engineer.

Concrete shall be defined as all or portions of mortared rubble masonry, brick or stone curbs, gutters and sidewalks; and portland cement concrete curbs, gutters, sidewalks, gutter depressions, driveways, aprons, slope paving, island paving, barriers, retaining walls, spillways, dams, structures, foundations, footings, and all other portland cement concrete or masonry construction, except bridges, concrete culverts and pavement which are provided for in Section 14.06, "BRIDGE, CONCRETE CULVERT REMOVAL".

Types of existing subbase, base, surfacing and pavement to be removed will be classified for payment as the type of excavation in which the subbase, base, surfacing and pavement are located. The work for removal of concrete shall include removal and disposal of any reinforcing steel except as provided herein.

Concrete pipe and clay pipe will be considered as miscellaneous facilities to be removed, salvaged, relaid or disposed of as provided in Section 14.04, "MISCELLANEOUS FACILITIES", and will not be paid for as removing concrete.

### *14.05.02 Removal Methods*

Unless otherwise specified in the Contract Specifications, existing concrete shall be removed to a depth of at least three feet below finished grade. Existing concrete shall be cut to a true line where new concrete is to join existing concrete. Explosives shall not be used for any concrete removal. Concrete removal operations shall be performed without damage to any portion that is to remain in place. Damage to the existing concrete, which is to remain in place, shall be repaired to a condition equal to that existing prior to the beginning of removal operations. The cost of repairing existing concrete damaged by the Contractor's operations shall be at the Contractor's expense.

Existing reinforcement that is to be incorporated in new work shall be protected from damage and shall be thoroughly cleaned of adhering material before being embedded in new concrete.

Unless otherwise provided in the Contract Specifications, removed concrete shall not be buried in adjacent embankments, and shall be disposed of in accordance with Section 5.12, "DISPOSAL OF MATERIALS OUTSIDE OF THE RIGHT OF WAY". If burial is otherwise

provided for, removed concrete shall be broken into pieces which can be readily handled and incorporated into embankments and is placed at a depth of not less than 3 feet below finished grade and slope lines. The removed concrete shall not be buried in areas where piling is to be placed or within ten feet of trees, pipelines, poles, buildings or other permanent objects or structures.

The floors of concrete basements, pits and structures, that are not required to be removed and which are located within the roadway shall be broken in a manner that will prevent the entrapment of water. Full compensation for breaking up concrete will be considered as included in the prices paid for the various contract items of work and no separate payment will be made therefor.

When there is a contract item for shattering concrete, concrete pavement and similar slabs upon which embankments are to be constructed, the concrete shall be broken up into pieces not larger than 2 feet in greatest dimension and left in place.

#### *14.05.03 Measurement*

The work performed under this Section 14.05 and paid for by contract items will be measured by the method specified in the Contract Specifications. In the absence of a contract item for removing concrete, the cost thereof will be considered as being included in the various items of work and no measurement for payment will be made.

No deductions will be made from any excavation quantities for the volume of concrete removed.

#### *14.05.04 Payment*

Payment for concrete removal will be made at the price per unit of measurement specified in the Contract Specifications. Payment includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work and performing all the operations involved in removal of concrete as shown on the Plans, as specified the Specifications, and as directed by the Engineer. No additional compensation will be paid for the removal of concrete containing steel reinforcing or other steel where encountered.

In the absence of a contract item for removal of concrete, the cost thereof shall be considered as included in the various items of work, and no additional payment will be made therefor.

### 14.06 BRIDGE, CONCRETE CULVERT REMOVAL

#### *14.06.01 Description*

This work shall consist of removing existing bridges, concrete culverts, or portions thereof. The type and general dimensions of the bridges or portions of bridges or concrete culverts to be

removed will be shown on the Plans or described in the Contract Specifications. For purposes of these Standard Specifications, “bridge” shall include concrete box culverts.

Where portions of bridges or culverts are to be removed, the removal operations shall be conducted so that there will be the least interference to public traffic using the structure involved. When complete bridges or culverts are to be removed, removal operations shall not be started until public traffic is no longer routed over the structure to be removed.

#### *14.06.02 Removal Methods*

At least 10 days before beginning bridge or culvert removal, the Contractor shall submit to the Engineer details of the removal operations showing the methods and sequence of removal and equipment to be used. Traffic control conforming to Section 11 “TRAFFIC CONTROL; CONSTRUCTION TRAFFIC CONTROL DEVICES”, and as directed by the Engineer shall be provided.

Materials that are to be salvaged shall be carefully removed and stockpiled near the site at a location designated by the Engineer. Material which is to be used in any specified reconstructed bridge work and has been damaged or destroyed as a result of the Contractor's operations shall be repaired or replaced by the Contractor at the Contractor's expense.

Piling, piers, abutments and pedestals shall be removed to at least one foot below ground line or three feet below finished grade, whichever is lower.

Where portions of a bridge or culvert are to be removed, the removal operations shall be performed without damage to any portion of the structure that is to remain in place. In these cases, tools with a manufacturer's rated striking energy in excess of 1,200-foot pounds per blow, a freely falling mass or a falling mass attached to a cable, rope or chain shall not be used for breaking or removing concrete which is attached to or supported by the bridge. Existing reinforcement that is to be incorporated in new work shall be protected from damage and shall be thoroughly cleaned of all adhering material before being imbedded in new concrete.

A freely falling mass or a falling mass attached to a cable, rope or chain shall not be used above any area open to the public. Falling masses shall not be used within 30 feet horizontally of any area open to the public unless adequate protective shields are in place. Protective shields shall be of sufficient size and strength to prevent any debris or equipment from endangering the public. The shields shall be designed and proportioned as required by the size of equipment and method of operations employed, but in no case shall the shields have a strength less than that provided by good, sound 2-inch thick Douglas fir planking supported on posts at 5-foot centers.

Before beginning concrete removal operations involving the removal of a portion of a monolithic concrete element, a saw cut approximately one inch deep shall be made to a true line along the limits of removal on faces of the element which will be visible in the completed work.

#### *14.06.03 Measurement And Payment*

Unless otherwise provided in the Contract Specifications, the work to be performed in accordance with this Section 14.06 will be measured and paid for on a lump sum basis. Payment shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing bridges or concrete culverts or portions thereof, including salvaging materials not to be reused in the project when salvaging is specified and not otherwise paid for, as shown on the Plans, as specified in the Specifications, and as directed by the Engineer.

Full compensation for removing materials that are to be reused in the project shall be considered as included in the contract prices paid for reconstructing, relocating or resetting the items involved, or in such other contract pay items that may be designated in the Contract Specifications. No additional payment will be made therefor.

In the absence of a bid item for bridge or concrete culvert removal, the cost thereof shall be included in the various bid items of work, and no additional payment will be made therefor.

## SECTION 15 – FINISHING ROADWAY

Finishing Roadway shall be as specified in Section 22, “Finishing Roadway”, of the State Standard Specifications.

## SECTION 16 – STABILIZED SOILS

Stabilized Soils shall be as specified in Section 24 “Stabilized Soils”, of the State Standard Specifications.

## SECTION 17 – AGGREGATE SUBBASES

Aggregate Subbases shall be as specified in Section 25 “Aggregate Subbases”, of the State Standard Specifications.

## SECTION 18 – AGGREGATE BASES

Aggregate bases shall be as specified in Section 26 “Aggregate Bases”, of the State Standard Specifications.

## SECTION 19 – CEMENT TREATED BASES

Cement Treated Bases shall be as specified in Section 27 “Cement Treated Bases”, of the State Standard Specifications.

## SECTION 20 – LEAN CONCRETE BASE

Lean Concrete Base shall be as specified in Section 28 “Concrete Bases”, of the State Standard Specifications.

## SECTION 21 – TREATED PERMEABLE BASES

Treated Permeable Base shall be as specified in Section 29 “TREATED PERMEABLE BASES”, of the State Standard Specifications.

## SECTION 22 – BITUMINOUS SEALS

Bituminous Seals shall be as specified in Section 37 “Bituminous Seals”, of the State Standard Specifications.

## SECTION 23 – HOT MIX ASPHALT PAVEMENT; DIKES

Hot mix asphalt pavement, other asphalt surfacing, and dikes shall be as specified in Section 39, “Asphalt Concrete”, of the State Standard Specifications.

Gradation of the aggregate shall conform to the grading requirements for three-quarter (3/4”) inch maximum aggregate (medium) and one-half (1/2”) maximum aggregate (medium).

Quality Assurance for “Hot Mix Asphalt” shall be per the most current version of the City of Reedley’s Quality Assurance Program.

Asphalt concrete pavement shall be measured by weight of the mixture complete, as specified in Section 9 of these Standard Specifications. The contract unit price paid per ton for asphalt concrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including furnishing and applying asphalt paint binder, and for doing all the work involved in constructing and placing the Portland cement concrete pavement, complete in place, as shown on the plans, and as specified in these specifications and the special provisions and as directed by the Engineer.

Payment for asphalt dike shall be as specified in the Special Provisions.

## SECTION 24 - PORTLAND CEMENT CONCRETE; PAVEMENT; CEMENT MORTAR

### 24.01 DESCRIPTION

Portland Cement Concrete Pavement shall be as specified in Section 40, "CONCRETE PAVEMENT", of the State Standard Specifications.

Quality Assurance for "Portland Cement Concrete, Pavement" shall be per the most current version of the City of Reedley's Quality Assurance Program.

### 24.02 PROTECTING CONCRETE

Concrete for structures shall not be placed on frozen ground nor shall it be mixed or placed while the atmospheric temperature is below thirty-five (35°) degrees Fahrenheit, unless adequate means are employed to heat the aggregates and water, and satisfactory provisions have been made for protecting the work. Provisions satisfactory to the Engineer shall be taken to protect concrete about to be poured when there is danger of temperature dropping below thirty-five (35°) degrees Fahrenheit within the next twenty-four (24) hours. Concrete damaged by frost action shall be replaced by the contractor at his expense. Concrete shall not be placed when the atmospheric temperature in the shade in the vicinity of the work exceeds ninety-five (95°) degrees Fahrenheit, or when the temperature of the concrete exceeds eight-five (85°) degrees Fahrenheit.

All surfaces against which concrete is to be placed shall be free from standing water, mud, debris, and shall be firm enough to prevent contamination of the concrete by earth or other foreign material.

Absorptive surfaces against which concrete is to be placed shall be moistened thoroughly so that moisture will not be drawn from the freshly placed concrete.

### 24.03 FORMS

Forms shall be smooth, mortar right, true to the required lines and grades, and of sufficient strength to resist springing out of shape during the placing of the concrete. All dirt, chips, sawdust, nails, and other foreign matter shall be completely removed from the forms before any concrete is deposited therein. Forms previously used shall be thoroughly cleaned of all dirt, mortar, and foreign matter before being reused. Before concrete is placed in forms, all surfaces against which the concrete will be placed shall be thoroughly coated with form oil.

Prior to placing concrete, the contractor shall have all forms checked by the Engineer for alignment and grade. Forms, reinforcing steel, or earth surfaces to receive concrete shall be wet prior to concrete placement.

#### 24.04 VIBRATOR

Whenever a structure requiring reinforcement is to be constructed, the contractor shall provide one or more portable vibrating machines to be used on such structures as directed by the Engineer. Full compensation for providing vibrating machines shall be considered as being included in the various bid items of work and no additional payment will be made therefore.

#### 24.05 CEMENT MORTAR

Cement mortar shall be composed of one part Portland Cement and two parts of clean, wellgraded sand of such a size that it will pass a No. 8 sieve. An admixture of hydrated lime, fire clay or diatomaceous earth may be used in the mortar to facilitate workability, and the amount of such material used will be limited as ordered by the Engineer. Quick setting cement may be used when necessary to facilitate the early backfilling of trench.

No mortar shall be used in which water has been added to the dry ingredients for a period of over thirty (30) minutes.

The consistency of mortar shall be such as to adhere to the ends of the pipe while being laid and be easily squeezed out of the joint when the pipe sections are squeezed together. Jointing and banding mortar shall be of such consistency that it will readily adhere to the pipe and/or structure.

#### 24.06 PAYMENT

The contract unit price paid per cubic yard for concrete shall include full compensation for furnishing all labor, materials (including cement in the amount specified), tools, equipment, and incidentals, and for doing all the work involved in constructing the Portland cement concrete pavement, complete in place, as shown on the plans, and as specified in these specifications and the special provisions and as directed by the Engineer.

## SECTION 25 - RESTORATION OF SURFACES

### 25.01 DESCRIPTION

Restoration of surfaces shall consist of restoring the surfaces of all trenches, surfaces at or around structure sites, or any other surfaces damaged or disturbed by the work, to the condition existing prior to commencement of the work, or to such condition specified by any encroachment permit issued by the City for the work, or as specified in the Special Provisions. Surfaces shall include, but not be limited to, pavement of any kind, grass, shrubbery or other landscaping, gravel, treated or untreated soil. All work shall be done in accordance with these Standard Specifications.

### 25.02 PAVEMENT REPLACEMENT

Replacement of pavement shall conform to the minimum requirements specified herein, and to the requirements of Sections 13 and 14 of these Standard Specifications and the Standard Plans, unless modified by the Special Provisions, or encroachment permit issued by the City. Deviation from these requirements, unless approved by the Engineer shall be cause for rejection of the work.

If aggregate base material is removed, it may be allowed to be replaced in like depth with new aggregate base in accordance with Section 13 of these Standard Specifications provided the same gravel equivalent thickness of base and paving as shown on the Standard Plan sections is maintained as determined by the Engineer.

Replacement of pavement shall be performed in a manner consistent with good construction practices and methods, shall be approved by the Engineer, and which, when completed, shall leave all areas requiring replacement of pavement with as neat an appearance as possible.

Pavement replacement shall be accomplished as soon as possible and practicable, and within the time limits specified in the Special Provisions.

Areas to receive pavement replacement shall be completely cleaned of all debris, rubbish, dirt, temporary paving, or any other deleterious material which might affect the quality of the work in any way. Cleaning shall be accomplished to a minimum of six (6') feet outside the edges of trenches or other areas to receive pavement replacement. This distance may be increased by the Engineer as necessary to prevent contamination of the new work.

Where saw-cutting of existing pavement edges is specified, the cut shall be made on a straight line along both sides of trenches, and to neat lines around structures or other locations requiring pavement replacement. The cut shall be made a minimum of three (3") inches in depth, or such other depth as may be specified in the Special Provisions, and shall encompass all pavement damaged by the work or specified to be removed or replaced.

All edges of existing pavement, whether trimmed or saw-cut, shall be protected from damage. Any edges damaged from any cause prior to or during paving operations, shall be re-cut or re-trimmed as directed by the Engineer, and no additional payment will be made therefore.

A paint binder of asphaltic emulsion shall be furnished and applied in conformance with Section 14.04 of these Standard Specifications to all vertical surfaces of existing pavement, curbs, gutters, or other surfaces against which asphalt concrete pavement is to be placed. Paint binder shall also be applied to the top surface of the initial layer of asphalt concrete if the pavement is to be replaced in lifts.

When replacing pavement in areas where sawcutting of existing pavement is specified, the new pavement material shall overlap the existing pavement edge as directed by the Engineer to a maximum of six (6") inches and "feathered" to match the existing paving. When compacted, the surface shall be smooth and without humps or depressions.

### 25.03 TEMPORARY PAVEMENT REPLACEMENT

Unless otherwise specified or unless otherwise required by an encroachment permit for the work, temporary replacement of existing pavement, where specified or directed to be placed by the Engineer, shall consist of a minimum thickness of two (2") inches of cut-back or "cold mix" asphalt concrete. The temporary pavement shall be diligently maintained by the contractor until permanent pavement is installed.

### 25.04 INFRARED HEATER-REMIX TRENCH PATCH

Trenching in pavements less than eight (8) years from installation, reconstruction or overlay or as directed by the City Engineer requires the use of an infrared heater remix process to be applied to the trench surface to have seamless joints with the existing pavement. Process shall be submitted to the City Engineer for approval prior to the placement of the trench patch.

### 25.05 MISCELLANEOUS SURFACE RESTORATION

Restoration of miscellaneous surfaces shall consist of replacing or restoring in-kind of any surface damaged or disturbed by the work, including, but not limited to, grass, landscaping of any kind, gravel, oiled dirt, concrete, or soil.

The surfaces of all trenches, excavations or other areas damaged or disturbed by the work, upon completion of miscellaneous surface restoration, shall conform to the elevations and character of the areas which existed before work commenced. Excess trench or excavation material shall not be spread over any part of the project site, unless authorized by the Engineer, and shall be disposed of in accordance with Section 13 of the City Standard Specifications.

## 25.05 MEASUREMENT AND PAYMENT

Pavement replacement will be paid for at the price bid per lineal foot or per square foot, as specified in the Special Provisions, and shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work, including sawcutting or trimming of edges, involved in replacing pavement in place as specified in these Standard Specifications and the Special Provisions, and as directed by the Engineer.

Temporary pavement replacement and miscellaneous surface restoration shall be included in the various bid items of work, with no additional payment made therefore unless otherwise specified in the Special Provisions.

## SECTION 26 - CONCRETE CURBS, SIDEWALKS, SURFACE IMPROVEMENTS

### 26.01 GENERAL

This work shall consist of constructing concrete curbs, gutters, curb and gutters, curb depressions, sidewalks, curb (wheelchair) ramps, driveway approaches, alley approaches, valley gutters, fence mowstrips and median caps of the form and dimensions shown on the Plans or Standard Drawings, as set forth in the Specifications, and as directed by the Engineer. Curb (wheelchair) ramps shall also comply with the most current Federal and State Accessibility Standards, whichever is more restrictive.

All concrete improvements as above defined shall be constructed by using fixed forms, except that curbs, curb and gutters, and alley gutters may be constructed by using an extrusion or slip-form machine.

### 26.02 PORTLAND CEMENT CONCRETE

Concrete for curbs, sidewalks, and other surface improvements shall conform the requirements of Section 90, "CONCRETE," of the State Standard Specifications.

Unless otherwise specified the required compressive strength for curb, sidewalk, and other surface improvements shall be 4,000 psi.

For extruded or slip-formed concrete improvements, the maximum size of aggregate used shall be at the option of the Contractor, but in no case shall the maximum size be larger than 1 inch or smaller than 3/8 inch. For extruded or slip-formed concrete, the cement content shall be as specified for Class 2 concrete.

### 26.03 REINFORCEMENT

Where the use of steel reinforcement is indicated on the Plans or Standard Drawings, it shall be furnished and installed in accordance with Section 52, "Reinforcement," of the State Standard Specifications.

### 26.04 SUBGRADE PREPARATION

Subgrade Preparation shall be constructed true to grade and cross-section, as shown on the Plans or directed by the Engineer. It shall be thoroughly watered and rolled or hand tamped to obtain a relative compaction of no less than 95 percent under curbs, gutters, driveway approaches, sidewalks, medians, valley gutters and handicap ramps, and a relative compaction of no less than 90 percent under mowstrips and concrete median caps prior to placing the concrete.

All soft or spongy material shall be removed to a depth of not less than 18 inches or to stable soil below subgrade elevation for curbs, gutters, valley gutters and driveways and 3 inches below for caps, mowstrips, sidewalks and wheelchair ramps, and the resulting space filled with earth, sand or gravel of a quality that when moistened and compacted will form a stable foundation.

The subgrade and forms shall be wet immediately in advance of placing concrete.

## 26.05 CONSTRUCTION

Concrete shall not be placed on frozen or ice-coated ground or subgrade or on ice-coated forms, reinforcing steel, structural steel, conduits, precast members, or construction joints. Under rainy conditions, placing of concrete shall be stopped before the quantity of surface water is sufficient to damage surface mortar or cause a flow or wash of the concrete surface, unless the Contractor provides adequate protection against damage. All concrete that has been frozen, or damaged by other causes, as determined by the Engineer, shall be removed and replaced by the Contractor at the Contractor's expense.

Fixed form construction shall conform to Sections 73-2.03, "Construction", 73-2.03B, "Fixed Form Method," and 73-3, "Sidewalk, Gutter Depression, Island Paving, Curb Ramps, and Driveways," of the State Standard Specifications, and as set forth in this Section 26. Extruded or slip-formed construction shall conform to Section 73-2.03C of the State Standard Specifications, and as set forth in this Section 26. The extrusion machine shall go no faster than the curb and/or gutter or alley gutter can be finished using good workmanlike practices.

### Construction Joints

Construction joints shall be as shown on the Standard Drawings, and as specified below for both fixed form and extruded or slip-formed construction, as follows:

(a) Where concrete improvements such curb and gutter, valley gutters, and sidewalk, are to be placed adjacent to existing pavement, the pavement shall be sawcut and removed 6 inches beyond the inside edge of the formwork. The edge of the existing pavement shall not be used as formwork.

(b) Expansion joints for curbs and gutters, sidewalks, mowstrips, valley or alley gutters, median island curbs and median caps shall be constructed at no greater than 45 foot intervals, and at the ends of curb returns. Expansion joints for curb, gutter and sidewalks and median curbs and caps shall be collinear. Expansion joints for curbs and gutters shall also be constructed on each side of curb depressions for driveway approaches. Expansion joints for sidewalks shall also be constructed on each side of driveway approaches. Expansion joints for fence mowstrips shall occur at post locations. All expansion joints shall be tooled with a 3/8 inch maximum radius edger, and filled with 3/8 inch thick premolded joint filler conforming to ASTM Specification Designation D1751.

(c) Weakened plane joints shall be placed at 15 foot intervals, except that for mowstrips they shall be placed at each post location not having an expansion joint. Weakened plane joints may be made by the use of plastic materials. Plastic weakened plane joint material shall be at least 1 inch

deep, T-shaped 1/8 inch thick plastic strip, with a minimum 3/4 inch wide pull-top stiffener. This plastic strip shall have a suitable anchor to prevent vertical movement. After preliminary troweling, the concrete shall be parted to a depth of approximately 2 inches with a joint knife or a thin metal straight edge. The plastic strip shall then be inserted in the impression so that the upper surface of the pull-top stiffener is flush with the concrete, and the pull-top stiffener shall be immediately peeled off. After the pull-top is removed, the concrete shall be floated to fill all voids adjacent to the strip. During final troweling, the edges at plastic control joints shall be finished to a radius not to exceed 1/8 inch using a slit jointer tool. The finished joint opening shall not be wider than 1/8 exclusive of radii.

(d) The above spacing for construction joints shall be required in lieu of the spacing indicated in Section 73, "Concrete Curbs and Sidewalks," of the State Standard Specifications.

(e) Mowstrips may not be poured monolithically with sidewalks or other concrete improvements.

The surface of sidewalks, wheelchair ramps and driveway approaches shall be scored, stamped, or otherwise marked as shown on the Plans, Standard Drawings, Contract Specifications, or as directed by the Engineer, utilizing a scoring tool, which will leave the edges rounded. The construction of wheelchair ramps shall include any special surfacing required to be affixed to the concrete surface.

Where steel dowels are set forth on the Plans to anchor proposed concrete curbs to existing pavement, adhesives may not be substituted therefor.

## 26.06 FINISH

Immediately upon stripping curb forms and prior to backfill, all rock pockets or honeycombs shall be repaired to the satisfaction of the Engineer.

Finish of concrete surface improvements shall be free from blemishes and shall be as follows:

- (a) Curbs - Trowel smooth and finish with a light brush.
- (b) Sidewalks and mowstrips – Broom Finish or Medium sweat finish.
- (c) Gutters, valley gutters and median caps -Finish with medium broom.
- (d) Driveway approaches - Finish with a medium broom, except wings shall be finished with a light broom and sidewalk area to receive a broom finish or a medium sweat finish.
- (e) Wheelchair ramps - Finish as indicated on the Standard Drawings.
- (f) Stamped Concrete – Shall be colored, sealed and constructed per the project specifications and construction plans and as directed by the Engineer.

Broomed surfaces to be used by pedestrian traffic shall be broomed transverse to the line of traffic.

## 26.07 TOLERANCES

The top and face of finished curbs shall be true and straight and the top surface of curbs shall be of uniform width, free from humps, sags, or other irregularities. When a straightedge 10 feet long is laid on the top or face of the curb or on the surface of gutters, or valley gutters, the surface shall not vary more than 1/8 inch from the edge of the straightedge, except at designed grade changes or curves.

The surface of sidewalks, wheelchair ramps, driveway and alley approaches, mowstrips and median caps shall not vary more than 3/16 inch along a 10 foot straightedge, except at grade changes.

## 26.08 CURING

All surface concrete improvements shall be cured by application of an approved curing compound in conformance with the requirements of Subsection 90-1.01C(5), "Curing Compound", of the State Standard Specifications.

## 26.09 BACKFILLING

After removal of forms, the area adjacent to the newly constructed concrete improvement shall be cleaned of all surplus concrete and other debris and the area filled with clean earth suitable for planting (except in front of the gutter). Backfill shall be placed behind the curb prior to any excavation in the street area below the plane of the bottom of curb and gutter.

## 26.10 MEASUREMENT

Unless otherwise specified in the Contract Specifications, concrete curb, concrete gutter, alley gutter, concrete curb and gutter, and concrete mowstrip shall be measured by the lineal foot. Curb depressions will be included in the measurement of length of concrete curb, or concrete curb and gutter, as the case may be.

Unless otherwise specified in the Contract Specifications, concrete sidewalks and wheelchair ramps, concrete driveway approaches, concrete alley approaches, concrete valley gutters and concrete median caps shall be measured by the square foot. Measurement of concrete driveway approaches and concrete alley approaches shall be made from the back of the curb to the back of the approach, wing to wing.

## 26.11 PAYMENT

Payment for concrete curb, concrete gutter, concrete curb and gutter, and concrete mowstrip shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved therein as shown on the Plans, as set forth in the Specifications, and as directed by the Engineer, including subgrade preparation.

Payment for concrete sidewalks and wheelchair ramps, concrete driveway approaches, concrete alley approaches, concrete valley gutters and concrete median caps shall include full compensation for furnishing all labor, materials, tools, equipment, special surfacing materials, and incidentals and for doing all the work involved therein as shown on the Plans, as set forth in the Specifications, and as directed by the Engineer, including subgrade preparation. Compensation for steel reinforcement required for concrete valley gutters or any other facilities requiring steel reinforcement shall be included in the cost for concrete valley gutters or other facilities requiring steel reinforcement.

## SECTION 27 - SEWER AND STORM DRAIN PIPE

### 27.01 DESCRIPTION

This work shall consist of furnishing and installing sewer and storm drain pipe as shown on the plans, as directed by the Engineer, and as specified in these Standard Specifications.

All precast pipe shall be of the size and class shown on the plans or specified in the Special Provisions. The pipe class, as designated on the plans, has been determined for vertical load under average trench conditions. The contractor shall exercise precautionary measures against trench cave-ins by providing adequate shoring or other devices to minimize the development of adverse trench conditions. Should the trench condition exceed in width the average trench condition, the contractor shall provide a recognized special bedding, approved by the Engineer, which is adequate to maintain pipe strength equivalent to the average trench condition. No additional compensation will be paid for such special bedding. In lieu of special bedding and the class of pipe designated in the plans, the contractor may provide a class of pipe in accordance with the manufacturer's recommendation for the conditions under which the pipe is placed, with no additional payment therefore.

### 27.02 TYPES OF PIPE

- a. **Storm Drain Pipe:** Where "storm drain pipe" is specified on the plans, the Contractor will be allowed to install either reinforced concrete pipe, non-reinforced concrete pipe, or polyvinyl chloride pipe (PVC) conforming to these Standard Specifications except where a particular type of pipe is specified on the plans or in the Special Provisions. Where a particular type of pipe is specified on the plans or in the Special Provisions, only that type of pipe shall be installed and no substitution will be allowed except as specified in Section 27.05 of these Standard Specifications. Once pipe laying operations have begun, the contractor will not be allowed to switch to a type of pipe different from that laid without prior approval from the Engineer.

Rubber gasketed concrete pipe conforming to these Standard Specifications shall be installed if "rubber gasketed storm drain pipe" is specified on the plans. Where a particular type of pipe is specified on the plans or in the Special Provisions, only that type of pipe shall be installed and no substitution will be allowed except as specified in Section 27.05 of these Standard Specifications.

The strength of pipe to be installed shall be specified on the plans as either Class II (CL II), Class III (CL III), Class IV (CL IV) or Class V (CL V). These strength classifications are based on the D-Load to produce the ultimate load in the 3-edge bearing strength test, ASTM Designation: Test Method C497: "Concrete Pipe, Concrete Box Sections, Manhole Sections, or Tile" or, with approval from the City Engineer, C500: "Asbestos-Cement Pipe". The following table shall be used to determine the strength class of pipe to be installed by the contractor to meet the class specified on the plans:

Pipe Class on Plans	CL II	CL III	CL IV	CL V
Reinforced Concrete Pipe (C76)	CL II 1500D	CL III 2000D	CL IV 3000D	CL V 3750D
Nonreinforced Concrete Pipe (C14)	E.S. 1500D	E.S. 2000D	N/A 3000D	N/A 3750D

E.S. means Extra Strength  
N/A means Not Available

The contractor's attention is called to Section 27.01 of these Standard Specifications in regards to strength requirements specified on the plans.

- b. **Sewer Pipe:** Unless otherwise specified in the Contract Specifications, pipe for sanitary sewer mains, fittings, and building and house branches (services) shall be polyvinyl chloride (PVC), as specified herein. PVC pipe and fittings for sanitary sewers and sewer services shall be green in color. Once pipe laying operations have begun, the contractor will not be allowed to switch to a type of pipe different from that being laid without prior permission from the Engineer. The final determination as to the suitability of any pipe for use as sewer pipe shall be made by the City Engineer.

**Sewer pipe shall be designed such that the slope of the proposed line will create a velocity of two (2) feet per second (F.P.S.) when the pipe is flowing half full using a Manning's "N" of 0.011.**

**Minimum Acceptable Slopes For Sewer Pipe**

Pipe Diameter (inches)	Slope at 2 F.P.S. Velocity (percent)
6	0.35
8	0.24
10	0.18
12	0.14

Where a particular type of pipe is specified on the plans or in the Special Provisions, only that type of pipe shall be installed and no substitution will be allowed.

## 27.03 REINFORCED CONCRETE PIPE

- a. **Materials:** Reinforced concrete pipe shall be manufactured in accordance with ASTM Designation: C76: “Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe”, as amended or revised.

Upon demand, the manufacturer of pre-cast concrete pipe shall furnish to the Engineer a Certificate of Compliance in accordance with the provisions in Section 6.03 of these Standard Specifications.

- b. **Joints:** The ends of reinforced concrete pipe sections shall be of such design that when properly laid they shall have a smooth and uniform interior surface. Both ends of pipe sections shall be substantially free of cracks and broken edges. Pipe so found to be damaged shall be rejected for use in the work. Each joint shall be sealed to prevent leakage. Sealing of joints shall be accomplished with cement mortar or rubber gaskets, as indicated on the plans or specified in the Special Provisions, and shall conform to the following specifications:

- c. **Cement Mortar Joints:** Mortar shall conform to the requirements of Section 24.05 of these Specifications. The ends of the concrete pipe shall be thoroughly wetted and cleaned prior to the application of mortar.

The ends of the pipe, after being wetted and cleaned, shall be completely filled with mortar for the full periphery of the joint. The two sections to be joined shall be firmly placed together in such a manner that the bell or groove end of the pipe fits truly and snugly over the tongue end so that mortar completely fills the joint. The interior surface of the joint shall be brushed smooth and all surplus mortar removed. The completed interior surface of the joint shall be as flush as possible with the pipe walls.

An external mortar band at least four (4") inches wide and three-fourths (3/4") inches thick shall be applied to the joint by first thoroughly cleaning and wetting the areas immediately adjacent to the joint and placing mortar round the upper two hundred seventy (270°) degrees of the pipe at the joint. The width and thickness of the external bank shall be completely and immediately covered with an impervious membrane, which shall be adequately anchored, or with moist earth.

In no case shall water be allowed to rise in or about the pipe before the mortar of the joint has become thoroughly set.

- d. **Rubber Gasketed Joints:** Rubber gasketed joints shall conform to the requirements of ASTM Designation: C443: “Standard Specifications for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets”, and shall be flexible and able to withstand expansion, contraction and settlement.

The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe. The two sections joined shall be firmly placed together in such a manner that the tongue or gasket end of the pipe "homes" on the bell end of the pipe. No appreciable gap shall exist at the completed joint, except as permitted by the Engineer at locations where curves in the pipe alignment are specified or required. Excessive gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

- e. **Construction Joints:** Whenever two sections of pipe are to be joined where standard joints are not available, such as joining reinforced concrete pipe to cast-in-place or asbestos cement pipe, a concrete collar shall be constructed around the full periphery of the pipe and extending one (1') foot each side of the joint. The collar shall be of a minimum thickness equal to that of the concrete pipe, but in no case less than four (4") inches thick. The interior of the joint shall be smoothed with cement mortar and brushed. The area to receive the collar shall be thoroughly cleaned and dampened immediately prior to construction of the collar. The cost of constructing concrete collars shall be considered as included in the cost of the items requiring the collar, and no additional payment will be made therefor.
  
- f. **Pipe Laying:** Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer. The pipe shall be laid uphill from structure-to-structure with the bell (or groove) end up-grade. Pipe with elliptical reinforcement shall be placed with the minor axis in a vertical position. Adjustments of pipes to line and grade shall be made under the body of the pipe throughout its entire length and not by blocking or wedging. Bell holes shall be accurately placed and shall not be larger than is reasonably required to make the joint. Before the pipe is laid, the interior of the bell of the preceding pipe shall be carefully cleaned. After each section of pipe has been laid to line and grade, it shall be joined to the preceding section as required in Section 27.03(b), "JOINTS". After jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations. Material shall be placed uniformly on either side of the pipe to prevent any movement, in accordance with Section 13.06 "TRENCH AND STRUCTURE BACKFILL" of these Standard Specifications.

For mortar joint pipe, no walking in the trench or working over the pipe after it has been laid, except as may be necessary in tamping the earth and refilling, will be permitted until the pipe has been braced as specified above.

#### 27.04 NON-REINFORCED CONCRETE PIPE

- a. **Materials:** Non-reinforced concrete pipe shall be manufactured in accordance with ASTM Designation: C14: "Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe", as amended or revised.

Upon demand, the manufacturer of pre-cast concrete pipe shall furnish to the Engineer a Certificate of Compliance in accordance with the provisions in Section 6.03 "CERTIFICATES OF COMPLIANCE" of these Standard Specifications.

- b. **Joints:** The ends of non-reinforced concrete pipe sections shall be of such design that when properly laid they shall have a smooth and uniform interior surface. Both ends of pipe sections shall be substantially free of cracks and broken edges. Pipe so found to be damaged shall be rejected for use in the work. Each joint shall be sealed to prevent leakage. Sealing of joints shall be accomplished with cement mortar as indicated on the plans or specified in the Special Provisions, and shall conform to the following specifications:
- c. **Cement Mortar Joints:** Mortar shall conform to the requirements of Section 24.05 "CEMENT MORTAR" of these Standard Specifications. The ends of the concrete pipe shall be thoroughly wetted and cleaned prior to the application of mortar.

The ends of the pipe, after being wetted and cleaned, shall be completely filled with mortar for the full periphery of the joint. The two sections to be joined shall be firmly placed together in such a manner that the bell or groove end of the pipe fits truly and snugly over the tongue end so that mortar completely fills the joint. The interior surface of the joint shall be brushed smooth and all surplus mortar removed. The completed interior surface of the joint shall be as flush as possible with the pipe walls.

An external mortar band at least four (4") inches wide and three-fourths (3/4") inches thick shall be applied to the joint by first thoroughly cleaning and wetting the areas immediately adjacent to the joint and placing mortar around the upper two hundred seventy (270°) degrees of the pipe at the joint. The width and thickness of the external band shall be completely and immediately covered with an impervious membrane which shall be adequately anchored, or with moist earth.

In no case shall water be allowed to rise in or about the pipe before the mortar of the joint has become thoroughly set.

- d. **Construction Joints:** Whenever two sections of pipe are to be joined where standard joints are not available, such as joining non-reinforced concrete pipe to cast-in-place or asbestos cement pipe, a concrete collar shall be constructed around the full periphery of the pipe and extending one (1') foot each side of the joint. The collar shall be of a minimum thickness equal to that of the concrete pipe, but in no case less than four (4") inches thick. The interior of the joint shall be smoothed with cement mortar and brushed. The area to receive the collar shall be thoroughly cleaned and dampened immediately prior to construction of the collar. The cost of constructing concrete collars shall be considered as included in the cost of the items requiring the collar, and no additional payment will be made therefore.

- e. **Pipe Laying:** Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer. The pipe shall be laid uphill from structure-to-structure with the bell (or groove) end upgrade. Adjustments of pipes to line and grade shall be made under the body of the pipe throughout its entire length and not by blocking or wedging.

Bell holes shall be accurately placed and shall not be larger than is reasonably required to make the joint. Before the pipe is laid, the interior of the bell of the preceding pipe shall be carefully cleaned. After each section of pipe has been laid to line and grade, it shall be joined to the preceding section as required in Section 27.03b "JOINTS". After jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations. Material shall be placed uniformly on either side of the pipe to prevent any movement, in accordance with Section 13.06 "TRENCH AND STRUCTURE BACKFILL" of these Standard Specifications. No walking in the trench or working over the pipe after it has been laid, except as may be necessary in tamping the earth and refilling will be permitted until the pipe has been braced as specified above.

**27.05 CAST-IN-PLACE CONCRETE PIPE**

- a. **Materials:** Concrete used in the construction of non-reinforced cast-in-place concrete pipe and cement mortar used for patching, smoothing or repair of cast-in-place concrete pipe shall conform to the requirements of Section 24.05 "CEMENT MORTAR", of these Specifications.

Concrete shall be either 4,000 psi or 3,000 psi per the Special Provisions and shall develop a minimum compressive strength of 2800 psi at 28 days.

Admixtures shall be used only in conformity with the requirements of Section 90 of the State Standard Specifications.

Coarse and fine aggregate gradation shall conform to the requirements of Section 90 of the State Standard Specifications and these coarse aggregate maximum size limitations:

<u>Pipe Diameter</u>	<u>Maximum Aggregate Size</u>
24" to 48"	1" maximum
48" and over	1-1/2" maximum

Coarse and fine aggregate shall also conform to ASTM Designation: C33: "Standard Specification for Concrete Aggregates", as revised.

Reinforced concrete pipe may be substituted for cast-in-place concrete pipe at any location and shall comply with the following provisions:

Reinforced concrete pipe shall conform to the requirements of Section 27.03 of these Standard Specifications.

Substituted pipe shall have the same internal diameter as specified for cast-in-place pipe. The pipe class shall be as specified or as determined by the Engineer.

Joints on substituted pipe shall be of the cement mortar type unless otherwise indicated on the plans or in the Special Provisions.

Payment shall be at the unit price bid for cast-in-place concrete pipe with no additional compensation paid therefore, except as provided in Section 27.17 of these Standard Specifications.

- b. **Nominal Internal Diameter:** The nominal internal diameter shall be the size indicated on the plans. The actual internal diameter of the pipe at any point shall not be more than five (5%) percent less than the nominal internal diameter, and the actual internal cross-sectional area of the pipe at any point shall not be less than the cross-sectional area of a circle computed from the nominal internal diameter. The contractor may be allowed to construct pipe of larger sizes than that specified on the plans; however, any and all deviations in sizes from that specified must be approved by the Engineer.
- c. **Wall Thickness:** Minimum wall thickness for the various sizes of pipe shall conform to the following table:

<u>Internal Diameter</u>	<u>Minimum Wall Thickness of Pipe</u>
24"	2 1/2"
30"	3"
33" - 36"	3 1/2"
42"	4"
48"	5"
54"	5 1/2"
60"	6"
66"	6 1/2"
72"	7"
78"	7 1/2"
84"	8"
90"	8 1/2"
96"	9"

- d. **Excavation:** Excavation shall conform to the requirements of Section 13.05, "TRENCH AND STRUCTURE EXCAVATION".

- e. **Bedding:** Bedding shall conform to the requirements of Section 13.06 and 27.13 of these Standard Specifications, unless otherwise specified in the Special Provisions.

Pipe Construction; Feasibility: The City makes no guarantee as to the types of soil or of soil conditions within the project limits. The contractor shall perform whatever soils or other tests as he deems necessary to make himself fully aware, prior to submitting a bid proposal, of the soil types or conditions which may prevail throughout the project site. Tests so performed shall be conducted at the contractor's expense, and no compensation will be paid therefore.

Where unstable trench conditions are encountered, the contractor shall attempt to stabilize the trench by shoring or, wherever practical, by sloping the sides of the trench above the top of the pipe.

Where the Engineer determines, due to unstable trench conditions or other reasons, that it is not feasible to place cast-in-place concrete pipe, the contractor shall place reinforced concrete pipe of the same size and class indicated on the plans or bidder's proposal, or as specified in the Special Provisions. The contractor will be paid for reinforced concrete pipe so placed at the unit price bid for cast-in-place pipe and no additional compensation paid therefore.

Construction of cast-in-place concrete pipe may be considered as not feasible when the trench walls are not stable below a distance above the bottom of the trench equal to one-half the diameter of the pipe. The Engineer, however, shall be the sole judge as to the feasibility of constructing cast-in-place concrete pipe as shown on the plans. Construction of cast-in-place concrete pipe shall be considered as feasible where fifty (50') feet or more of stable trench is encountered.

- f. **Pipe Construction:** Pipes shall be constructed in conformity with the prescribed lines and grades obtained from stakes set by the Engineer.

All surfaces against which concrete is to be placed shall be free from standing water, mud and debris and shall be firm enough to prevent contamination of the concrete by earth or other foreign material.

Absorptive surfaces against which concrete is to be placed shall be moistened thoroughly so that the moisture will not be drawn from the freshly placed concrete.

When placing operations cease or are delayed for any reason for more than thirty (30) minutes, the end of the pipe shall be left rough with a slope of approximately thirty (30°) degrees and the ends of the pipe shall be securely closed by heavy canvas or other acceptable material to prevent excessive dehydration of the concrete already placed. The joint so formed when placing operations again commence

shall conform to the requirements of Section 27.03b "JOINTS" of these Specifications.

Cast-in-place pipe shall be constructed in one placement around the complete periphery of the pipe by means of a traveling pipe-casting-machine approved by the Engineer. The bidder may be required to furnish evidence of successful in-service performance of pipe produced by the pipe-casting-machine under similar working conditions.

Pipe shall be cast-in-place in a manner such that as forms are lapped, the lap ridges formed in the interior walls of the pipe face downstream in the direction of flow.

Forms used in the work shall be clean and reasonably free of concrete adhering to the surface of the forms from previous operations. Immediately prior to use in the work, each form shall be sprayed or otherwise coated with an approved form oil. Forms used shall be of sufficient strength to withstand vibrating of concrete and which will provide interior dimensions of the pipe in accordance with the tolerances of Section 24.03 "FORMS" of these Standard Specifications. Damaged forms shall not be used in the work and shall be removed from the job site.

- g. **Construction Joints:** Where construction of cast-in-place concrete pipe stops short of a manhole or other structure and construction will continue at a later time, or where cast-in-place pipe is to be jointed to pre-cast pipe, the resulting joint shall be reinforced by constructing a concrete collar around the joint. This collar shall extend one (1') foot each side of the joint around the full periphery of the pipe, and shall be equal in thickness to the wall thickness of the joined pipe, but in no case less than four (4") inches. The area to receive the collar shall be thoroughly cleaned and dampened immediately prior to constructing the collar. The cost of constructing concrete collars shall be considered as included in the cost of the various items requiring construction of concrete collars, and no additional payment will be made therefore.

- h. **Curing:** Immediately after finishing of the exposed exterior surface of the pipe, it shall be covered with an approved polyethylene or plastic membrane which shall be anchored sufficiently to keep the surface covered.

Unless the pipe terminates at a structure which is closed to the air, the ends of the pipe, as well as any other openings, shall be securely closed with an impermeable membrane for a minimum of seven (7) days or until the structure is constructed, if sooner. Precaution shall be used to make the structure reasonably air-tight for a minimum of seven (7) days, except when work is taking place inside the pipe.

- i. **Finish:** The exterior exposed surface of the pipe shall have a steel screeded finish. A hand trowel shall be used, as construction progresses, to smooth areas not

sufficiently smoothed by the pipe-casting machine. All finishing of the exterior shall be accomplished immediately as pipe construction progresses.

The interior surface of the pipe shall be equivalent to a steel screeded finish. All honey-combed or minor voids shall be chipped out, filled and smoothed with cement mortar. Major voids shall be repaired with Portland Cement Concrete (Class A or B) in a manner prescribed by the Engineer.

Excessive longitudinal ridges along the sides of the interior of the pipe shall be chipped back and smoothed with cement mortar as directed by the Engineer. Form lap offsets exceeding the limits established below shall be chipped back and smoothed with mortar.

<u>Pipe Diameter</u>	<u>Maximum Offset</u>
24" - 30"	3/8"
33" - 42"	1/2"
48" - 66"	5/8"
72" - 90"	7/8"
96" -	1"

Interior finishing shall be accomplished as soon as possible or practical after placing of the pipe and shall be subject to the provisions of Section 27.17 "PAYMENT", of these Standard Specifications.

- j. **Concrete Tests:** During the placing operations, the contractor, if requested, shall assist the Engineer in securing three (3) standard test cylinders for each fifty (50) cubic yards, or portions thereof, per day. Test cylinders shall be tested for strength by a recognized testing laboratory. The cost of such tests will be at the contractor's expense and certified copies of the results will be submitted to both the contractor and the Engineer. One of the cylinders will be tested at the end of seven (7) days; one of the test cylinders will be tested at the end of twenty-eight (28) days; and one of the test cylinders will be held to be tested at the discretion of the Engineer, all in accordance with the procedures established by the ASTM Designation: C39: "Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens".
- k. **Hydrostatic Tests:** When hydrostatic testing is specified and when the concrete has reached a compressive strength of 2,800 pounds per square inch, the contractor shall test the pipe with water to the maximum operating head. The line may be tested in one length or in sections, as approved by the Engineer. Each test shall be maintained for twenty-four (24) hours at the maximum operating head.

All leaks creating wet spots at the soil surface, or otherwise exposed by the test, shall be repaired by and at the expense of the contractor. Leakage loss during this

test period shall not exceed one thousand (1,000) gallons per inside diameter inch diameter inch per mile of pipe installed, for a period of twenty-four (24) hours.

Where leakage exceeds the allowable, the contractor shall discover the cause and remedy it before the line is offered for retesting and acceptance. If the leakage is less than the allowable, and individual leaks are observed, such leaks shall be repaired in a manner satisfactory to the Engineer.

## 27.06 VITRIFIED CLAY PIPE AND FITTINGS

- a. **Materials:** Vitrified clay pipe and fittings shall be extra strength bell and spigot pipe manufactured in accordance with ASTM Designation: C700: "Standard Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated".

Upon demand, the manufacturer of vitrified clay pipe shall furnish to the Engineer a Certificate of Compliance in accordance with Section 6.03 "CERTIFICATES OF COMPLIANCE" of these Standard Specifications.

- b. **Joints:** Joints shall be performed factory fabricated plastisol joints manufactured in accordance with ASTM Designation: C425: "Standard Specification for Compression Joints for Vitrified Clay Pipe and Fittings".

Joints shall be of such a design that when the pipe is properly laid there shall be a smooth and uniform interior surface. Ends of pipe sections and fittings shall be free of cracks and broken edges. Pipe so found shall be rejected for use in the work.

The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe. The two sections joined shall be firmly placed together in such a manner that the spigot end of the pipe "homes" on the bell end of the pipe. No appreciable gap shall exist at the completed joint, except as permitted by the Engineer at locations where curves in the pipe alignment are specified or required. Excessive gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

- c. **Pipe Laying:** Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer. The pipe shall be laid uphill from structure to structure. Occasional variations in grade will be permitted as follows:

Above grade 1/4 inch; below grade not to exceed 1/2 inch; alignment not to exceed 3 inches if gradual over a distance of 20 feet. Adjustments of pipes to line and grade shall be made under the body of the pipe throughout its entire length and not be blocking or wedging. Bell holes shall be accurately placed and shall not be larger than is reasonably required to make the joint. Before the pipe is laid, the interior of the bell of the preceding pipe shall be carefully cleaned.

After each section of pipe has been laid to line and grade, it shall be joined to the preceding section as required in Section 27 “SEWER AND STORM DRAIN PIPE”. After jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations.

Material shall be placed uniformly on either side of the pipe to prevent any movement, in accordance with Section 13.06 “TRENCH AND STRUCTURE BACKFILL” of these Standard Specifications. No walking in the trench or working over the pipe after it has been laid, except as may be necessary to tamping the earth and refilling, will be permitted until the pipe has been braced as specified above. The open ends of all sewer lines being installed shall be covered to keep out animal life, etc., whenever the line is left unattended for any length of time, such as overnight.

### 27.07 POLY VINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS

- a. **Materials:** Poly vinyl chloride (PVC) pipe and fittings shall be manufactured in accordance with ASTM Designation: C3034: “Standard Specification for Type PSM Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings”.

The minimum allowable pipe stiffness (F/AY) for all sizes shall be forty-six (46 psi) pounds per square inch at five (5%) percent deflection when tested in accordance with ASTM Test Method D2412: “Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe and Parallel-Plate Loading”. Pipe and fittings shall be manufactured and supplied with bell and spigot joints which are an integral part of the pipe or fitting.

Upon demand, the manufacturer of PVC pipe shall furnish to the Engineer a Certificate of Compliance in accordance with the provisions of Section 6.03 “CERTIFICATES OF COMPLIANCE” of these Standard Specifications.

- b. **Joints & Gaskets:** Joints for PVC pipe and fittings shall be elastomeric gasket type able to withstand contraction and expansion and be able to prevent displacement during assembly after the pipe has been locked into place. Joints shall be water tight when tested in accordance with ASTM Test Method D2855: “Standard Practice for the Two-Step (Primer and Solvent Cement) Method of Joining PVC or Chlorinated PVC Pipe and Piping Components with Tapered Sockets”.

Joints shall be of such a design that when the pipe is properly laid, there shall be a smooth and uniform interior surface. Ends of pipe sections and fittings shall be free of cracks and broken edges. Pipe found to be so damaged shall be rejected for use in the work.

The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe. Pipe shall then be joined together as recommended by the

manufacturer. Gaskets shall be properly lubricated and the pipe "homed" as far as recommended. No appreciably gap shall exist at the completed joint, except as permitted by the Engineer. Excess gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

Elastomeric gaskets shall conform to the provisions in ASTM F477 for thermoset elastomeric gaskets, and these specifications. Gaskets shall be factory installed by the pipe manufacturer, and shall be specifically intended for use with the pipe.

Gaskets shall be manufactured from a synthetic elastomer, containing not less than 50% by volume of first-grade synthetic rubber. The remainder of the compound shall consist of pulverized fillers free of rubber substitutes, reclaimed rubber, and deleterious substances.

A gasket shall contain no more than one splice. A splice shall be made by applying a suitable cement to the ends and vulcanizing the splice in a full mold.

The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe. Pipe shall then be joined together as recommended by the manufacturer. Gaskets shall be properly lubricated and the pipe "homed" as far as recommended. No appreciably gap shall exist at the completed joint, except as permitted by the Engineer. Excess gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

- c. **Time Limit for Installation:** If the Contractor proposes to install any PVC pipe and fittings that are more than 180 days old from the date of manufacture, the Contractor shall retest the materials within 60 days prior to installation, at the Contractor's expense, to demonstrate compliance with specification requirements, unless otherwise directed by the Engineer. The Contractor shall not install any PVC pipe and fittings more than 2 years old from the date of manufacture. PVC pipe that is stored for more than 3 weeks under conditions that may subject the pipe to sunlight or other sources of ultraviolet light shall be covered or otherwise protected from such exposure to prevent pipe material degradation due to ultraviolet radiation. The foregoing shall also apply to elastomeric gaskets.
- d. **Pipe Laying:** Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer. The pipe shall be laid uphill from structure to structure with the bell (or groove) end up-grade. Existing sewer lines shall remain operational at all times. The Contractor shall furnish and install a gasketed stainless steel band-type repair coupling specifically designed for such use and approved by the Engineer where PVC pipe is to be connected to an existing pipe.

Sewer pipe and fittings shall be laid to true line and grade, and jointed in compliance with the manufacturers recommendation and shall be carefully adjusted to grade by

scraping away or filling and tamping the trench bottom to eliminate any possible sag or high point in the pipe. Occasional variations in grade will be permitted as follows: above grade, 3/16" inch; below grade, not to exceed 3/8" inch; alignment not to exceed 2 inches if gradual over a distance of 20 feet. Adjustments of pipes to line and grade shall be made under the body of the pipe throughout its entire length and not by blocking or wedging. Bell holes shall be accurately placed and shall not be larger than is reasonably required to make the joint. Before the pipe is laid, the interior of the bell of the preceding pipe shall be carefully cleaned.

After each section of pipe has been laid to line and grade, it shall be joined to the preceding section. After jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations. Material shall be placed uniformly on either side of the pipe to prevent any movement, in accordance with Section 13.06 "TRENCH AND STRUCTURE BACKFILL" of these Specifications. No walking in the trench or working over the pipe after it has been laid, except as may be necessary in tamping the earth and refilling, will be permitted until the pipe has been braced as specified above. The open ends of all sewer lines being installed shall be covered to keep out animal life, etc., whenever the line is left unattended for any length of time, such as overnight.

The interior of the pipe shall be kept free from dirt and other foreign materials as the laying progresses. Any pipe that shows undue settlement or is damaged shall be taken up and replaced or re-laid at the Contractor's expense. The end of any sewer that does not terminate at a manhole shall be closed at the bell end with a plug manufactured for that purpose.

- d. **Bedding:** Bedding for PVC pipe shall conform to the requirements of ASTM Designation: D2321: "Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications", for the type and class of material encountered in the trench. These specifications shall take precedence over other bedding requirements specified in those Standard Specifications, but not exclude them.
- e. **Backfill:** Backfill shall be performed as specified in Section 13.06 "TRENCH AND STRUCTURE BACKFILL" of these Standard Specifications except that the initial backfill operation shall conform to the requirements of the "Haunching and Initial Backfill" section of ASTM Designation: D2321 (See above).
- f. **Test Requirements:** Deflection testing shall be provided by the contractor for all PVC installations. The contractor shall demonstrate that the maximum pipe deflection does not exceed five (5%) percent of the diameter of the pipe installed by pulling a properly sized solid ball or mandrill or a rigid set of discs, as approved by the Engineer, through the pipe.

Where deflection of the pipe exceeds the allowable, the contractor shall, at his own expense, make suitable repairs to the line before it is offered for retesting and acceptance. All repairs shall be made to the satisfaction of the Engineer. Deflection testing shall be paid for at the unit price bid per linear foot of pipe when the items of work are included in the bid proposal. When no item of work is included in the bid proposal, payment for the testing shall be considered to be included in the price bid for the various items of work requiring the testing and no additional payment will be made therefor. Full compensation for providing deflection testing, including furnishing all labor, materials, tools, equipment, and incidentals, and doing all work involved in performing the required testing shall be included in the unit price bid per linear foot for deflection testing or included in the various items of work requiring the testing and no additional payment will be made therefore.

During production of the pipe, the pipe manufacture shall perform the tests specified in ASTM D3034. A certificate of compliance with specification requirements shall be provided by the pipe manufacturer, for each lot of pipe from which the pipe is delivered and shall be delivered with the pipe. The certificates of compliance shall include test results. The Contractor shall submit the certificates of compliance to the Engineer prior to commencing excavation for installation of the pipe.

In addition, when so directed by the Engineer, the Contractor shall obtain PVC compound samples and shall provide test specimens in accordance with ASTM D1987. The Contractor shall also provide one test selected at random by the Engineer from each 1200 feet or fraction thereof, or from each pipe lot or fraction thereof. A lot shall be defined as all pipe having identical identification marking. The length of the test pipe for each selected pipe shall be a minimum of 8 feet. The Engineer may test the specimens for compliance with the specification requirements. When so directed by the Engineer, the Contractor shall furnish test specimens of gaskets from each batch used in the work.

When the pipe is delivered to the work site, the Engineer may require additional testing to determine conformance with specification requirements for pipe flattening, impact resistance, pipe stiffness, and extrusion quality.

The basis of acceptance will be compliance with specification requirements, as determined by the inspection of pipe, fittings, and couplings, certificates of compliance, and the results of any tests conducted by the Engineer.

## 27.08 WYES, GENERAL

Wyes shall be of the same material as the main sewer line and be manufactured to be compatible with the pipe with which they are installed. They shall conform to the strength and

jointing requirements of the Standard Specifications that covers the type of pipe with which they are to be installed.

The contractor shall place wyes of the size specified at the locations shown on the plans or as directed by the Engineer. Wyes, unless otherwise specified, shall be inclined at an angle from the horizontal of not greater than forty-five (45°) degrees.

Each wye that does not terminate in a manhole shall be closed at the bell with a cap made for that purpose.

**Payment:** Payment for wyes shall be made on a unit price per each basis, or as otherwise specified in the Special Provisions, and shall include full compensation for supplying all labor, materials, tools, caps, equipment, and incidentals, and doing all work involved in furnishing and installing the wye as shown on the plans and as specified in these Standard Specifications and in the Special Provisions, and as directed by the Engineer, and no additional payment will be made therefore.

#### 27.09 HOUSE BRANCHES, GENERAL

Sewer house branches shall be installed at the locations shown on the plans and in conformance with the Standard Drawings.

Four (4") inch and six (6") inch diameter branches may be connected directly to sewer mains eighteen (18") inches or greater in diameter providing that the type of connection to the main is approved by the Engineer. Other means of making connections to sewer mains will not be allowed.

A two way sanitary sewer cleanout is required to be installed behind the sidewalk for a sewer service lateral in construction. It is the responsibility of the owner to maintain the cleanout, along with the lateral up to point of connection at the sewer main.

House branches eight (8") inches or greater in diameter must connect to mains with a manhole structure. Installation of house branches shall commence at the bell of the wye or from the manhole and extend to a point (10') feet inside the property line. At this point, the branch shall be plugged to seal the ends with a plug that is approved by the manufacturer of the pipe for use with his product.

- a. **Marking:** The location where the sewer crosses beneath curb and gutter shall be marked on the curb with the letter "S". Said mark is to be chiseled into the existing concrete or stamped if the concrete is freshly poured. In cases where a concrete curb does not exist or will not exist in the near future, the contractor shall mark the end of the house branch with a 2" x 4" board, three (3') feet long that extends one (1') foot above the ground.

House branches shall be installed in existing streets in such a manner that the street will be open to traffic at all times.

Excavations for laying service laterals shall be made in accordance with the Plans or Contract Specifications. Where no direction is given, service laterals shall be installed in such a manner that: 1) At no time will an existing street be closed to traffic; 2) Whenever service laterals are to be installed in existing major streets that have been resurfaced within the last five years, or in pavement that is in good condition free of cracking, they shall be installed by boring methods rather than open cut trenches. Laterals crossing over water mains shall comply with Section 27.15, "WATER/SEWER SEPARATION," of these specifications.

### 27.10 SEWER LINE ACCEPTANCE TEST

The sewer line acceptance test shall be a low pressure air test performed under the supervision of the Engineer and utilizing the following procedure:

Test shall not be made until the section of pipe to be tested, including house branches, has been cleaned, completely backfilled and the trenches compacted as specified in Section 13.06 "TRENCH AND STRUCTURE BACKFILL" of these Standard Specifications.

Plugs to be used in the test shall be the pneumatic type equipped with pressure gauges for measuring air pressure in the sewer pipe to be tested. The pressure gauges shall be calibrated in one-half (1/2 psi) pound per square inch increments and connected to the plug in such a way that when the plug is placed in the installed line, the gauge can be located outside of the manhole.

All plugs shall be seal tested before being used in the actual test installation. The seal test shall be conducted by placing in both ends of a pipe laying on the ground, the plugs to be tested. The plugs shall then be inflated to twenty-five (25 psi) pounds per square inch-gauge. The sealed pipe shall then be pressurized to give (5 psig) pounds per square inch-gauge. The plugs shall not move when subjected to this pressure.

Pipe shall be tested between consecutive manholes. Prior to testing, the line shall be thoroughly wetted to minimize any loss of air through the pipe wall. After the pipe has been wetted, the plugs shall be installed and inflated to twenty-five (25 psig) pounds per square inch-gauge. Low pressure air shall then be introduced into the sealed line until a constant pressure of four (4 psig) pounds per square inch-gauge is maintained. The pressure in the line shall be maintained at this level for a minimum of two (2) minutes to allow the air pressure to stabilize in the pipe. During the stabilization period, the plugs shall be tested for air tightness. If a plug is found to be faulty, the pressure in the line shall be released, the faulty plugs reinstalled, and the process begun over again.

After the stabilization period, the air supply shall be disconnected. When the air supply is disconnected, the air pressure in the line shall be four (4 psig) pounds per square inch-gauge. After the air supply is disconnected, the gauge shall be watched until the air pressure reaches three and one-half (3.5 psig) pounds per square inch-gauge. At this point, the time required for the air

pressure to drop from three and one-half (3.5 psig) to two and one-half (2.5 psig) pounds per square inch-gauge for asbestos cement and vitrified clay pipe and three (3 psig) pounds per square inch-gauge for PVC pipe shall be recorded.

The pipe reach being tested shall be considered as having passed the test when the time recorded for the pressure to drop one (1 psi) or one-half (1/2 psi) pound per square inch as previously specified is not less than the time shown for the given type and diameter of pipe in the following table:

**PVC Gravity Sewer Pipe  
Minimum Acceptable Time Required for Pressure  
Decrease for 3.5 to 3.0 Psig**

<u>Pipe Diameter in Inches</u>	<u>Time (Minutes and Seconds)</u>
4	2 minutes 32 seconds
6	3 minutes 50 seconds
8	5 minutes 6 seconds
10	6 minutes 22 seconds
12	7 minutes 39 seconds
15	9 minutes 30 second

Pipes greater than 15 inches diameter shall be as specified in the Contract Specifications

**Vitrified\* Clay Pipe  
Minimum Acceptable Time Required for Pressure  
Decrease from 3.5 to 2.5 Psig**

\*Only if this kind of pipe is required on the Plans or specified in the contract Specifications

<u>Pipe Diameter in Inches</u>	<u>Time –Minutes (Seconds)</u>	<u>Min. Dist. Between Manholes (Feet)</u>	<u>K Value</u>
4	2.0 (0)	430	0.428
6	2.0 (45)	380	0.592
8	3.0 (45)	320	0.702
10	4.0 (46)	260	1.100
12	5.0 (40)	215	1.580
15	7.0 (0)	170	2.470
18	8.0 (36)	145	3.560
21	10.0 (6)	125	4.850
24	11.0 (6)	105	6.340

Pipes greater than 24 inches diameter shall be as specified in the Contract Specifications  
The above tabulated values shall be used for the respective diameter pipes except where the distance between the successive manholes is less than the above-tabulated values, in which case, the following formula will be used to determine the test time:

T=KL  
Where:

T-test time in seconds

K=value from table

L=distance between successive manholes in feet.

- a. **Air Test:** The air test is to be made on the pipe installation without the addition of seals to the pipe interior. The application of mortar, epoxy, caulking compounds, or other material to the pipe will be prohibited. Failure to meet the air test will require the contractor to replace sections as required. Any broken pipe, separation of joints, or any pipe not laid true to line and grade, shall be replaced. All test expenses are to be borne by the contractor.

## 27.11 TELEVISION INSPECTION OF INTERIOR OF INSTALLED PIPE

The contractor shall furnish closed circuit television equipment for an interior inspection of the newly installed sewer mains. The television inspection of the sewer mains shall be made after leakage and deflection tests have been performed and prior to placing street aggregate base or asphalt paving. Any broken pipe, separation of joints, or any pipe exceeding the permitted tolerances for line and grade shall be replaced or repaired.

Any pipe repaired or replaced shall be retested for leakage and deflection. An electronic copy of the television inspection (standard DVD or Mpeg file format) shall be provided the City at no additional cost to the City, as well as any retests shall be provided to the City at no additional costs.

The Contractor shall be responsible for all costs associated with furnishing the television inspection and making final repairs to the sewer mains and re-inspection utilizing the closed circuit television equipment.

### *27.11.01 Requirements for Sewer Video Inspections:*

1. The Video Inspection Company is to certify as to their ability to adequately perform the video inspection.
2. Contractor will provide the City 48 hour notice of inspection schedule so the City inspector may be present to monitor the inspection.
3. A flush truck will be required to be on-site to aid in the video inspection.
4. A DVD shall be submitted to the City as proof of inspection and be certified to comply with Plan requirements or identify station distances of any defects found.
5. Lateral lines to be documented by stationing distance from center line of manhole and the inspection form shall provide a map of the inspected lines.
6. In order to facilitate review, a log of the inspections performed shall correlate from manholes, stationing, etc., between the sewer plans and the DVD produced.
7. Joints - Shall have a view perspective, and have each joint inspected by turning the camera 90 degrees to the joint inspecting all 360 degrees of the connection.
8. Laterals - Shall have a perspective view identifying clock position to the main and a view into the lateral to identify any rolled gasket in the lateral connection.

9. Sags - A guide shall be used that is 1” in diameter to identify sags and must be visible during the entire inspection. Give a perspective view of the start of the sag, a view of the guide at the deepest part of the sag and the end of the sag.
10. Downstream Access Point - A perspective view of the channel from the mainline at the downstream access point must be shown. Provide a snapshot of the bottom of the channel and the shelves looking downstream.
11. Debris - If debris is found during the inspection, the inspection must be terminated and restarted one the debris has been removed and more water flushed through the main.
12. Video Inspection shall be performed in the direction of flow.
13. Lined Pipes (e.g. Cured In Place) – The bottom of the pipe shall be free of water and the camera lens shall have an obstructed view of the pipe bottom.

Additional Information:

Before new construction of sewer infrastructure (main sewer line, manholes, etc.) is approved by the City, a video of the pipe interior will be reviewed to ensure specific guidelines are followed. If these are not met, the approval is put on hold until the problem is fixed. A follow up video inspection is then required which will be reviewed and approved if in compliance. The video inspection may be conducted by private contractors but the final review and approval is the City’s responsibility and authority.

The City of Reedley may also be available to perform inspections and will charge a fee to recover the cost of the labor and equipment utilized for the video inspection and cleaning.

Guidelines for inspecting new construction:

Ensure access area is free of construction debris. Standby charges may apply if work is scheduled and staff is unable to access the area to be inspected.

Clean mainlines and manholes of all debris prior to inspection.

After cleaning, water is to be dumped in to the upstream manhole via flusher nozzle or hydrant. If flusher nozzle is used by running it upstream, it needs to be pulled back without pressure to keep water in the line.

27.12 BEDDING

Bedding for all pipe, unless specified otherwise in these Standard Specifications or the Special Provisions, shall conform to the requirements of Section 13.06 “TRENCH AND STRUCTURE BACKFILL” of these Standard Specifications.

27.13 BACKFILL

Backfill for all pipe, unless specified otherwise in these Standard Specifications, shall conform to the requirements of Section 13.06 “TRENCH AND STRUCTURE BACKFILL” of these Standard Specifications.

27.14 PROTECTION OF PIPE

The requirements of this Section 27 shall not relieve the contractor of the provisions of Section 7.11 “RESPONSIBILITY FOR DAMAGE” of these Standard Specifications.

The contractor shall exercise every precaution against damage to the pipe, including damage from subsequent backfill or compaction operations. Any damaged pipe shall be removed from the work or repaired as directed by the Engineer.

27.15 WATER/SEWER SEPARATION

Water and sewer mains and house services shall maintain minimum vertical and horizontal separation between each other as required by Title 22 of the State of California Administrative Code, Section 64572. Attention is called to Section 30.08 of these Standard Specifications.

27.16 UNDERGROUND DETECTABLE METALLIC WARNING TAPE FOR NON-METALLIC PIPE

Provide permanent, bright-colored, continuous-printed tape consisting of an aluminum or steel foil sheathed in a plastic laminate, not less than 2 inches wide by 3 mils thick.

Provide tape with printing which most accurately indicates type of buried service. Provide the following colored tape for the various piping services:

SERVICE	COLOR
Sewer	Green
Water	Blue
Reclaimed water	Violet
Gas	Yellow
Electric	Red
Fuel oil, Gasoline	Yellow
Telephone	Orange
Chemical	Yellow
Cable TV	Orange

27.17 PAYMENT

The length of pipe to be paid for will be the slope length designated by the Engineer. When pipes are laid through structures as shown in the Standard Plans or as directed by the Engineer, the payment quantity will include those quantities within the structure. When pipes begin and/or terminate at structures, the payment quantity shall be exclusive of structures. When pipes enter a structure from a right angle and are cut to conform to the faces of the structure or of

a slope, the quantity to be paid for will be measured along the center line of the pipe to the inside face of the structure, or to the face of the slope.

The price paid per linear foot of pipe shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including, but not limited to, all fittings and couplings as may be required, and doing all work involved in installing the pipe complete and in place, including, but not limited to, excavation and backfill, and for all tests as herein specified, all as shown on the plans, and as specified in these Standard Specifications and in the Special Provisions, and as directed by the Engineer.

## SECTION 28 - BORING AND JACKING PIPE

### 28.01 GENERAL

This work shall consist of furnishing, boring, and jacking into place the type of pipe shown on the plans or specified in the Special Provisions at locations and between the limits shown on the plans or specified, and in accordance with these Specifications.

### 28.02 MATERIALS

The pipe designated on the plans shall be of the size and class shown on the plans or specified, except to the class of pipe designated has been determined for vertical loads only. Additional facilities, reinforcement, or strength of pipe required to withstand jacking pressure shall be determined and furnished by the contractor at his expense.

Any sleeves for joints shall be manufactured of galvanized steel, stainless steel, or fiberglass, sufficient in strength to withstand all loads, and which will maintain a water tight joint.

### 28.03 JOINTS

Joints for sewer and storm drain pipe shall be of the rubber gasket type and shall conform to the requirements of the various pipe sections of these Specifications, except as herein modified.

If the annular space in the joints on the inside of sewer or storm drain pipe exceeds one (1") inch, the space shall be filled with cement mortar for the full periphery of the joint and finished smooth and flush with the interior walls of the pipe. Filling and finishing annular spaces shall be accomplished after the entire installation is completed for larger pipe.

### 28.04 EXCAVATION OF JACKING AND RECEIVING PITS

Jacking and receiving pits shall be excavated and sheathed, shored or braced in accordance with the Safety Regulations of the State of California, Department of Industrial Relations, Division of Occupational Safety and Health, and in accordance with Section 7.17 of these Specifications.

### 28.05 JACKING AND BORING

Pipe shall be jacked in conformity with the prescribed lines and grades obtained from the stakes set by the Engineer. Excavation for the pipe shall be accomplished by boring or by hand digging. Jetting with water will be permitted with the approval of the Engineer.

The excavated hole, whether bored or hand dug, shall not be more than one-tenth (0.1') foot greater than the outside limits of the pipe, or where the contractor elects to use a conductor pipe, no more than one-tenth (0.1') foot greater than the outside limits of the conductor.

If the nature of the material is such that caving will likely occur and which will result in a greater space than specified above, a metal shield or jacking head shall be installed which extends a minimum of eighteen (18") inches ahead of the jacked pipe or conductor. The metal shield shall cover a minimum of the upper one-half (1/2) of the periphery of the jacked pipe or conductor. Excavation shall not proceed beyond the shield.

Cavities or voids outside the limits specified above, regardless of cause, shall be backfilled with sand, soil, cement, or cement mortar as directed by the Engineer. The method by which backfill is to be performed shall be approved by the Engineer.

#### 28.06 BACKFILL OF JACKING AND RECEIVING PITS

Jacking and receiving pits shall be backfilled in accordance with Sections 13.06 "TRENCH AND STRUCTURE BACKFILL" of these Standard Specifications.

#### 28.07 PAYMENT

The price paid per linear foot of pipe, shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in furnishing and installing the pipe in place, including, but not limited to, excavating, constructing and backfilling jacking and receiving pits, constructing metal shields (jacking heads), and backfill of voids or cavities, all as shown on the plans, as specified in these Standard Specifications and in the Special Provisions, and as directed by the Engineer.

## SECTION 29 - SEWER AND STORM DRAIN STRUCTURES

### 29.01 DESCRIPTION

This work shall consist of constructing Portland cement concrete sewer and storm drain manholes, storm drain inlets and outlets and any miscellaneous structures appurtenant to sewers and storm drain all complete and in place at the locations shown on the plans, on the Standard Plans and as specified in these Standard Specifications and in Section 51 of the State of California Standard Specifications.

### 29.02 MANHOLES AND MATERIALS

- a. **Manholes:** Manholes shall consist of a poured-in-place concrete or a pre-cast-polymer concrete base section (except as otherwise provided by the Standard Plans), a pre-cast polymer concrete or concrete riser section or cast in place riser section, a reinforced concrete or pre-cast-polymer taper section, grade rings, cast iron frame and cover, and poured in place concrete collars.

Where specified on the plans or directed by the Engineer, manholes shall be left a minimum of one (1') foot and a maximum of eighteen (18") inches below final finish grade of streets or other areas to be reconstructed or where new streets or other facilities are to be constructed. The manhole frame and cover shall be temporarily set as specified by the Engineer. Unless otherwise specified, the Contractor will be required to raise these manholes to grade in accordance with the Standard Plans for raising manholes to grade, including returning after construction or reconstruction of streets or other areas, shall be included in the price paid per manhole, and no additional payment will be made unless a bid item is provided therefore.

Where existing manholes need to be raised or lowered to meet a new street grade, they will be lowered below the grading plane as specified in Section 13.02 of these Standard Specifications and marked until the street has been paved. After the paving material has been compacted, they will be dug out, the frame and cover removed and raised to grade as shown on the Standard Plans.

In all cases where manhole covers are to be brought to grade in areas with existing pavement, the repair shall be done in accordance with Sections 13 and 14 and shall equal in thickness and quality with the type of base, if any, and paving, that was existing or in accordance with the trench resurfacing requirements for the pipeline construction.

- b. **Materials:**

**Cast-in-Place Concrete:** Concrete for cast-in-place manholes shall be Class 2 concrete conforming to the provisions in Section 90 of the State Standard

Specifications, unless otherwise shown on the Plans or specified in the Contract Specifications. Portland cement shall be Type II low alkali sulfate resistant conforming to the provisions in ASTM C150. Slump shall not exceed 3 inches. Before using concrete, the Contractor shall submit in writing to the Engineer a copy of all mix design. Shall consist of a poured-in-place concrete base section, (except as otherwise provided by the Standard Plans), a pre-cast or cast-in-place riser section, a reinforced concrete taper section, grade rings, cast iron frame and cover, and poured-in-place concrete collars.

**Precast Reinforced Concrete Manhole Sections:** Precast reinforced manhole section for manholes shall conform to the provisions in ASTM C478: “Standard Specification for Circular Precast Reinforced Concrete Manhole Sections” using Type II cement, see C150: “Standard Specification for Portland Cement”.

Elliptical single line reinforcement is not allowed. The ends of the manhole sections shall be in planes at right angles to the longitudinal axis of the section. The ends of manhole sections shall be finished to regular smooth surfaces, and no point on any surface of either the spigot end or bell end shall project beyond, or be more than ¼ inch short of, the specified plans.

In addition to the tongue and groove joints shown on the Standard Drawings, joints for manhole sections may be rubber gasket joints of flush bell and spigot design with a contained rubber gasket. Joints and gaskets shall conform to the provisions in ASTM C443 for standard gaskets, except as modified or required otherwise in these Specifications. The gasket shall be confined in a groove or by a shoulder on the spigot end of the manhole section so that neither movement of the section nor the hydrostatic pressure can displace the gasket. When the joint is assembled, the gasket shall be compressed to effect a watertight seal.

Rubber gasket joint assemblies shall be formed and accurately manufactured so that installed manhole sections will form a continuous watertight manhole with a smooth and uniform interior surface, and shall provide for slight movements of the sections due to expansion, contraction, settlement, or lateral displacement. The shape and dimensions of the joint shall be such that it shall be self-centering upon closure, and so designed that the gasket will not be required to support the weight of the manhole sections. The rubber gasket shall be the sole element of the joint depended upon to provide water-tightness.

Manhole adjustment rings shall be precast concrete manhole adjustment rings conforming to the details on the standard drawings.

**Mortar:** In manholes shall be composed of one part, by weight, Portland cement (Type II low alkali conforming to ASTM C150: “Standard Specification for Portland Cement”) and 2 parts, by weight sand.

**Steel reinforcement bars:** Shall be deformed billet-steel bars of the size called for in the Plans and Specifications, conforming to provisions in ASTM A615 for Grade 60.

**Metal frames and covers for manholes:** Shall be cast iron meeting the provisions in ASTM A46 for Class 25, and shall conform to the details shown on the Plans and Standard Drawings. Covers shall be marked “Sanitary Sewer”, molded in the cover by the manufacturer.

**Alternate Materials:** As an alternate pre-cast bases, riser sections, and tapered eccentric cones of flat-tops may also be pre-cast polymer concrete. Grade rings shall be expanded polypropylene when polymer concrete pre-cast manholes are used.

Alternate polymer concrete mixture shall consist solely of thermosetting resin sand and aggregate. No cementitious materials shall be allowed as part of the mix design matrix. All sand and aggregate shall be nonreactive in an acid environment. The resin shall have a minimum deflection temperature of 158 F when tested at 264 psi (1.820 mPa) following Test Method D 2584. The resin content shall not be less than 7% of the weight of the sample as determined by Test Method D 2584. Resin selection shall be suitable for applications in the corrosive conditions to which the structures will be exposed.

- b. **Construction:** Manholes shall be constructed in accordance with Standard Plans as herein specified, and shall comply with Section 13.05 “TRENCH AND STRUCTURE EXCAVATION”, Section 13.06 “TRENCH AND STRUCTURE BACKFILL” and Section 29-02 “MANHOLES AND MATERIALS”.

Manholes shall be complete structures in place and backfilled including the furnishing and placing of all materials involved. Cast-in-Place concrete manholes shall consist of a poured-in-place base and riser section, reinforced concrete reducing cone sections. Pre-cast concrete pipe manholes shall consist of a poured in place concrete base section, reinforced concrete pipe riser and reducing cone sections. Both types shall have a cast iron frame and cover poured in place concrete collar with paving patch.

All entering and leaving storm drain pipes shall be placed flush with the inside edge of the manhole, except that all edges shall be rounded with cement mortar to a three (3") inch radius as specified in the Standard Plans.

The base of sewer manholes shall be formed to create invert channels which shall be smooth and semi-circular in shape conforming to the size and flow line of the entering and leaving pipes.

If a sewer main is laid through a manhole, the top of the pipe shall be carefully broken out and removed, leaving the bottom half of the pipe to form the flow line of the manhole. Rubber weep rings are required where PVC pipe is joined to concrete manholes.

Changes in size and grade of invert channels shall be made gradually and evenly. Changes in direction shall be made with a smooth curve of as large of a radius as the size of the manhole will permit.

The top of the base section shall be keyed to receive the tongue end of the riser section. The key shall be formed in the freshly poured concrete by using a template manufactured to the dimensions of the riser section. If the riser is cast-in-place monolithically with the base section by using a slip form or other means, the key may be omitted between the base and the riser. If the base and riser sections are not poured monolithically but separately, a key shall be provided in the base section. In either case, a key will be required in the top of the riser section to receive the tongue end of the tapered cone. Cast-in-place riser sections shall have the minimum wall thickness specified in the Standard Plans.

The joints between the base and all pre-cast elements of the manhole, including adjustment rings and manhole frame, shall be filled with cement mortar prior to joining the elements.

For all sections of pre-cast polymer concrete manholes, joints shall be designed using butyl rubber sealant per ASTM C990. Polymer concrete manhole joints shall be assembled with a bell/spigot or shiplap butyl mastic joint so that on assembly, manhole base, riser and top section make a continuous and uniform manhole. Gaskets between segments shall be compatible with butyl mastic joint sealant to ensure adhesion between each precast section for the manhole to withstand the specified test pressure during installation.

The interior of the manhole shall be troweled smooth with a wooden trowel, removing excess mortar extruded out of joints for the entire height of the manhole, from the manhole frame to the floor. All excess mortar and any other debris shall be removed from the manhole.

The Contractor should be aware that connections to existing sewers will be “wet” and the Contractor shall make whatever arrangement are necessary to complete the manhole connections under “wet” conditions.

- c. **Raising to Grade:** Manholes constructed in finished roadway areas, or other finished areas, shall be brought to the same elevation as the surrounding finished surface in accordance with the Standard Plans.

- d. **Abandoning Manholes:** Manholes abandoned in place shall be broken out within three (3') feet of the finished grade. The manhole frame and cover will be delivered to the City corporation yard. Any pipes entering the manholes shall be sealed with concrete and the manhole backfilled with sandy soil and compacted to a relative compaction of ninety (90%) percent using optimum moisture and tested in accordance with California Test Method No. California 231: "Relative Compaction of Untreated and Treated Soils and Aggregates Using Nuclear Gauges". Tests shall be provided in accordance with Section 6.02 of these Standard Specifications.

Manholes to be removed shall have the barrel and tapered section removed and the base broken up and disposed of. The manhole frame and cover will be delivered to the City Corporation Yard. After the complete manhole has been removed, the excavation will be backfilled in accordance with backfill requirements. Before backfilling, all sewer or storm drain pipes that have entered the manhole will be sealed with concrete. The cost of plugging existing pipes shall be included in the cost of removing the manhole and no additional payment will be made therefore.

### 29.03 STORM DRAIN INLETS AND OUTLETS

- a. **Materials:** Concrete and mortar shall conform to the requirements of Section 24, "PORTLAND CEMENT CONCRETE; PAVEMENT; CEMENT MORTAR," of these Specifications. Concrete shall be Class "A" using Type II Cement.

All metal parts shall be structural grade steel, except those permitted to be cast iron by the project plans or Standard Plans, and bar reinforcement shall conform to the requirements of Section 52, "Reinforcement," of the State of California Standard Specifications. All exposed metal parts, unless otherwise specified, shall be painted or dipped with an asphaltum paint approved by the Engineer.

- b. **Forms:** Forms shall conform to the requirements of Section 24.03 of these Specifications. The Contractor shall not place concrete in any forms until the forms have been approved for line and grade by the Engineer.
- c. **Construction:** Storm drain inlets or outlets may be constructed either by completely forming the interior and exterior of the structure, or by forming only the interior and upper section and neat pouring concrete for the lower section against undisturbed earth that has been excavated to the lines and grades indicated on the plans or as directed by the Engineer.

Storm drain inlets and outlets shall be constructed monolithically (one pour), or if the Contractor elects, the structures may be constructed in two sections (two pour) as provided in the details of the Standard Plans, with no additional payment made therefore. Rubber weep rings are required where PVC pipe is joined to concrete manholes or storm drain inlets.

The surface finish of the exterior exposed surfaces of concrete shall conform to the sidewalk, curb and gutter finish as required in Section 26.06, "FINISH," of these Specifications. The interior surface shall have a wood trowel finish. Excessive voids shall be chipped and repaired as directed by the Engineer.

Depths of the storm drain inlets and outlets may vary according to the depth and grade at which the lateral pipe must be installed in order to avoid existing utilities. The Contractor shall allow in his bid price for the various inlet or outlet structures full compensation for any possible increase or decrease in the anticipated depth because of adjustment in depth of lateral pipes.

Lateral pipes connecting to storm drain inlets and outlets shall be installed flush with the inside walls of the structure, except that pipe edges shall be smoothed and rounded with cement mortar to a three (3") inch radius as specified in the Standard Plans for the type of inlet or outlet installed.

Existing concrete work shall be removed and replaced as necessary to install proposed inlets and outlets, with full compensation therefore included in the unit price bid for said inlets and outlets.

A concrete pavement saw shall be used, unless determined to be impractical by the Engineer or unless some other method approved by the Engineer, such as removal of concrete to an adjacent expansion joint, obtains as satisfactory a result as saw cutting in removing of all existing concrete pavements, curbs, gutters, and sidewalks. A minimum of one and one-half (1½") inch depth of saw cut shall be used.

No separate payment shall be made for concrete saw cutting and full compensation therefore shall be included in the various bid items of work involving sawcutting.

Grading work in the immediate vicinity of the installed inlet structures shall be done by the Contractor as directed by the Engineer so as to provide for the movement of surface water to the newly installed inlet. Full compensation for said grading work shall be included in the price bid for inlet structures, and no separate payment will be made therefore.

At locations where inlets and outlets are constructed behind curb lines and within landscaped areas, all structure patching, final backfilling, final sprinkler system repairing and lawn reseeding and mulching behind the curb line shall be completed within fifteen (15) calendar days of placing the structure.

Where it is necessary to construct the curb and gutter portions of storm drain inlets and outlets on disturbed earth, a foundation for the curb and gutter shall be prepared by thoroughly compacting the disturbed material to the satisfaction of the Engineer.

## 29.04 MISCELLANEOUS STRUCTURES

- a. **Materials:** Concrete and cement mortar shall conform to the requirements of Section 24 "PORTLAND CEMENT CONCRETE; PAVEMENT; CEMENT MORTAR," of these Specifications. Concrete shall be Class "A", unless otherwise specified.

Bar reinforcement shall conform to the requirements of Section 52, "Reinforcement," of the State of California Standard Specifications. All metal parts shall be of structural grade steel, except those parts that may be cast iron as provided by the details in the project plans or Standard Plans.

All exposed metal parts, except as provided below, or unless otherwise provided in these Specifications or the Special Provisions, shall be painted or dipped with an asphaltum paint approved by the Engineer.

Exposed metal parts for all outfall cages shall be galvanized by the hot dip method with the large pieces meeting the requirements as set forth in ASTM Designation: A123, and nuts, bolts and small pieces meeting the requirements as set forth in ASTM Designation: A153: "Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware".

- b. **Construction:** Miscellaneous facilities shall be constructed in accordance with the applicable portions of the Section 29.02 and 29.03 of these Specifications, and in accordance with the details and notes of the project plans or Standard Plans, or as directed by the Engineer.

The surface finish of the concrete shall conform to the sidewalk finish required in Section 26.06, "FINISH," of these Specifications, or as required by the Engineer. The interior surface of the concrete shall have a wood trowel finish.

The cost of connecting storm drain or sewer laterals or pipelines to miscellaneous facilities shall be included in the prices bid for the various items of work requiring the connections and no additional compensation will be paid therefor.

## 29.05 EXCAVATION

Excavation for all structures shall conform to Section 13.05 of these Specifications.

## 29.06 FORMS

Forms shall conform to the requirements of Section 24.03 of these Specifications.

### 29.07 BACKFILL

Backfill for all structures shall conform to the requirements of Section 13.06 of these Specifications.

### 29.08 CURING

Curing of exposed concrete surfaces shall comply with the requirements of Section 26.08 of these Specifications.

### 29.09 SEWER MANHOLE COATING

Unless specified otherwise, manholes on sewer mains shall be one of the following: Raven 400 or Raven 405, products of RLS solutions; Neopoxy 5300 series, products of Neopoxy International; or Quadex Structure Guard, a product of Quadex. Approved products shall be applied per manufacturer specifications. No substitutions are acceptable. Coating must be spark tested before final acceptance.

### 29.10 PAYMENT

Payment for all structures, unless otherwise specified in the Special Provisions, will be made on a unit price per each basis and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and doing all work involved in constructing the structure in place complete, including, but not limited to, any and all structural elements, frame and cover assemblies, removal of existing concrete, excavation for the structure, excavating, connecting, existing or new lateral or main pipes, unless specified otherwise herein, and backfilling, all as shown on the plans, the Standard Plans, and as specified in these Standard Specifications, in the California Standard Specifications, the Special Provisions, and as directed by the Engineer.

## SECTION 30 - DOMESTIC WATER FACILITIES

### 30.01 DESCRIPTION

This work shall consist of the furnishing and installing of water main, water services, fire hydrants, and their appurtenant valves, stops and structures including excavation and backfill, at the locations and of the sizes shown on the plans. All work shall be done in accordance with these Standard Specifications.

### 30.02 WATER PIPE AND FITTINGS

- a. **Materials:** Water main pipe shall be Poly Vinyl Chloride (PVC) pipe conforming to AWWA Standard: C900. Pipe shall be Class 200 when required by the State of California Health Department as specified in Section 20.08 of these Standard Specifications. Poly Vinyl Chloride (PVC) pipe (SDR-PR) shall conform to the provisions of ASTM D2241. Joints shall be bell and spigot conforming to ASTM D2122 and shall be provided with flexible elastomeric seal conforming to the provisions of ASTM F477. Said pipe joints for said PVC shall conform to the provisions of ASTM D3139. PVC pipe shall conform to the dimension ratio as set forth in ASTM Standard C900, Table 2 for the class and size of pipe specified. Elastomeric gasketed couplings may be used.

Upon demand, the manufacturer of PVC pipe and couplings, if utilized, shall furnish to the Engineer a Certificate of Compliance in accordance with the provisions of Section 6.03 of these Standard Specifications.

Fittings for water pipe shall be mortar lined ductile iron. The ductile iron wall thickness shall conform to AWWA Standard: C110 (laying length waived) and the fitting shall be able to withstand a water pressure of two hundred and fifty (250 psi) pounds per square inch plus water hammer as specified by A.S.A. Standard: A21.10.

All fittings shall restrained mechanical joints suitable for connecting to the PVC pipe being furnished or flanged ends suitable for connecting to other flanged fittings.

PVC pipe shall be of the class specified herein or otherwise specified in the Special Provisions. The pipe class or strength, as designated, has been determined for vertical load under average trench conditions. The Contractor shall exercise precautionary measures against cave-ins by providing adequate shoring or other devices to minimize the development of adverse trench conditions. Should the trench conditions exceed the average trench conditions, in lieu of the class or strength of pipe designated, the Contractor shall provide a class or strength of pipe

in accordance with the manufacturer's recommendation for the conditions under which the pipe is placed. In lieu of providing a stronger class of pipe, the Contractor may provide a recognized special bedding to be reviewed and approved by the City Engineer, which is adequate to maintain pipe strength equivalent to average trench conditions.

- b. **Joints:** The ends of PVC pipe shall be of such a design that when properly laid they shall have a smooth and uniform interior surface. Ends of the pipe sections shall be free to cracks and broken edges. Pipe so found to be damaged shall be rejected for use in the work. Each joint shall be sealed to prevent leakage. Sealing of joints shall be accomplished with a sleeve coupling designed to maintain alignment and ensure tight flexible joints. Couplings shall be the rubber gasket type and shall conform to the requirements of Section 30.02 of these Specifications.

The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe and installation of the coupling. The two sections joined shall be firmly placed together in such a manner that each succeeding section of pipe is forced "home" as far as possible into the coupling. No appreciable gap shall exist at the completed joint, except as permitted by the Engineer at locations where curves in the pipe alignment are specified or required. Excessive gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

- c. **Excavation:** Excavation shall conform to the requirements of Section 13.05, "Trench and Structure Excavation," of these Specifications.
- d. **Pipe Laying:** Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer.

Pipe shall be carefully lowered into place and adjusted to line and grade by scraping away or filling in and tamping material under the body of the pipe throughout its entire length and not by blocking or wedging. Depressions in the trench bed for pipe couplings shall be accurately placed and shall not be larger than is reasonably required to make the joint.

The Contractor may choose to use earth mounds to support the pipe slightly above the trench bottom in lieu of excavating bell holes. Mounds shall be constructed of select material free from rocks, large stones, and lumps or hardpan. They shall extend the total width of the trench and provide a minimum of six (6") inches of support for the pipe. The mound shall be of sufficient height to provide at least two (2") inches of clearance under couplings. Mounds shall be located as recommended by the pipe manufacturer. Before the pipe is laid, the interior of the preceding pipe and the ends of the pipes to be joined shall be carefully cleaned and lubricated. As each section of pipe is laid to grade, it shall be jointed to the preceding section as required in Section 30.02(b), "Joints." After jointing of each

section of pipe is complete, there shall be no appreciable movement of the pipe in subsequent operations.

A single strand 14 gauge copper wire shall be laid along the top of and attached to all nonmetallic water pipe. The wire shall be held to the pipe at five (5') foot intervals with duct tape or plumbers tape or be wrapped around the pipe as directed by the Engineer to maintain the wires position on the top surface of the pipe being installed. The copper wire shall be attached to the flange or body of all metallic valves as directed by the Engineer. Other methods of providing means of detection of nonmetallic pipe with conventional metal detectors may be considered by the Engineer and shall be submitted for his review and approval prior to incorporation in any construction.

- e. **Water/Sewer Separation:** Water mains shall maintain minimum vertical and horizontal separation from new or existing sewers as required by Title 17 of the State of California Administrative Code, Section 7081 (b), which is included in Section 20.08 of these Standard Specifications.
- f. **Bedding:** Bedding for pipe shall conform to the requirements of Section 13.06 of these Standard Specifications or, with the permission of the Engineer.
- g. **Concrete Thrust Blocks:** Concrete thrust blocks shall be provided on water mains at all points in the line where a change in direction more than five (5°) degrees occurs, at all gate valves twelve (12") inches and larger, fire hydrant bends and at all dead ends. Thrust blocks shall be installed between the fittings and undisturbed earth of the trench wall and shall be at least the minimum dimensions shown on the Standard Plans. Thrust blocks shall be installed at tees created by a tapping sleeve and valve placed on an existing main. For conditions not covered on the Standard Plans, the bearing area shall be computed and approved by the Engineer. Concrete for thrust blocks shall be 3,000 psi concrete.  
  
All concrete thrust blocks shall be allowed to cure for five (5) days prior to pressurizing the respective section of the pipeline.
- h. **Testing and Sterilization:** All water mains and fittings shall be tested and sterilized in accordance with Section 30.07 of these Standard Specifications.
- i. **Backfill:** Backfill shall be performed in accordance with Section 13.06 of these Specifications.
- j. **Protection:** The Contractor shall exercise every precaution against damage to the pipe, including damage from subsequent backfill or compaction operations. Any damaged pipe shall be removed from the work or repaired as directed by the Engineer, at no cost to the City.

- k. **Payment:** Payment for poly vinyl chloride water mains and fittings will be made on the basis of the slope length designated by the Engineer and shall be measured along the centerline of the pipe and through all fittings and valves.

The price paid per linear foot of pipe shall include full compensation for furnishing all labor, materials, (including couplings), fittings, (unless otherwise specified in the Special Provisions), thrust blocks, tools, equipment, incidentals, and doing all work involved in installing the pipe complete and in place, including excavation and backfill, and for all tests and sterilization of pipeline as herein specified, all as shown on the plans, the Standard Plans, and as specified in these Standard Specifications, the Special Provisions, and as directed by the Engineer.

### 30.03 BLOW-OFF VALVE AND ASSEMBLIES

- a. **Description:** This work shall consist of furnishing and installing temporary or permanent blow-off valves, including service connection, service box, and fittings in place and complete at the locations shown on the plans, at low points, and at dead ends, all as shown on the City Standard Plans and as specified in these Standard Specifications.

- b. **Materials:** All materials shall be those designated on the Standard Plans and as specified herein:

1) Service Pipe and Fittings: Pipe and fittings shall be Schedule 80 galvanized steel pipe installed in accordance with ASTM Designation A120.

2) Valves, Valve Casing, Valve Box and Lid: Valves, valve casings, and valve boxes and lids shall be of the type specified in Section 20.04 of these Standard Specifications.

3) Curb Boxes: Curb boxes shall be of the type shown on the Standard Plans or City approved equal.

- c. **Excavation:** Excavation shall conform to the requirements of Section 13.05 of these Standard Specifications.

- d. **Installation:** Blow-off assemblies shall be installed complete and in place as herein specified, and as shown on the Standard plans and as directed by the Engineer.

Valves, valve casings, valve boxes and covers shall be furnished, installed, and brought to grade as shown on the Standard Plans.

Curb boxes shall be installed as shown on the Standard Plans.

- e. **Backfill:** Backfill shall be performed in accordance with Section 13.06 of these Standard Specifications.
- f. **Payment:** Payment for water blow-off assemblies will be made at the contract unit price per each and shall include furnishing all labor, tools, materials, including pipe, fittings, valves, stops, adapters, and collars, and all equipment, and incidentals, and doing all the work involved in installing the assembly, including, but not limited to, excavation, backfilling, raising valve covers to grade, and any testing and sterilization, all as shown on the plans, the Standard Plans, and as specified in these Standard Specifications, in the Special Provisions, and as directed by the Engineer.

### 30.04 VALVES

- a. **Description:** This work shall consist of furnishing and installing resilient seat gate valves, valve casings and valve boxes and lids all complete and in accordance with the plans, the Standard Plans, and as specified in these Standard Specifications, the Special Provisions, and as directed by the Engineer.
- b. **Valve Operators:** Valve operators shall be of the manual type. The operators shall be totally enclosed, self-locking, worm gear or screw type with adjustable stops to limit disc travel. The number of complete turns of the operator required to rotate the disc 90° shall be approximately the same as an equivalent sized gate valve. Direction to open valve shall be counter clockwise. All valve operators shall be fully gasketed, weatherproof and factory packed with grease. Operators shall be of the size required for opening and closing the valve against 150 psi water pressure, and they shall have a torque rating not less than that shown in AWWA Standard C-504, Table 1, Class 150-B.

Should the distance between the operating nut and the valve cover exceed forty (40") inches, an extension mast shall be installed in order that the operating nut not exceed forty (40") inches from the valve cover.

Buried operators shall be worm gear or screw type and shall be equipped with standard AWWA two inch (2") operation nuts. All exposed fastenings shall be NI-Cad steel or City approved equal. Operators shall be specifically designed and suitable for permanent buried service. Operators for valves located above ground shall have dis-position indicators and a hand-wheel.

- c. **Exterior Coating:** Valve bodies and operator housings and extension shall be factor coated with asphaltic coating per AWWA C151 and wrapped during installation with low-density polyethylene wrap of at least 8-mil thickness conforming to AWWA C105. Products: Canusa Wrapit Tape; Tapecoat 35; Polyken 934; AA Thread Seal Tape, Inc.; or equal.

The exterior of the body shall be coated with Asphalt Varnish conforming to Jan-P-450 and shall have a minimum thickness of coating of 30 mils. Prior to coating, the body shall be sandblasted to "commercial" standard as defined in SSPC Specification No. 6. The coating shall be installed at the place of manufacture in accordance with the manufacturer's recommendations.

- d. **Resilient Seat Gate Valves; Materials:** Resilient seat gate valves shall be tight closing equipment with a rubber seating ring and conforming to AWWA Standard: C500 and C504. The valve shall provide a tight shut-off against maximum differential pressures across the seat of two hundred (200 psi) pounds per square inch.

The valve stem and thrust collar shall be a single piece manufactured from modified manganese bronze, AB Alloy 676. The valve stem nut shall be manufactured from bronze, AB Alloy 676. The valve stem nut shall be manufactured from bronze conforming to ASTM Standard: B-62 and shall be integrally cast with the valve stem. The body, bonnet, stuffing box, and disc shall be manufactured from gray iron conforming to ASTM Standard: A-126 Class B.

The disc seating ring shall be internally reinforced molded natural rubber manufactured in accordance with ASTM Standard D2000, 4AA 730 and shall be attached to the disc by stainless steel screws manufactured from Type 304, 18-8 Stainless Steel.

All exposed nuts, bolts, cap screws, and fasteners shall be of a material approved by the City. The resilient seat gate valve shall be the type shown on the Standard Plans or City approved equal.

- e. **Interior Coating:** The interior of the body and the valve disc shall be coated with a City approved two-part, thermosetting epoxy which is approved for contact with potable water.
- f. **Operations:** The resilient seat gate valve shall be a non-rising stem gate valve which has an unobstructed passage when fully open. Valve shall be operable against 150 psi water pressure.

All buried valves shall be equipped with a two (2") inch wrench nut and shall close in the clockwise direction.

The valve shall be equipped with a two (2") inch wrench nut and shall close in the clockwise direction.

The valve shall be supplied with the proper connections as shown on the plans.

- g. **Nuts and Bolts:** Used for bolting flanged-end valves to pipeline flanges above ground, shall be hexagonal head machine bolts and hexagonal nuts conforming to ASTM Designation: A307, Grade B. All buried flanged-end valves shall be bolted to the pipe line flanges with City-approved stainless steel or teflon-coated nuts and bolts. All bolt threads shall be lubricated with graphite and oil.
- h. **Valve Casings and Valve Boxes and Lids:** Valve casings shall be eight (8") inch Poly Vinyl Chloride (PVC) pipe manufactured in accordance with AWWA Standard C900. Valve boxes and lids shall be the type shown on the Standard Plans or City approved equal. The cast iron lid shall be marked "Water."
- i. **Excavations:** Excavation shall conform to Section 13.05 of these Standard Specifications.
- j. **Installation:** Valves shall be installed complete with valve casing and cover as shown on the Standard Plans and as directed by the Engineer. Valve casings and lids shall be installed and brought to grade as shown in the Standard Plans and as specified herein:

After the water main and valves have been installed and backfilling has commenced, the Contractor shall install, in a timely manner, the valve casings centered squarely over the operating nut and in a vertical plumb position. Valve operating nuts shall be free of any dirt or debris and the valves shall be in a wide open position.

Casing shall extend from the operator to just below any subgrade which may be subject to removal or compaction and capped.

After the base material is brought to grade and compacted, the casing shall be raised to a minimum height of eight (8") inches below the finished paving surface and capped. Extension of the existing casing shall be made with a standard coupling as specified for the type of pipe used to form the casing.

After paving operations have been completed, the Contractor shall return and raise the valve casing to grade with a valve box and lid as shown on the Standard Plans.

Any disturbed subgrade and/or base shall be replaced and compacted in accordance with Section 13.06 of these Standard Specifications, and the paving replaced as required to complete the installation, in accordance with Section 25 of these Standard Specifications.

- k. **Backfill:** Backfill shall be accomplished in accordance with Section 13.06 of these Standard Specifications.
- l. **Testing and Sterilization:** All valves shall be tested and sterilized in accordance with Section 30.07 of these Standard Specifications.

- m. **Payment:** Payment for valves shall be made at the contract unit price per each and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and doing all work involved in installing the valve complete and in place, including but not limited to, placing water valve casing and returning to raise the valve box to finish grade, all as shown on the plans, the Standard Plans, and as specified in these Standard Specifications, in the Special Provisions, and as directed by the Engineer.

### 30.05 WATER SERVICE ASSEMBLIES

- a. **Description:** This work shall consist of furnishing and installing water service assemblies including service tap with saddle, corporation stop, service line, meter stop, or gate valve, fittings, meter and meter box, in place and complete at the locations shown on the plans or as established in the field by the Engineer, all as shown on the Standard Plans and as specified in these Standard Specifications.
- b. **Materials:** All materials shall be as those designated on the Standard Plans or as specified herein:

1) Pipe and Fittings. Service pipe shall be Polyethylene (PE) 3408 CTS tubing manufactured and supplied to meet the requirements of ATM D2737, ASTM D3350, AWWA C-901. Tubing shall be tested and certified to NSF Standard #14 and #16 to meet 200 PSI at 73.4°F maximum pressure rating and carry the logo of the NSF.

Fittings shall be new brass AWWA inlet compression connection type to be used with PE 3408 CTS tubing. They shall be manufactured and supplied in conformance with ASTM Designation: B62. Solder fittings shall be soldered with ninety-five (95%) percent tin and five (5%) percent lead or silver solder (pure).

Upon demand, the manufacturer of Polyethylene service tubing and brass fittings shall furnish to the Engineer, a Certificate of Compliance in accordance with the provisions of Section 6.03 of these Standard Specifications.

2) Meters. Meters to be purchased from the City Public Works Department.

3) Service Taps. All service taps shall be made with a single (1" service) or double (2" service) strap ductile or malleable iron saddle and shall be of the type shown on the Standard Plans or City approved equal.

4) Curb Boxes. Curb boxes shall be sufficient in size to contain the curb stop assembly and a meter. Curb boxes shall be of the type shown on the Standard Plans or City approved equal.

- c. **Excavation:** Excavation shall conform to the requirements of Section 13.05 of these Standard Specifications.
- d. **Installation:** Water service assemblies shall be installed as shown on the Standard Plans.

Service pipe, corporation stop, and curb fitting shall be installed as indicated in the following table:

<u>Service Size</u>	<u>Corporation Stop</u>	<u>Service Pipe</u>	<u>Curb Fitting</u>
1"	1"	1"	1" x 1" (Meter stop)
2"	2"	2"	2" x 2" (Gate valve)

1) Service Taps. In no case shall a service tap be made in a main closer than 18 inches to a bell coupling joint, or fitting. Service taps shall not be less than two feet (2') apart. Service taps shall be located opposite the service locations so that the service laterals will be perpendicular to the street center line. Service tap locations varying more than two feet (2') from the perpendicular must be approved by the Engineer prior to installation. Service taps shall be in accordance with the Standard Plans. Where dissimilar metals are joined, a dielectric connection, approved by the Engineer, shall be provided. Hole size drilled in the pipe shall be the same size as the corporation stop.

2) Water Service Lines. Water service lines may be installed by either standard excavation methods or by jetting or boring, with approved machinery, a hole of sufficient size through which the service line can be installed. The bore hole shall be straight, of uniform diameter, and true to grade. The cavity created by the jetting or boring shall not exceed, in diameter, the service line to be installed by more than one (1") inch. If the bore hole exceeds the diameter of the service pipe by more than one (1") inch, then a conduit of approved material shall be installed in the bore hole. The conduit shall be of sufficient size to fit snugly in place in the bore hole and act as a liner in which the service line shall be installed. Any conduit which is required to be installed due to the bore hole diameter exceeding the above criteria shall be furnished and installed at the Contractor's expense and no additional payment will be made therefore. Prior to installing any service line into an unlined bore hole, the lead end of the line shall be capped to insure no soil or other matter is scraped into the line.

- e. **Curb Boxes:** Curb boxes and covers and meter boxes and covers shall be furnished and installed by the Contractor as shown on the Standard Plans or as specified in the Special Provisions. All curb boxes shall be installed completed and in place at the proper grade at the time of acceptance of the work. All service shall be marked by a "W" clearly visible on the curb face. When service lines or service gate valves fall within driveways, the Contractor shall either supply a traffic

type curb box and lid or relocate one foot from the edge of the service box to the edge of the driveway and no additional payment will be made therefore.

- f. **Backfill:** Backfill shall be performed in accordance with Section 13.06 of these Standard Specifications.
- g. **Testing and Sterilization:** All water service assemblies and fittings shall be tested and sterilized in accordance with Section 20.07 of these Standard Specifications.
- h. **Water Service Abandonment:** The contractor is recommended to first excavate and determine the condition of the water service saddle. Depending on the condition and situation, the water service abandonment shall be through an approved method as directed by the Water Division Supervisor of the Public Works Department and must be inspected by a City representative.
- i. **Payment:** Payment for water service assemblies and fittings will be made at the contract unit price per each, and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and doing all work involved in installing the water service assembly in place and complete, including excavation and backfill, and for all tests and sterilization of the assembly as herein specified, all as shown on the plans, on the Standard Plans, and as specified in these Standard Specifications, in the Special Provisions, and as directed by the Engineer.

### 30.06 FIRE HYDRANT ASSEMBLY

- a. **Description:** This work shall consist of furnishing and installing fire hydrants, connector pipe, valves and fittings, complete and in place at the locations shown on the plans, as shown in the Standard Plans, and as specified in these Standard Specifications.
- b. **Materials; Fire Hydrants:** Fire hydrants shall be of the wet barrel type conforming to AWWA Standard: C503 with traffic breakaway flange. Hydrants shall be the type shown on the Standard Plans with standard operating nut, nozzle cap, and two (2) standard, two and one-half (2½") inch nozzles and one (1), four and one-half (4½") inch pumper nozzle. Threading on nozzles shall be National Standard. The bottom of the hydrant shall be manufactured with a rubber gasketed inlet connection that will accept Class 150 asbestos-cement water pipe or Class 200 if specified on the plans.
- c. **Connection Pipe:** Connection pipe from the water main fitting to the fire hydrant shall be six (6") inches (in diameter), Class 150 asbestos-cement pipe or Class 200 pipe if specified on the plans, furnished and installed in conformance with Section 30.02 of these Standard Specifications.

- d. **Thrust Blocks:** Thrust blocks shall be placed as shown on the Standard Plans and shall conform to Section 30.02 of these Standard Specifications.
- e. **Valves, Valve Casings, and Valve Boxes and Lids:** Valves, valve casings, and valve boxes and lids shall be furnished, installed and brought to grade as shown on the Standard Plans.
- f. **Excavation:** Excavation shall conform to Section 13.05 of these Standard Specifications.
- g. **Installation:** Fire hydrant assemblies shall be installed complete and in place as specified herein, and as shown on the plans and on the Standard Plans and as directed by the Engineer. Valves shall be installed complete with casings, box and lid and the casing brought to grade as specified in Section 30 of these Standard Specifications. The asbestos-cement connector pipe shall be installed as recommended by the manufacturer and in accordance with Section 30.02 of these Standard Specifications.

A blue reflective pavement marker, State of California Type C, shall be placed 1' (1 foot) from centerline on fire hydrant side of street.

The standard fire hydrant bury shall be thirty (30") inches. However, the length may be adjusted to achieve the grade specified on the Standard Plans with the "Extension Kit" supplied by the hydrant manufacturer. No other extension kit will be allowed to be used to extend the bury.

Hydrants shall be adjusted such that the pumper nozzle faces the street.

- h. **Backfill:** Backfill shall conform to Section 13.06 of these Standard Specifications.
- i. **Testing and Sterilization:** All fire hydrant assemblies shall be tested and sterilized in accordance with Section 30.07 of these Standard Specifications.
- j. **Payment:** Payment for fire hydrant assemblies will be made at the contract unit price per each and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and doing all work involved in installing the fire hydrant assembly complete and in place, including excavation, placing the connector pipe, thrust block, valve, and the valve casing, and bringing the valve casing to grade, and backfill, and for all tests and sterilization of the assembly, all as shown on the plans, on the Standard Plans, and as specified in these Standard Specifications, in the Special Provisions, and as directed by the Engineer.

### 30.07 TESTING AND STERILIZATION

- a. **Description:** This work shall consist of testing the installed water system under a hydrostatic head for leaks and faulty workmanship and the sterilization of the installed water system prior to its use for transporting potable water. All work shall be performed by the Contractor under the direction of the Engineer in conformance with these Standard Specifications.
  
- b. **Sterilization:** After the pipe and all appurtenances have been installed and backfilled, but prior to pressure testing and acceptance of any work, the entire water system installation, including all valves, fittings, hydrant runs, service laterals, and other accessories shall be sterilized in accordance with AWWA Specification: C601 and as specified as follows:  
During laying operations, the Contractor shall attach chlorine pellets in each pipe section by means of glue. These pellets shall be HTH Pittabs, seventy (70%) percent chlorine, as manufactured by the Los Angeles Chemical Company, or City approved equal.

All mains shall be flushed with potable water after completion of construction and prior to disinfection. The Contractor shall provide a sufficient number of suitable outlets at the end(s) of the line(s) being sterilized in addition to those required by the plans, to permit the main to be flushed with water at a velocity of at least 5.5 feet per second over its entire length. The outlets provided shall meet the requirements for fittings as specified in these Standard Specifications. Temporary blow-offs may be installed during the sterilization and flushing to satisfy these requirements. Drainage facilities shall be constructed such that the water lines cannot be contaminated through the flushing outlet.

The pellets shall then be dissolved by filling the pipeline with potable water. The chlorine residual shall be between fifty (50) and one hundred (100) parts of chlorine per million. This residual shall be retained in the line for twenty-four (24) hours. Valves shall be opened and closed during the chlorine contact time.

After twenty-four (24) hours, the treated water shall be flushed from the water mains with potable water until the water being flushed from the line is equal chemically and bacteriologically with that of the permanent supply. Dechlorinate down to 0.1 mg/L or less. Discharge of disinfection water to be reviewed and approved by City Engineer.

Forty-eight (48) hours after chlorination has commenced, the Contractor shall have a certified testing laboratory collect and analyze samples of water from the main. Samples shall be collected from blow-off valves, corporation stops, or curb stops installed for that purpose and as directed by the Engineer.

The laboratory shall furnish the results of the bacteriological tests to the Contractor and the Engineer seventy-two (72) hours after chlorination has commenced.

Should any of the foregoing periods fall on a City non-working day, the order of procedure will be continued to the next regular City working day.

The City Engineer may authorize, in writing, alternate methods of sterilization of pipe lines by the Contractor.

The pipe line will be considered as having been adequately sterilized if the bacteriological tests show a coliform M.P.N./100 mil. of water, less than two and two-tenths (2.2) on all samples. In the event the coliform number is above two and two-tenths (2.2), the lines shall be resterilized within twenty-four (24) hours as directed by the Engineer. The cost of all resterilization of the line as directed by the Engineer shall be at the expense of the Contractor and no additional payment will be made therefore.

Payment for sterilization of water system facilities shall be considered to be included in price bid for the various items of work requiring the sterilization and shall include full compensation for providing all labor, tools, materials, chemicals, bacteriological tests, water equipment, and incidentals, and doing all work involved in performing the required sterilization as herein specified, as specified in the Special Provisions, and as directed by the Engineer.

Laboratory Testing shall be provided as specified in Section 6.02 of these Standard Specifications.

- c. **Hydrostatic Pressure and Leakage Tests:** After the pipe and all appurtenances have been installed, backfilled, and compacted, and the pipe has been sterilized, the entire line shall be subjected to a hydrostatic pressure test in the manner specified as follows:

The line shall be filled with water at least twenty-four (24) hours prior to performing the test. All air shall be expelled from the line during the filling of the line. Where air valves or other suitable outlets are not available for introducing water or releasing air for test purposes, taps and fittings approved by the Engineer shall be installed and later securely plugged.

Pressure gauges calibrated to one (1 psi) pound per square inch shall be properly attached to the pipe line to be tested and the pressure in the pipe line shall be increased from the filled condition to one hundred (100 psig) pounds per square inch gauge. At this pressure, the addition of water to the line shall be discontinued and the line sealed. The line shall remain sealed for a period of thirty (30) minutes at which time the pressure in the line shall be recorded.

Water shall then be added to the line to repressurize it to one hundred (100) pounds per square inch - gauge and the amount of water required to repressurize the line shall be recorded. This amount of water shall be considered to be the amount of leakage that occurred during the test.

The line will be considered as having passed the Hydrostatic Pressure and Leakage Test if the leakage does not exceed the amounts in the following table:

<u>Pipe Diameter</u>	<u>Leakage Allowance at 100 psig gpm/100 coupling/30 min.</u>
4	0.50
6	0.75
8	1.00
10	1.25
12	1.50
14	1.75
16	2.00

Any failures or imperfect construction revealed by this test shall be promptly corrected by the Contractor as directed by the Engineer and the line shall be retested until the line is able to pass the test. All remedial corrections ordered by the Engineer or required to correct failures or imperfect construction and any retesting shall be made by the Contractor at his expense and no additional payment will be made therefore.

Payment for hydrostatic pressure and leakage tests shall be considered as included in price bid for the various items of work requiring the test and shall include full compensation for furnishing all labor, tools, materials, gauges, water, and incidentals, and doing all work involved in performing the required test as herein specified, as specified in the Special Provisions and as directed by the Engineer.

**30.08 WATER/SEWER SEPARATION**

- a. **Description:** Separation of sewer and water mains shall be maintained as stated herein and as shown in the Standard Plans. Separation of sewer and water mains shall be per Section 64572, Title 22 of the State of California Administrative Code. "Required Separation Between Water Mains and Sanitary Sewer shall be (10 feet horizontal and 1 foot vertical)":

**PUBLIC HEALTH REASONS**

Sanitary sewers frequently leak and saturate the surrounding soil with sewage. Water mains cannot always be relied upon to have continuous positive pressure therein and can be contaminated by a nearby leaking sewer. To install new water mains or to repair breaks in existing mains in sewage contaminated areas is a serious public health hazard. Hazards

also can result if a nearby existing sewer is broken in the course of installing or repairing a water main; this can allow sewage to enter the water main trench or the water main. Water main failures will likely result in failure of any sewer located above or too near the water main.

A community with its buried water mains and sanitary sewers in close proximity is extremely vulnerable to waterborne disease outbreaks in the event of earthquake or man-made disasters that would cause simultaneous fractures to these conduits.

Any case in which both a water main and sewer fall in close proximity is extremely hazardous to the water consumers. There can be no dollar value set on the reduction of such hazards. All practical steps must be taken to avoid them.

### **BASIC SEPARATION**

Water mains and sewers should be separated as far as is reasonable in both the horizontal and vertical directions with sewers always lower than water mains.

### **PARALLEL CONSTRUCTION**

The horizontal distance between pressure water mains and sewers shall be a minimum of 10 feet.

### **PERPENDICULAR CONSTRUCTION (CROSSING)**

Pressure water mains shall be at least one foot above sanitary sewers where these lines must cross. The basic separation distance specified shall be measured from the nearest edges of the facilities.

### **EXCEPTIONS TO BASIC SEPARATION REQUIREMENTS**

Certain local conditions of topography, available space, etc., may create a situation where there is no alternative but to install water mains or sewer lines at less than the required separation. In such cases, more rigid construction requirements must be met as specified in the section below subject to the special provision and restrictions given in the following section. The basic separation requirements apply to sewers of twenty-four (24") inch diameter or less. Larger sewers may create special hazards because of flow volumes and type of joints used. Each installation of sewer larger than twenty-four (24") inch diameter must be reviewed in advance to determine if the separation and protection provided to nearby water mains is adequate.

### **SPECIAL CONSTRUCTION REQUIREMENTS**

The special construction requirements necessary for sewers or water mains where the minimum required separation cannot be maintained are given in City of Reedley Standard Drawing W-9 and W-10. These are two situations encountered in the field:

- Case 1 - New Sewer - New or Existing Water Main
- Case 2 - New Water Main - Existing Sewer

For Case 1 the special construction requirements apply to the sewer. For Case 2 the special construction requirements may apply to either or both the water main and sewer.

The special construction requirements shall apply to house laterals that cross above a pressure water main but not to those house laterals that cross below a pressure water main. The special construction requirements given are for the normal conditions found with sewage collection lines and water distribution mains. More stringent requirements may be necessary for special circumstances such as water mains buried deeper than normal, unstable soil conditions, high ground water, etc. These situations must be reviewed with the Health Department in advance.

The special provisions and restrictions given below must be followed.

### **SPECIAL PROVISIONS AND RESTRICTIONS**

Sewer force mains are not permitted to be constructed over water mains. Force mains constructed parallel to water mains must have the required separation as given in Basic Separation Requirements regardless of construction. When sewer force mains must cross under water mains, special approval of the Health Department is required in advance.

Construction of any sanitary sewers within twenty-five (25') feet horizontal distance of low head water mains shall be reviewed and approved by the Health Department in advance. (Low head water mains are defined in the State Health Department Policy as any water main which has less than five (5) psi at any time at any point in the main.)

Where a sewer must cross over a water main, it should cross at a 90° angle if possible and the length of sewer pipe shall be centered on the water main so the sewer joints are the maximum distance from the water main.

In pressure testing new water mains and/or sewers, special attention should be given to those areas where the lines are in close proximity. End Excerpt from State Health Department.

### **30.09 CROSS-CONNECTION CONTROL**

- a. **General:** In conformance with the requirements of the Fresno County Department of Health, cross-connection control (backflow prevention) shall be provided to protect service connections for new construction, and modification or change-of-use of existing construction.
- b. **Definition:** A cross-connection is an unprotected connection between a potable water system and any other liquid system not approved as safe for human consumption. During times of flow reversal (backflow), contaminated water or other unsafe fluids can flow through a cross-connection and produce a health hazard.

Types of Cross-Connection (Backflow) Devices and When They are Required.

The kind of backflow protection required depends on the degree of hazard and the kind of installation. There are five means of backflow protection:

- 1) Air gap separation
- 2) Reduced pressure principle backflow prevention device
- 3) Double check valve assembly
- 4) Pressure vacuum breaker
- 5) Atmospheric vacuum breaker

Air gap separation should be used to protect against backflow where feasible. Where it is not feasible, one of the four other methods should be used:

An approved, properly installed reduced pressure principle backflow prevention device should be used to protect the service of any installation where any material hazardous to health is brought into contact with the water system. This includes hoses or pipes immersed in hazardous materials.

An approved, properly installed double check valve assembly should be used to protect the service of any installation where any objectionable (but not necessarily hazardous) material is brought into contact with the water system.

An approved, properly installed pressure vacuum breaker (PVB) may be used where all use and piping downstream of the PVB is at least twelve (12") inches below the bottom of the PVB. No pressurizing device (e.g., a pump) or any other source of pressure may be connected downstream of a PVB; however, shut-off valves may be installed downstream of a PVB. A PVB may be used for continuous service for an indefinite period.

An approved, properly installed atmospheric vacuum breaker (AVB) may be used where all use and piping downstream of the AVB is at least six (6") inches below the bottom of the AVB. No source of pressure or shut-off valves may be installed downstream of an AVB. Continuous service through an AVB is restricted to twelve (12) hours.

## SECTION 31 – LANDSCAPE AND LANDSCAPE IRRIGATION

This Section will apply to and regulate all walls and landscaping to be placed in the public rights-of-way and/or to be maintained by the City of Reedley. It is intended to provide and promote adequate, coordinated, and modern development to enhance the esthetics of the City.

Exceptions to this section will be processed in the same manner as required by the subdivision ordinance.

### 31.01 GENERAL POLICIES

Landscaping shall be provided on major arterial streets, major collector streets on which is placed a requirement for construction of masonry block walls, median islands, or on other such areas as required by the City Planning Commission.

Major arterial streets will require a landscaped area with a minimum width of twenty-one (21') feet, including the width of the wall behind the City standard sidewalk.

Major collector streets will require a landscaped area with a minimum width of seventeen (17') feet, including the width of the wall behind the City standard sidewalk.

With prior approval of the City Engineer, meandering sidewalk may be constructed.

### 31.02 (NOT USED)

### 31.03 FINAL MAP REQUIREMENTS

Prior to recordation of the Final Map, the following requirements must be satisfied:

1. Conceptual approval of walls and landscaping adjacent to public street must be obtained from the City Planning Commission.
2. The subdivider/developer shall provide detailed wall plans, signed by a registered civil engineer, and landscaping and irrigation plans.
3. Three (3) sets of check prints for the wall design, landscape and irrigation plans shall be submitted to the Engineering Department.
4. A complete materials list with cost estimate shall be submitted with the check prints.
5. Plan check and inspection fees, using the current fee rate and based on preliminary estimates, shall be submitted with the check prints.

6. Upon approval of the plans, the subdivider/developer shall provide two (2) sets of construction prints on mylar (film). One set will be returned to the subdivider/developer. The other set will be kept on file in the Public Works Department.
7. The subdivider/developer shall either install the landscaping and irrigation system, or enter into a separate improvement agreement and post approved security to guarantee installation of the landscaping and irrigation system.

### 31.04 INSTALLATION AND MAINTENANCE

#### A. CONSTRUCTION

All improvements shall be installed in accordance with the approved plans, standards and policies of the City.

The Subdivider/developer shall notify the City Engineer prior to the installation of the irrigation system and landscaping.

#### B. MAINTENANCE

Prior to the Subdivider/Developer receiving written acceptance of the improvements by the City Engineer, the Subdivider/Developer shall, if required by the City, enter into a Landscape Maintenance Agreement with the City.

The Subdivider/Developer shall maintain all irrigation and landscaping for a period of ninety days after receiving written acceptance by the City Engineer.

The Subdivider/Developer shall pay all cost for water and electricity until the end of the ninety day maintenance period.

At the end of the ninety day period and after receiving the final written acceptance by the City, the Subdivider/Developer shall be responsible for notifying the utility companies by letter to arrange for the utility meters to be transferred to the City. Copies of the notification shall be sent to the Public Works Director/City Engineer.

### 31.05 LANDSCAPE AND IRRIGATION PLANS

Landscape and irrigation construction plans conforming to the approved concept or master plan, with a maximum sheet size of 24" x 36", shall contain notes, details, and specifications necessary to complete the proposed work. Said information shall include, but not be limited to, the following:

1. Title
2. Vicinity Map

3. Key Map (Scale of 1" = 200') used as Sheet Index
4. Signature Block on the Cover Sheet
5. Signed by the Landscape Designer
6. Approved by – Public Works Director/City Engineer
7. Approved by – Community Development Director
8. Drawn on Engineer's Scale on maximum 24" x 36" sheet
9. Notes Peculiar to this Project
10. Bench Mark (Same one used on the Street Improvement Plans)
11. Legend (City Standard L-1)
12. Water Line, with Point of Connection(s) for the Project
13. Relation to existing pipes, utilities, etc. (show by cross-section)
14. Stationing – from south to north and from west to east  
(to coincide with the Street Stationing on Improvement Plans)
15. Construction Phasing Limits (if applicable)
16. Note on Title Sheet – 24 HOUR NOTICE IS REQUIRED PRIOR TO START OF CONSTRUCTION. CALL CITY OF REEDLEY ENGINEERING DEPARTMENT AT (559)637-4200 EXT. 295.

### 31.06 GUIDELINES FOR CONTAINER-GROWN LANDSCAPE TREES

These guidelines were developed to assist landscape professionals in specifying high quality, container-grown, landscape trees. They were developed by arboricultural and horticultural professionals in California (Quality Tree Committee) comprised of municipal arborists, urban foresters, nurseryman, landscape architects and other landscape specialists. Depending on species, intended use, and availability of the trees, some elements of these guidelines may need to be modified.

#### *31.06.01 PROPER IDENTIFICATION*

All trees shall be true to name as ordered or shown on the planting plans and shall be labeled individually or in groups by species and cultivar (where appropriate).

#### *31.06.02 COMPLIANCE*

All trees shall comply with federal and state laws and regulations requiring inspection for plant disease, pests and weeds. Inspection certificates required by law shall accompany each shipment of plants. Clearance from the County Agricultural Commissioner, if required, shall be obtained before planting trees originating outside the county in which they are to be planted. Even though trees may conform to county, state, and federal laws, the buyer may impose additional requirements.

### 31.06.03 TREE CHARACTERISTICS AT THE TIME OF SALE OR DELIVERY

#### A. TREE HEALTH

As typical for the species/cultivar, trees shall be healthy and vigorous, as indicated by an inspection for the following:

1. foliar crown density
2. length of shoot growth (throughout crown)
3. size, color and appearance of leaves
4. uniform distribution of roots in the container media
5. appearance of roots
6. absence of twig and/or branch dieback
7. relative freedom from insects and diseases

**Note:** some of these characteristics can not be used to determine the health of deciduous trees during the dormant season.

#### B. CROWN

1. **Form:** Trees shall have a symmetrical form as typical for the species/cultivar and growth form.
  - a) **Central Leader:** Trees shall have a single, relatively straight central leader and tapered trunk, free of codominant stems and vigorous, upright branches that compete with the central leader. Ordinarily, the central leader should not have been headed. However, in cases where the original leader has been headed, an upright branch at least  $\frac{1}{2}$  (one-half) the diameter of the original leader just below the pruning point shall be present. Note: This section applies to single trunk trees, as typically used for street or landscape planting. These specifications do not apply to plants that have been specifically trained in the nursery, e.g., topiary, espalier, multi-stem, clump, etc., or unique selections such as contorted varieties.
  - b) **Main Branches (Scaffolds):** Branches should be distributed radially around and vertically along the trunk, forming a generally symmetrical crown typical for the species. Minimum vertical spacing may be specified.
    1. Main branches, for the most part, shall be well spaced.
    2. Branch diameter shall be no longer than  $\frac{2}{3}$  (two thirds) the diameter of the trunk, measured 1" (one inch) above the branch.
    3. The attachment of scaffold branches shall be free of included bark.
  - c) **Temporary branches:** Unless otherwise specified, small "temporary" branches should be present along the lower trunk below the lowest main (scaffold) branch, particularly for trees less than 1- $\frac{1}{2}$ " (one and one-half inches) in trunk diameter.

Temporary branches should be distributed radially around and vertically along the lower trunk. They should be no greater than  $\frac{3}{8}$ " (three-eighths inch) in diameter and no greater than  $\frac{1}{2}$  (one-half) the diameter of the trunk at the point of attachment. Heading of temporary branches is usually necessary to limit their growth.

C. TRUNK

1. Trunk diameter and taper shall be sufficient so that the tree will remain vertical without the support of a nursery stake.
2. The trunk shall be free of wounds (except properly-made pruning cuts), sunburned areas, conks (fungal fruiting-bodies), wood cracks, bleeding areas, signs of boring insects, galls cankers and/or lesions.
3. Trunk diameter at 6" (six inches) above the soil surface shall be within the diameter range shown for each container size below:

Container	Trunk Diameter (in)	Soil level from Container Top (in)
#5	0.5" to 0.75"	1.25" to 2"
#15	0.75" to 1.5"	1.75" to 2.75"
24 inch box	1.5" to 2.5"	2.25" to 3"

D. ROOTS

1. The trunk, root collar (root crown) and large roots shall be free of circling and/or kinked roots. Soil removal near the root collar may be necessary to inspect for circling and/or kinked roots.
2. The tree shall be well rooted in the soil mix. When the trunk is carefully lifted both the trunk and root system shall move as one.
3. The upper-most roots or root collar shall be within 1" (one inch) above or below the soil surface. The soil level within the container below the rim should be within the distance ranges shown in the table above.
4. When the container is removed, the rootball shall remain intact.
5. The rootball periphery should be free of large circling and bottom-matted roots. The acceptable diameter of circling peripheral roots depends on species and size or rootball. The maximum acceptable size should be indicated for the species (if necessary).

E. MOISTURE STATUS

At time of inspection and delivery, the rootball shall be moist throughout, and the tree crown shall show no signs of moisture stress, as indicated by wilt, shriveled, dead leaves, or branch dieback. Roots shall show no signs of being subjected to excess soil moisture conditions, as indicated by root discoloration, distortion, death, or foul odor.

#### *31.06.04 INSPECTION*

The buyer reserves the right to reject trees that do not meet specifications as set forth in these guidelines or as adopted by the buyer. If a particular defect or sub-standard element or characteristic can be easily corrected, appropriate remedies shall be required. If destructive inspection of rootballs is to be done, the buyer and seller should have a prior agreement as to the time and place of inspection; minimum number of trees to be inspected, or percentage of a species or cultivar, and financial responsibility for the inspected trees.

#### *31.06.05 DELIVERY*

The buyer should stipulate how many days prior to delivery that notification is needed.

#### *31.06.06 TERMS AND DEFINITIONS*

**Codominant** - Stems: two or more vigorous and upright branches of relatively equal size that originate from a common point, usually where the leader has been lost or removed.

**Crown** - The portion of a tree above the lowest main (scaffold) branch, including the trunk, branches and foliage.

**Cultivar** - A named plant selection from which identical or nearly identical plants can be produced, usually by vegetative propagation or cloning.

**Girdling root** - A root that partially or entirely encircles the trunk and/or large buttress roots, which could restrict growth and downward movement of photosynthate.

**Included bark** - Bark embedded within the crotch between a branch and the trunk or between two or more stems that prevents the formation of a normal branch bark ridge. This often occurs in branches with narrow-angled attachments or branches resulting from the loss of the leader. Such attachments are weakly attached and subject to splitting out.

**Kinked root** - A primary root (s), which is sharply bent, causing a restriction to water, nutrient, and photosynthate movement. Kinked roots may compromise the structural stability of roots systems.

**Leader** - The dominant stem which usually develops into the main trunk.

**Photosynthate** - pertains to sugar and other carbohydrates that are produced by the foilage during photosynthesis, an energy trapping process.

**Root collar** - The flared area at the base of a tree where the roots and trunk merge. Also referred to as the “root crown” or “root flare.”

**Shall** - used to denote a practice that is mandatory.

**Should** - used to denote a practice that is mandatory.

**Scaffold branches** - large, main branches that form the main structure of the crown.

**Temporary branch** - A small branch that is retained temporarily along the lower trunk of young trees. Temporary branches provide photosynthate to increase trunk caliper and taper help protect it from sunburn damage and mechanical injury. Such branches should be kept small and gradually removed as the trunk develops.

**Trunk** - The main stem or axis of a tree that is supported and nourished by the roots and to which branches are attached.

## SECTION 32 TRAFFIC STRIPES, SIGNS, AND PAVEMENT MARKINGS

### 32.01 GENERAL

This work shall consist of furnishing and installing thermoplastic or painted traffic stripes (traffic lines), traffic signs, and pavement markings including glass beads, at the locations and in accordance with the details shown on the Plans, as specified in the Specifications, or as directed by the Engineer. For the purposes of these Standard Specifications, traffic stripes (traffic lines) are defined as longitudinal centerlines and lanelines which separate traffic lanes in the same or opposing direction of travel, and longitudinal edgelines which mark the edge of the traveled way or the edge of lanes, or longitudinal lines which mark bicycle lanes. Pavement markings are defined as transverse markings which include, but are not limited to, word and symbol markings, limit lines (stoplines), crosswalk lines, bicycle lane markings, shoulder markings, and parking stall markings.

### 32.02 MATERIALS

#### *32.02.01 Thermoplastic materials*

Thermoplastic material shall conform to Section 84-2.02 “Materials,” of the State Standard Specifications, except that only Alkyd Binder Thermoplastic shall be used.

#### *32.02.02 Paints*

Paint shall be waterborne unless otherwise shown on the plans or specified in the Contract Specifications. All paints, whether waterborne or solventborne, shall be rapid dry, designed for traffic use and shall conform to the latest revisions of the San Joaquin Valley Unified Air Pollution District, Control Architectural Coatings Rule 4601 which requires that traffic paints shall not exceed the limit of 150 grams of volatile organic compounds (VOC’s) per liter of coating as applied, excluding water. Paint shall also comply with any applicable State air pollution regulations.

32.02.02(A) Waterborne Paint

Waterborne paint (rapid dry) shall comply with the following specifications:

COLOR	WHITE	YELLOW	BLACK
Pigment, % by weight +/- 2%	60	59	58
Vehicle, % by weight	38-42	38-42	38-42
Total Solids, % by weight minimum	76	75	74
Viscosity, K.U. @ 77° F	78-92	78-92	78-92
Fineness of Grind, Hegman minimum	3.5	3.5	3.5
Dry time: 77° F without beads ATM D-711, minutes maximum	10	10	10
Flexibility, 8 Miles wet, 24 hours are dry 1/2" Mandrel	No cracking	No cracking	No cracking
Contrast Ratio: 15 Mils wet, min.	0.98	0.98	0.98
Weight per gallon minimum	13.5	13.0	12.50
Reflectance, minimum	85	50	N/A
VOC gms/liter, maximum	150	150	150

32.02.02(B) Solvent Borne Paint

Where shown on the Plans or specified by the Contract Specifications to be applied, solvent borne paint shall comply with the following specifications:

COLOR	WHITE	YELLOW	BLACK
Pigment, % by weight	57-62	57-62	57-62
Vehicle, % by weight	38-42	38-42	38-42
Total Solids, % by weight minimum	72	72	72
Viscosity, K.U. @ 77° F	70-85	70-85	70-85
Fineness of Grind, Hegman minimum	4	4	4
Dry time: 77° F without beads ASTM D-711, minutes maximum	3-6	3-6	3-6
Flexibility, 8 Miles wet, 24 hours are dry 1/2" Mandrel	No cracking	No cracking	No cracking
Contrast Ratio: 15 Mils wet, min.	0.98	0.98	0.98
Reflectance, minimum	85	50	N/A
VOC gms/liter, maximum	150	150	150

### 32.02.03 Glass Beads

Glass beads (spheres) shall conform to State Specification No. 8010-004 (Type II) and meet the following requirements.

General: Glass spheres shall lend themselves readily to firm embedment when dropped on freshly placed waterborne and solvent borne traffic paint.

Appearance: A minimum of 75% of the spheres by count shall be true spheres when testing in accordance with applicable ASTM Methods. They also shall be free of air inclusions, milkiness and dark spots. The spheres shall be clean and free of any foreign material.

Coatings: Spheres to be used on Waterborne Paint: The spheres shall be treated with the correct coatings to maximize proper embedment and adhesion in water borne paint.

Spheres to be used on Solvent Borne Paint: The spheres shall be completely uncoated. There shall be no moisture or adhesion coating applied to the spheres.

Gradation: The glass spheres shall conform to the following grading requirements to closely match the AASHTO Designation: M-247.

US Mesh	% By Weight Passing
20	100
30	85 +/- 10%
50	15-35
100	0-5

Physical Properties: Glass spheres shall conform to the following properties:

Refractive Index, minimum 1.50

Moisture Content, maximum 0.01%

### 32.02.04 Traffic Signs

All traffic signs shall conform to the current Standards of the California MUTCD and the following:

All traffic signs shall be 0.080 inch thick aluminum.

Stop Signs, Speed Limit Signs, and all School and Pedestrian Signs shall have a 3M Diamond Grade DG3 reflective sheeting with an applied 3M #1160 or equal Graffiti Film, and 3M Electrocut Film.

School and Pedestrian Signs shall be Florescent Yellow Green in color.

All other signs shall have 3M #3930 High Intensity Prismatic reflective sheeting with an applied 3M #1160 or equivalent Graffiti Film, and 3M Electrocut Film.

#### *32.02.05 Sign Mounting Hardware*

All mounting hardware shall be zinc coated, galvanized, or stainless steel. Banding shall be ½ inch wide stainless steel. Hose clamps are not permitted. All Signs shall be mounted using bolts. Rivets are not permitted.

#### *32.02.06 Sign Posts*

All posts for traffic signs shall be 2 inch square x 12 gauge galvanized steel, with holes punched on all four sides for the entire length of the post.

### 32.03 REMOVAL OF EXISTING MARKINGS

Removal of existing striping or pavement markings shall comply with Section 14.02.02(C), “Traffic Stripes and Pavement Markings,” and the directions of the Engineer.

### 32.04 APPLICATION EQUIPMENT

Application equipment for paint shall comply with Section 84-2.03C(3), “Application Equipment,” of the State Standard Specifications, except for the use of “AIRSPRAY” equipment. Only “AIRLESS” type equipment will be allowed to be used to apply traffic paint for striping or stenciling. The use of “AIRSPRAY” type of equipment is not allowed in the City of Reedley.

### 32.05 APPLICATION OF THERMOPLASTIC MATERIAL, PAINT, AND BEADS

Preparation of surfaces and application of thermoplastic material and beads shall comply with the requirements of Section 84-2, “Traffic Stripes and Pavement Markings”, of the State Standard Specifications, except as amended by these Standard Specifications. Pedestrian Crosswalks shall be installed using extruded type Alkyd Binder Thermoplastic material applied at a thickness of 125 mils (+/- 15 mils).

Beads for thermoplastic material shall be 25-30% of the material before application, and applied to the extruded material immediately after application.

Preparation of surfaces and application of paint and beads shall conform to the requirements of Section 84-2, “Traffic Stripes and Pavement Markings,” of the State Standard Specifications, and as amended by these Standard Specifications. Tolerances and appearance shall conform to the requirements of Section 84-2.03, “Construction”, of the State Standard Specifications.

The application rates of waterborne or solvent borne paint provided in Section 84-2, "Traffic Stripes and Pavement Markings", of the State Standard Specifications and as amended by these Standard Specifications.

Two coats of paint shall be applied at the rate of 100 square feet per gallon of paint at a thickness of 15 mils wet.

Beads shall be applied for both coats of paint at a rate of 5 lbs. per gallon of paint.

Word markings, letters, numerals, legends and symbols shall be applied utilizing suitable approved equipment together with approved stencils and templates.

All markings shall be standard, and shall be identical with those used by the City of Reedley. The Contractor shall borrow stencils for directional arrows and word markings from the City of Reedley Public Works Department at 1108 "I" Street and return them in good condition. Stencils damaged by the Contractor will be replaced at the Contractor's expense.

When no previously applied figures, markings, or traffic striping are available to serve as a guide, suitable layouts such as "cat-tracking" shall be spotted in advance of the permanent application. Written approval of temporary layout shall be obtained prior to permanent application. The Contractor shall mark or otherwise delineate the traffic lanes in the new roadway or portion of roadway, or detour, before opening it to traffic.

Where necessary, the Engineer will furnish the necessary control points for all required pavement striping and markings. Alignment and layout of the work by the Contractor shall conform to Section 84-2, "Traffic Stripes and Pavement Markings," of the State Standard Specifications.

The Contractor shall provide an experienced technician to supervise the location, alignment, layout, dimensions, and application of the pavement striping and marking.

In areas of high traffic volume, the Contractor shall schedule work to apply traffic lines and markings in off-peak traffic hours, or on weekends. In all cases, the Contractor shall use proper and sufficient directional signs, warning devices, barricades, pedestals, lights, traffic cones, flagpersons, or such other devices to protect the work, workers, and the public.

All markings and striping shall be protected from injury and damage of any kind while the material is drying. All adjacent surfaces shall be protected from disfiguration by spatter, splashes, spillage, and dripping of material. Damaged stripes or markings shall be cleaned and reapplied by the Contractor at his expense.

### 32.06 TRAFFIC SIGN INSTALLATION

Traffic signs shall be installed at the locations, of the type, and at the height shown on the Plans, as specified in the Specifications, as directed by the Engineer, and in conformance with the current California MUTCD.

If a sign is to be installed in existing concrete, the concrete shall be cored with a 6-inch diameter hole.

If a sign is to be placed where new concrete is to be poured, a 6-inch diameter PVC sleeve shall be provided in the new concrete. Solid embedment of sign posts in concrete is not permitted. Sleeves may be obtained from the City of Reedley Public Works Department at 1108 "I" Street.

Sign posts shall be imbedded in the ground to the depth specified in the Plans, Contract Specifications, or California MUTCD as applicable. Any voids around sign posts passed through sleeves in concrete shall be backfilled with soil and thoroughly compacted to the satisfaction of the Engineer.

### 32.07 MEASUREMENT

Unless otherwise specified in the Contract Specifications, striping and marking pavement shall be measured on a lump sum basis, and shall include any required removal of existing pavement striping or markings.

Unless otherwise specified in the Contract Specifications, traffic signs will be measured on a per each basis.

### 32.08 PAYMENT

The lump sum price paid for striping and marking pavement shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved therein as shown on the Plans, as specified in the Specifications, or as directed by the Engineer.

The per each price paid for signs shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in stalling signs as shown on the Plans, as specified in the Specifications, or as directed by the Engineer.

## SECTION 33 ELECTRICAL WORK

Electrical work shall be as specified in Division X, "ELECTRICAL WORK", of the State Standard Specifications.



## REEDLEY CITY COUNCIL

- Consent Calendar
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 7

**DATE:** October 22, 2019

**TITLE:** PUBLIC HEARING REGARDING THE PLACEMENT OF STOP SIGNS ON DEL ALTAIR AVENUE BETWEEN DAVIS AND SHIMIZU AVENUES AND RECEIVE COMMENTS FROM THE GENERAL PUBLIC

**SUBMITTED:** John Robertson, P.E.  
City Engineer

**APPROVED:** Nicole R. Zieba  
City Manager

### RECOMMENDATION

Public Hearing regarding the placement of stop signs on Del Altair Avenue between Davis and Shimizu Avenues and receive comments from the general public.

### EXECUTIVE SUMMARY

The City of Reedley Municipal Code Section 6.1.2 grants to the City Council of the City of Reedley authority for the placement of regulatory traffic signage (stop/yield) and or traffic signals in accordance with requirements detailed in the California Vehicle Code (CVC) and the California Manual on Uniform Traffic Devices (CA-MUTCD). These two documents require that prior to the placement and enforcement of regulatory devices, an engineering analysis be performed and data such as volumes of traffic, number of accidents, etc. are collected and compared to specific warrants or criteria.

In addition to the specific criteria, Section 2B.07 of the CA-MUTCD provides provisions that can be applied to the analysis to assist in the final determination to either place or not place a regulatory device. These provisions include physical sight distance restrictions and high pedestrian volumes.

Due to a number of complaints the City has received from residents related to speeding vehicles on Del Altair Avenue, Engineering staff gathered accident history data and performed a visual inspection of the area. It was apparent from observation that traffic volumes would not meet required thresholds and with the accident history also not meeting these thresholds it was clear that the required warrants would not be met for the placement of regulatory signs.

Given the number of complaints received, the fact that Kings Canyon Unified School District

(KCUSD) provides school bus service at the corner of Del Altair and Huntsman Ave.'s and with the linear geometry of Del Altair for a significant distance without stop signs which allows those vehicles not abiding the posted limits to exceed them, it was determined by the Engineering Department to bring the issue before the Traffic Safety Commission (TSC) to obtain recommendations related to the situation.

The Engineering Department presented the findings, observations, and results of the engineering data collection to the TSC for review and comment at a meeting held on September 19, 2019. The Engineering Department suggested the placement of four-way stop signs at the intersections of Del Altair/Huntsman and Del Altair/Shoemake intersections. These two intersections were chosen for consideration due to the fact that both Huntsman and Shoemake extend to the west of Frankwood Avenue creating in essence local/collector roads. When the future junior high and high schools are completed to east of these intersections in the future the volume of through traffic could significantly increase.

The TSC was not in support of the creation of a 4-way stop controlled intersection at Del Altair and Shoemake due to its relatively short distance to Shimizu Avenue. Due to the fact that KCUSD does pick up school children adjacent to the intersection of Del Altair and Huntsman the TSC felt it would be prudent to create a stop sign controlled intersection at this location and requested that this matter be taken to City Council for approval.

Although not necessarily warranted the placement of regulatory stop signs and the creation of 4-way stop at Del Altair and Huntsman would be supported by applicable provisions of the CA-MUTCD specifically Section 2B.07 that states they could be considered given, "the need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes."

The purpose of the public hearing tonight is to receive input from residents and to receive direction from City Council related to the TSC's recommendation for the placement of stop signs at the intersection of Del Altair and Huntsman. If so directed, the Engineering Department will bring back an item to Council for the placement of stop signs at the intersection of Del Altair and Huntsman.

## **FISCAL IMPACT**

The cost to install stop signs and advance warning signs is approximately \$2,500 and will be funded through Article 8 funds.

## **ATTACHMENTS**

1. Exhibit A Del Altair & Huntsman

EXHIBIT "A"



PREPARED BY:  
**CITY OF REEDLEY**

ENGINEERING DEPARTMENT  
 1733 9th STREET  
 REEDLEY, CA 93654  
 Phone: (559)637-4200, ext. 295  
 Fax: (559)637-2139

DIAGRAM OF  
 DEL ALTAIR AVENUE STOP SIGN

DATE:  
 OCTOBER 16, 2019

DRAWN BY:  
 LTHAO

SCALE  
 1" = 400'



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing
- Receive/Review

ITEM NO: 8

DATE: October 22, 2019

TITLE: CONSIDER ADOPTION OF ORDINANCES REGARDING A BALLOT MEASURE PERTAINING TO A TRANSACTIONS AND USE TAX FOR THE MARCH 3, 2020 CALIFORNIA PRIMARY ELECTION

- A) ADOPT ORDINANCE NO. 2019-005, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REEDLEY ADDING SECTION 3-1-14, TO CHAPTER 1, OF TITLE 3 OF THE REEDLEY MUNICIPAL CODE PERTAINING TO THE IMPOSITION OF AN ADDITIONAL TRANSACTIONS AND USE TAX
- B) ADOPT UNCODIFIED ORDINANCE NO. 2019-006, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REEDLEY IMPOSING AN ADDITIONAL TRANSACTIONS AND USE TAX TO BE ADMINISTERED BY THE CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION

SUBMITTED: Paul A. Melikian, Assistant City Manager 

APPROVED: Nicole R. Zieba, City Manager 

### RECOMMENDATION

Adopt Ordinance Nos. 2019-005 and 2019-006, which will enact the three-quarters of one percent (0.75%) Transactions and Use tax increase if the voters approve the Measure at the March 3, 2020 election. In order to begin the timely collection of the tax, the California Department of Tax and Fee Administration requires that an ordinance be adopted and in place to become effective if the Measure is approved by the voters at the election.

### EXECUTIVE SUMMARY

On October 8, 2019, Ordinance Nos. 2019-005 and 2019-006 were presented for introduction to the City Council, and after discussion, the Council present unanimously voted in favor of the proposed Ordinances. The Council discussion resulted in direction to staff to modify the proposed ballot language to include a requirement for a 10 year review, which was added with guidance from the City Attorney. The final ballot language as sent to the County Clerk is shown below:

REEDLEY PUBLIC SAFETY & VITAL CITY SERVICES MEASURE: To maintain 911 emergency response times, police protection, neighborhood patrols, anti-gang and drug programs; repair streets, alleys, potholes, and other infrastructure; maintain neighborhood parks, youth, after-school, and senior programs; retain and attract local businesses; address homelessness; and provide other services; shall the City of Reedley enact a  $\frac{3}{4}\%$  sales tax providing approximately \$1,500,000 annually, requiring annual audits and 10 year review, with all funds benefitting Reedley residents?

The Council also adopted Resolution No. 2019-086 on October 8, 2019, which calls for and gives notice of a special municipal election to be held on March 3, 2020, orders that a ballot measure ("Measure") for a three-quarters of one percent (0.75%) Transactions and Use tax increase be placed on the ballot and submitted to the voters of the City at the March 3, 2020 special municipal election, requests consolidation of the special municipal election with the statewide primary election to be held on the same date, and requests the County Board of Supervisors to authorize the Fresno County Clerk to render election services to the City of Reedley.

The City Council must approve a measure by ordinance (including a section conditioning its effect upon subsequent voter approval) no later than December 6, 2019, in order for the measure to be included on the ballot for the March 3, 2020 California Primary Election.

### **BACKGROUND**

By 2012, the deep national recession had significantly reduced the City's revenue available to fund essential city services. The statewide shuttering of Redevelopment Agencies also significantly impacted the ability of the City to conduct economic development activities and combat blight in the community. Economic recovery has been slow in this region and General Fund revenues simply have not grown at a rate that would permanently close the gap between revenues and expenditures. The City's most recent financial forecast, covering fiscal years 2020-2025, demonstrated that the City faces a known budget deficit of at least \$678,000 in the next fiscal year (Fiscal Year 2021) and a growing budget deficit in excess of \$2 million annually by Fiscal Year 2025 in the General Fund, the primary funding source for police and fire, among other critical services. Without additional revenue, the General Fund Reserve will be completely depleted within the next two fiscal years, and the City will no longer be able to support current service levels due to significant reductions in full-time positions.

The tax measure is necessary in order to maintain 911 emergency response times, police protection, neighborhood patrols, anti-gang and drug programs; repair streets, alleys, potholes, storm drains, and other infrastructure; maintain neighborhood parks, youth and after-school, and senior programs; retain and attract local businesses; address homelessness; and provide other vital services. The recent community polling that was completed illustrates that Reedley residents continue to have high expectations for their public services and are willing to pay to adequately fund them. Public safety, streets maintenance and upkeep of public facilities all ranked highly in importance.

A general tax measure requires approval of a simple majority of the voters (50% + 1). City staff recommends this proposed tax measure be put to the voters at the earliest possible election to provide the City Council with direction prior to the development of the FY 2021 budget.

### **Sunset Discussion**

Staff is not recommending that this measure have a 'sunset' (i.e. expiration date) for a number of reasons. The issues facing the City for the foreseeable future are not expected to go away. Despite the ongoing best efforts of a dedicated Council and City leadership team, expenses will continue to rise faster than revenue growth, creating a drastic structural deficit if left unaddressed. The additional revenue from this measure will be needed as much 10-15 years from now as it is needed for next fiscal year. These expenses go far beyond the recent focus on unfunded pension liabilities. There are a number of areas that the Council and staff have collectively worked very hard to make headway on, but challenges remain.

One major example includes the continuing shortfall of road maintenance funds just to maintain the existing pavement conditions, a well-traveled issue with most cities in California. Reedley has historically not had sufficient General Fund revenue to support any street maintenance activities, instead relying upon gas taxes, Measure 'C', Local Transportation Funds, and CDBG allocations for

almost all maintenance projects. The most recent Pavement Management Plan, completed in March 2017, identified \$4 million in annual expenditures (investment) that is needed just to maintain the then current Pavement Condition Index of 54. Utilizing all available resources, the City of Reedley currently averages about \$1.5 million annually in average expenditures for streets maintenance projects. This deficit in annual funding of approximately \$2.5 million will have to be made up in later years when maintenance treatments will be more invasive and expensive. (e.g. a full reconstruction vs. slurry seal)

Another example is the ongoing shortfall of funds for the replacement of front line public safety vehicles. The Police Department currently has 12 Ford Crown Victoria sedans still in service, ranging from model years 2007 to 2011. By any industry best practice, most of these sedans should have been replaced. The Department is dealing with ongoing maintenance issues of keeping these cars on the road; however no funds will be available for the financing package until 2021, when the current loan is paid off. In the meantime the oldest of these vehicles will need to serve for at least another two years, with the newer sedans likely serving several more years as there will not be enough funding to replace all 12 at the same time unless a grant or other revenue source is identified. The same situation exists for the Fire Department, where several of the large apparatus will be due for replacement in the next 5-10 years, and very limited replacement funds are available. As a result almost every new vehicle/equipment acquisition will require bank financing over a long term, resulting in interest costs adding to the purchase price. This shortfall of adequate equipment replacement funds is not expected to be a short term situation.

#### Comparable Cities

As detailed in the memo to the City Council dated September 12, 2019 and included in the October 8, 2019 agenda item, Reedley offers residents a tremendous amount of service level on far less sales tax revenue than nearby similarly sized cities. Reedley's annual sales tax of \$2,990,801 is \$1,577,595 less than the next lowest neighbor, the City of Sanger. Put another way, if Reedley had the same level of sales tax revenue as Sanger, a new tax measure would not likely be necessary at this time. The cities of Selma and Dinuba (also similar in size) have sales tax revenue on the order of three and four times the amount of Reedley.

Doing more with less dollars is engrained into the culture of the City of Reedley, with staff at all levels looking to reduce expenses where possible. However, there is a juncture in the near future where even the best financial and operational practices cannot counteract the increasing expenditures that are being passed along to the City by its vendors and providers, of which the City simply has little or no control.

#### Declaration of Fiscal Emergency

On August 27, 2019, the City Council unanimously adopted Resolution No. 2019-076 declaring a fiscal emergency in order to place a general purpose ballot measure on the March 3, 2020 statewide primary election, and requesting the City Attorney to prepare an ordinance for placement of the measure on the March 2020 ballot.

At a workshop on August 13, 2019, the City Council received an updated and detailed General Fund Forecast that built upon ongoing information presented to the Council regarding the City continuing to experience significant increases in expenses that outpace available revenue resources that ultimately will lead to a budget crises of unprecedented proportions if left unaddressed. The financial forecast, covering fiscal years 2020-2025, demonstrated that the City faces a known budget deficit of at least \$678,000 in the next fiscal year (Fiscal Year 2021) and a growing budget deficit in excess of \$2 million annually by Fiscal Year 2025 in the General Fund, the primary funding source for police and fire, among other critical services.

**FISCAL IMPACT**

If authorized by the City Council, and approved by voters, the additional Transactions and Use Tax measure is expected to generate approximately \$1.5 million annually for vital public safety, streets maintenance, and other infrastructure. City staff recommends placing this proposed general tax measure on the March 3, 2020 ballot so the City Council will know the results of the election prior to development of the FY 2021 budget.

**ATTACHMENTS**

Ordinance No. 2019-005

Ordinance No. 2019-006 (uncodified)

**ORDINANCE NO. 2019-005**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REEDLEY  
ADDING SECTION 3-1-14, TO CHAPTER 1, OF TITLE 3 OF THE REEDLEY  
MUNICIPAL CODE PERTAINING TO THE IMPOSITION OF AN  
ADDITIONAL TRANSACTIONS AND USE TAX**

WHEREAS, the City Council of the City of Reedley has ordered a ballot measure (“Measure”) for a three-quarters of one percent (0.75%) transactions and use tax increase, to be submitted to the voters of the City at the March 3, 2020, statewide primary election; and

WHEREAS, should the voters approve the Measure, the California Department of Tax and Fee Administration (“Department”) requires that an ordinance be in place for the collection of that tax; and

WHEREAS, the City Council desires to adopt two ordinances, one codified (reflecting the additional tax rate) and one uncoded (reflecting the additional tax rate and Department requirements), both contingent on the voters approving the Measure, and Uncodified Ordinance No. 2019-006 is to be adopted concurrently with this Ordinance.

NOW, THEREFORE, the City Council of the City of Reedley does hereby ordain as follows:

**SECTION 1. Codification of Additional Transactions and Use Tax.**

Section 3-1-14, of Chapter 1, of Title 3, is hereby added to the Reedley Municipal Code to read as follows:

**Section 3-1-14: Additional transactions and use tax rate.**

Notwithstanding anything to the contrary in this Chapter 1 or in Chapter 11 of Title 5 of the Reedley Municipal Code, effective on July 1, 2020, there shall be existing in the City a Transactions and Use Tax of three-quarters of one percent (0.75%). This tax is in addition to the City’s existing sales and use tax as set forth in Chapter 1 of Title 3 of the Reedley Municipal Code, and in addition to the transactions and use tax set forth in Chapter 11 of Title 5 of the Reedley Municipal Code. The purpose of this additional Transactions and Use Tax is to fund general governmental services as set forth in Resolution No. 2019- 086 and Uncodified Ordinance No. 2019-006, and this tax shall be subject to the provisions of Uncodified Ordinance No. 2019-006. The voters approved this additional Transactions and Use Tax at an election held for that purpose on March 3, 2020, by a majority of the voters.

**SECTION 2. Effective and Adoption Date; Contingency on Voter Approval.**

This ordinance relates to the levying and collecting of City transactions and use taxes and shall take effect immediately upon adoption, but shall have no force or effect, and shall not be sent for

publication or considered adopted, unless a majority of the voters approve the Measure at the March 3, 2020 election.

The foregoing ordinance was introduced at a regular meeting of the City Council held on October 8, 2019, and was adopted at a regular meeting of said Council held on October 22, 2019, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

---

Frank Piñon, Mayor

ATTEST:

---

Sylvia Plata, City Clerk

APPROVED AS TO LEGAL FORM:

---

Scott G. Cross, City Attorney

**UNCODIFIED ORDINANCE NO. 2019-006**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REEDLEY  
IMPOSING AN ADDITIONAL TRANSACTIONS AND USE TAX TO BE  
ADMINISTERED BY THE CALIFORNIA DEPARTMENT OF TAX AND FEE  
ADMINISTRATION**

WHEREAS, the City Council of the City of Reedley has ordered a ballot measure ("Measure") for a three-quarters of one percent (0.75%) transactions and use tax increase, to be submitted to the voters of the City at the March 3, 2020, statewide primary election; and

WHEREAS, should the voters approve the Measure, the California Department of Tax and Fee Administration ("Department") requires that an ordinance be in place for the collection of that tax; and

WHEREAS, the City Council desires to adopt two ordinances, one codified (reflecting the additional tax rate) and one uncodified (reflecting the additional tax rate and Department requirements), both contingent on the voters approving the Measure.

NOW, THEREFORE, the City Council of the City of Reedley does hereby ordain as follows:

Section 1. TITLE. This ordinance shall be known as the Additional Transactions and Use Tax Ordinance. The City of Reedley hereinafter shall be called "City." This ordinance shall be applicable in the incorporated territory of the City.

Section 2. OPERATIVE DATE. "Operative Date" means the first day of the first calendar quarter commencing more than 110 days after the adoption of this ordinance. The Operative Date of this ordinance, if approved by voters, shall be July 1, 2020.

Section 3. PURPOSE. This ordinance is adopted to achieve the following, among other purposes, and directs that the provisions hereof be interpreted in order to accomplish those purposes:

A. To impose a retail transactions and use tax in accordance with the provisions of Part 1.6 (commencing with Section 7251) of Division 2 of the Revenue and Taxation Code and Section 7285.9 of Part 1.7 of Division 2 which authorizes the City to adopt this tax ordinance which shall be operative if a majority of the electors voting on the measure vote to approve the imposition of the tax at an election called for that purpose.

B. To adopt a retail transactions and use tax ordinance that incorporates provisions identical to those of the Sales and Use Tax Law of the State of California insofar as those provisions are not inconsistent with the requirements and limitations contained in Part 1.6 of Division 2 of the Revenue and Taxation Code.

C. To adopt a retail transactions and use tax ordinance that imposes a tax and provides a measure therefore that can be administered and collected by the California Department of Tax

and Fee Administration in a manner that adapts itself as fully as practicable to, and requires the least possible deviation from, the existing statutory and administrative procedures followed by the California Department of Tax and Fee Administration in administering and collecting the California State Sales and Use Taxes.

D. To adopt a retail transactions and use tax ordinance that can be administered in a manner that will be, to the greatest degree possible, consistent with the provisions of Part 1.6 of Division 2 of the Revenue and Taxation Code, minimize the cost of collecting the transactions and use taxes, and at the same time, minimize the burden of record keeping upon persons subject to taxation under the provisions of this ordinance.

Section 4. CONTRACT WITH STATE. Prior to the operative date, the City shall contract with the California Department of Tax and Fee Administration to perform all functions incident to the administration and operation of this transactions and use tax ordinance; provided, that if the City shall not have contracted with the California Department of Tax and Fee Administration prior to the operative date, it shall nevertheless so contract and in such a case the operative date shall be the first day of the first calendar quarter following the execution of such a contract.

Section 5. TRANSACTIONS TAX RATE. For the privilege of selling tangible personal property at retail, a tax is hereby imposed upon all retailers in the incorporated territory of the City at the rate of 0.75% (three quarters of one percent) of the gross receipts of any retailer from the sale of all tangible personal property sold at retail in said territory on and after the operative date of this ordinance.

Section 6. PLACE OF SALE. For the purposes of this ordinance, all retail sales are consummated at the place of business of the retailer unless the tangible personal property sold is delivered by the retailer or his agent to an out-of-state destination or to a common carrier for delivery to an out-of-state destination. The gross receipts from such sales shall include delivery charges, when such charges are subject to the state sales and use tax, regardless of the place to which delivery is made. In the event a retailer has no permanent place of business in the State or has more than one place of business, the place or places at which the retail sales are consummated shall be determined under rules and regulations to be prescribed and adopted by the California Department of Tax and Fee Administration.

Section 7. USE TAX RATE. An excise tax is hereby imposed on the storage, use or other consumption in the City of tangible personal property purchased from any retailer on and after the operative date of this ordinance for storage, use or other consumption in said territory at the rate 0.75% (three quarters of one percent) of the sales price of the property. The sales price shall include delivery charges when such charges are subject to state sales or use tax regardless of the place to which delivery is made.

Section 8. ADOPTION OF PROVISIONS OF STATE LAW. Except as otherwise provided in this ordinance and except insofar as they are inconsistent with the provisions of Part 1.6 of Division 2 of the Revenue and Taxation Code, all of the provisions of Part 1 (commencing with Section 6001) of Division 2 of the Revenue and Taxation Code are hereby adopted and made a part of this ordinance as though fully set forth herein.

Section 9. LIMITATIONS ON ADOPTION OF STATE LAW AND COLLECTION OF USE TAXES. In adopting the provisions of Part 1 of Division 2 of the Revenue and Taxation Code:

A. Wherever the State of California is named or referred to as the taxing agency, the name of this City shall be substituted therefor. However, the substitution shall not be made when:

1. The word "State" is used as a part of the title of the State Controller, State Treasurer, State Treasury, or the Constitution of the State of California;

2. The result of that substitution would require action to be taken by or against this City or any agency, officer, or employee thereof rather than by or against the California Department of Tax and Fee Administration, in performing the functions incident to the administration or operation of this Ordinance.

3. In those sections, including, but not necessarily limited to sections referring to the exterior boundaries of the State of California, where the result of the substitution would be to:

a. Provide an exemption from this tax with respect to certain sales, storage, use or other consumption of tangible personal property which would not otherwise be exempt from this tax while such sales, storage, use or other consumption remain subject to tax by the State under the provisions of Part 1 of Division 2 of the Revenue and Taxation Code, or;

b. Impose this tax with respect to certain sales, storage, use or other consumption of tangible personal property which would not be subject to tax by the state under the said provision of that code.

4. In Sections 6701, 6702 (except in the last sentence thereof), 6711, 6715, 6737, 6797 or 6828 of the Revenue and Taxation Code.

B. The word "City" shall be substituted for the word "State" in the phrase "retailer engaged in business in this State" in Section 6203 and in the definition of that phrase in Section 6203.

1. "A retailer engaged in the business in the district" shall include any retailer that, in the preceding calendar year or the current calendar year, has total combined sales of tangible personal property in this state or for delivery in the state by the retailer and all persons related to the retailer that exceeds five hundred thousand dollars (\$500,000.00). For purposes of this section, a person is related to another person if both persons are related to each other pursuant to Section 267(b) of the Internal Revenue Code and the regulations thereunder.

Section 10. PERMIT NOT REQUIRED. If a seller's permit has been issued to a retailer under Section 6067 of the Revenue and Taxation Code, an additional transactor's permit shall not be required by this ordinance.

Section 11. EXEMPTIONS AND EXCLUSIONS.

A. There shall be excluded from the measure of the transactions tax and the use tax the amount of any sales tax or use tax imposed by the State of California or by any city, city and county, or county pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law or the amount of any state-administered transactions or use tax.

B. There are exempted from the computation of the amount of transactions tax the gross receipts from:

1. Sales of tangible personal property, other than fuel or petroleum products, to operators of aircraft to be used or consumed principally outside the county in which the sale is made and directly and exclusively in the use of such aircraft as common carriers of persons or property under the authority of the laws of this State, the United States, or any foreign government.

2. Sales of property to be used outside the City which is shipped to a point outside the City, pursuant to the contract of sale, by delivery to such point by the retailer or his agent, or by delivery by the retailer to a carrier for shipment to a consignee at such point. For the purposes of this paragraph, delivery to a point outside the City shall be satisfied:

a. With respect to vehicles (other than commercial vehicles) subject to registration pursuant to Chapter 1 (commencing with Section 4000) of Division 3 of the Vehicle Code, aircraft licensed in compliance with Section 21411 of the Public Utilities Code, and undocumented vessels registered under Division 3.5 (commencing with Section 9840) of the Vehicle Code by registration to an out-of-City address and by a declaration under penalty of perjury, signed by the buyer, stating that such address is, in fact, his or her principal place of residence; and

b. With respect to commercial vehicles, by registration to a place of business out-of-City and declaration under penalty of perjury, signed by the buyer, that the vehicle will be operated from that address.

3. The sale of tangible personal property if the seller is obligated to furnish the property for a fixed price pursuant to a contract entered into prior to the operative date of this ordinance.

4. A lease of tangible personal property which is a continuing sale of such property, for any period of time for which the lessor is obligated to lease the property for an amount fixed by the lease prior to the operative date of this ordinance.

5. For the purposes of subparagraphs (3) and (4) of this section, the sale or lease of tangible personal property shall be deemed not to be obligated pursuant to a contract or lease for any period of time for which any party to the contract or lease has the unconditional right to terminate the contract or lease upon notice, whether or not such right is exercised.

C. There are exempted from the use tax imposed by this ordinance, the storage, use or other consumption in this City of tangible personal property:

1. The gross receipts from the sale of which have been subject to a transactions tax under any state-administered transactions and use tax ordinance.

2. Other than fuel or petroleum products purchased by operators of aircraft and used or consumed by such operators directly and exclusively in the use of such aircraft as common carriers of persons or property for hire or compensation under a certificate of public convenience and necessity issued pursuant to the laws of this State, the United States, or any

foreign government. This exemption is in addition to the exemptions provided in Sections 6366 and 6366.1 of the Revenue and Taxation Code of the State of California.

3. If the purchaser is obligated to purchase the property for a fixed price pursuant to a contract entered into prior to the operative date of this ordinance.

4. If the possession of, or the exercise of any right or power over, the tangible personal property arises under a lease which is a continuing purchase of such property for any period of time for which the lessee is obligated to lease the property for an amount fixed by a lease prior to the operative date of this ordinance.

5. For the purposes of subparagraphs (3) and (4) of this section, storage, use, or other consumption, or possession of, or exercise of any right or power over, tangible personal property shall be deemed not to be obligated pursuant to a contract or lease for any period of time for which any party to the contract or lease has the unconditional right to terminate the contract or lease upon notice, whether or not such right is exercised.

6. Except as provided in subparagraph (7), a retailer engaged in business in the City shall not be required to collect use tax from the purchaser of tangible personal property, unless the retailer ships or delivers the property into the City or participates within the City in making the sale of the property, including, but not limited to, soliciting or receiving the order, either directly or indirectly, at a place of business of the retailer in the City or through any representative, agent, canvasser, solicitor, subsidiary, or person in the City under the authority of the retailer.

7. "A retailer engaged in business in the City" shall also include any retailer of any of the following: vehicles subject to registration pursuant to Chapter 1 (commencing with Section 4000) of Division 3 of the Vehicle Code, aircraft licensed in compliance with Section 21411 of the Public Utilities Code, or undocumented vessels registered under Division 3.5 (commencing with Section 9840) of the Vehicle Code. That retailer shall be required to collect use tax from any purchaser who registers or licenses the vehicle, vessel, or aircraft at an address in the City.

D. Any person subject to use tax under this ordinance may credit against that tax any transactions tax or reimbursement for transactions tax paid to a district imposing, or retailer liable for a transactions tax pursuant to Part 1.6 of Division 2 of the Revenue and Taxation Code with respect to the sale to the person of the property the storage, use or other consumption of which is subject to the use tax.

Section 12. AMENDMENTS. All amendments subsequent to the effective date of this ordinance to Part 1 of Division 2 of the Revenue and Taxation Code relating to sales and use taxes and which are not inconsistent with Part 1.6 and Part 1.7 of Division 2 of the Revenue and Taxation Code, all amendments to Part 1.6 and Part 1.7 of Division 2 of the Revenue and Taxation Code, and all amendments to the California Constitution or all amendments to other applicable provisions of California law shall automatically become a part of this ordinance, provided however, that no such amendment shall operate so as to affect the rate of tax imposed by this ordinance.

Section 13. ENJOINING COLLECTION FORBIDDEN. No injunction or writ of mandate or other legal or equitable process shall issue in any suit, action or proceeding in any court

against the State or the City, or against any officer of the State or the City, to prevent or enjoin the collection under this ordinance, or Part 1.6 of Division 2 of the Revenue and Taxation Code, of any tax or any amount of tax required to be collected.

Section 14. SEVERABILITY. If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the remainder of the ordinance and the application of such provision to other persons or circumstances shall not be affected thereby.

Section 15. EFFECTIVE DATE. This ordinance relates to the levying and collecting of the City transactions and use taxes and shall take effect immediately upon adoption, but shall have no force or effect, and shall not be sent for publication or considered adopted, unless a majority of the voters approve the Measure at the March 3, 2020 election.

Section 16. TERMINATION DATE. The authority to levy the tax imposed by this ordinance shall continue until ended by voters.

Section 17. NO CODIFICATION. This ordinance will not be codified.

The foregoing ordinance was introduced at a regular meeting of the City Council held on October 8, 2019, and was adopted at a regular meeting of said Council held on October 22, 2019, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

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Frank Piñon, Mayor

ATTEST:

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Sylvia Plata, City Clerk



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 9

DATE: October 22, 2019

TITLE: ADOPT RESOLUTION NO. 2019-097 APPROVING A FINDING OF PUBLIC CONVENIENCE OR NECESSITY RELATED TO CONDITIONAL USE PERMIT APPLICATION NO. 2019-6, AUTHORIZING THE SALE OF BEER AND WINE FOR OFF-SITE CONSUMPTION LOCATED AT 1577 E MANNING AVENUE

BY: Ellen Moore, Associate Planner *EM*  
Community Development Department

SUBMITTED: Rob Terry, AICP, Director *RT*  
Community Development Department

APPROVED: Nicole R. Zieba, City Manager *NZ*

### RECOMMENDATION

Staff recommends that the City Council of the City of Reedley take the following actions:

1. Adopt Resolution No. 2019-097 approving a finding of public convenience or necessity related to Conditional Use Permit Application No. 2019-6, authorizing the potential for sale of beer and wine for off-site consumption located at 1577 E Manning Avenue

### EXECUTIVE SUMMARY

October 3, 2019, the Planning Commission approved Conditional Use Permit Application No. 2019-6, authorizing the potential for sale of beer and wine for off-site consumption within a proposed 5,680 square-foot convenience store with quick service restaurant (QSR) options and dine-in seating to be constructed at 1577 East Manning Avenue (APNs 370-100-12, 370-100-13, and 370-100-72), located on the south side of East Manning Avenue, between North Kady Avenue and South Buttonwillow Avenue.

The applicant requested to apply for a Type 20 Alcoholic Beverage Control License, which would authorize the sale of beer and wine for consumption off the premises where sold. According to the California Department of Alcoholic Beverage Control (ABC), there is currently an "undue concentration" of off-sale licenses in the census tract where this property is located. The Business and Professions Code gives cities the authority but not the obligation to make public convenience or necessity findings to allow issuance of alcoholic beverage licenses despite there being an "undue concentration".

While final approval for an Alcoholic Beverage Control license is granted through ABC, the notation of potential alcohol sales must be identified within the CUP processed by the Planning Commission.

Following the Planning Commission's actions on the CUP, the City Council must also make a finding of public convenience and necessity (PCN) before ABC can make a determination on whether an ABC license can be issued.

The proposed project is consistent with the Reedley 2030 General Plan and the Reedley Municipal Code zone district designation and property development standards. The proposed convenience store is a by-right use and can be operated as such once a site plan review application is approved and a building permit is issued, but the sale of beer and wine requires a conditional use permit and findings of public convenience or necessity at the proposed location.

**PROJECT DESCRIPTION**

On October 3, 2019, the Planning Commission approved Conditional Use Permit Application No. 2019-6, authorizing the potential for sale of beer and wine for off-site consumption within a proposed 5,680 square-foot convenience store with quick service restaurant (QSR) options and dine-in seating to be constructed at 1577 East Manning Avenue, conditioned upon the City Council making findings of public convenience or necessity. The Conditions of Approval can be found attached to Planning Commission Resolution No. 2019-12 (Attachment 2).

According to the Floor Plan submitted (Exhibit B of Attachment 2), the proposed convenience store includes a beer cave, walk-in coolers, walk-in freezer, two quick service restaurant (QSR) counters, grab-n-go food/beverage displays, and restrooms. The proposed convenience store also includes dine-in tables, a meeting room with tables that can be reserved, and work stations.

According to the Operational Statement submitted (Exhibit C of Attachment 2), the hours of operation for the business are proposed to be 5 AM – 12 AM, seven days per week. At the Planning Commission meeting, the applicant confirmed that his property would have security cameras within the proposed convenience store as well as on the exterior of the proposed building. All necessary requirements for filing an ABC application will be followed.

The applicant currently owns and operates a business in Dinuba off of El Monte Way that is similar to what is proposed with this development. The business is a Circle K Market that includes a Taqueria, TOGO's Sandwiches, and Tutti Frutti Frozen Yogurt as the QSR options inside the market. The applicant has provided letters of support for this project from Dinuba community members based on his current business operations (See Attachment 4).

The applicant provided a preliminary site plan for the future development of the site if the proposed CUP for alcohol sales is approved and a finding of public convenience or necessity is made. The convenience store is proposed new construction, along with a 2,800 square-foot drive-thru restaurant and fueling station (12 gas pumps), within the subject properties. The applicant provided this preliminary site plan to show the future development of the site, however the site plan by itself is not within the scope of a finding of public convenience or necessity. The Conditions of Approval dated October 3, 2019, attached to Planning Commission Resolution No. 2019-12, state that the applicant shall submit a site plan review application that shall be approved by the Community Development Department prior to pulling building permits for any proposed buildings/structures on the site.

**BORDERING PROPERTY INFORMATION**

	<u>Planned Land Use</u>	<u>Existing Zoning</u>	<u>Existing Land Use</u>
North	Community Commercial	Central and Community Commercial (CC)	Existing Commercial Shopping Center
East	Community Commercial	Central and Community Commercial (CC)	Existing Commercial Businesses

South	Low Density Residential	One-Family Residential (R-1-7)	Vacant Land with Single Family Homes fronting onto East Myrtle Avenue
West	Community Commercial	Central and Community Commercial (CC)	Vacant Land and Single Family Residence

**GENERAL PLAN CONSISTENCY**

The subject property is located within the boundaries of the 2030 General Plan. The General Plan Planned Land Use Designation for the property is Community Commercial, which is land designated for "a wide range of consolidated shopping opportunities near residential concentrations. Such activities serve the entire community. Where possible, these uses should be concentrated into unified retail centers." (Reedley 2030 General Plan, page 43).

The project proposes to authorize the potential sale of beer and wine for off-site consumption (ABC Type 20 License) within a proposed convenience store with quick service restaurant options, which is consistent with the objectives of the Community Commercial General Plan Planned Land Use Designation.

**ZONING ORDINANCE CONSISTENCY**

The current zoning designation of the subject property is CC (*Central and Community Commercial*). Operation of a convenience store with quick service restaurant (QSR) options and dine-in seating is a permitted use in this zone district, therefore the proposed land use is consistent with the Reedley Municipal Code. The convenience store (not including alcohol sales), fueling station, and drive-thru restaurant are by-right uses and can be operated as such subject to Site Plan Review approval and demolition of two existing single family homes on the subject properties, but the sale of beer and wine is a conditional use and requires a finding of public convenience or necessity at this location.

A Public Hearing Notice was duly published in the Mid-Valley Times on October 10, 2019. On October 10, 2019, Public Hearing Notices were mailed to the surrounding property owners as required by Section 10-18-1 of the Reedley Municipal Code.

Before the project was presented to the Planning Commission, staff sent the project information to all City departments and other local agencies, including Kings Canyon Unified School District and ABC, to give those agencies the opportunity to provide comments or conditions of approval for the project. KCUSD did not provide comments on the project. The Fresno County Health Department provided comments addressing the need for food facility permitting, the potential for elevated noise levels, and ABC licensing. ABC commented that public convenience or necessity findings would be required.

**PLANNING COMMISSION ACTION**

Conditional Use Permit Application No. 2019-6 was approved by the Planning Commission with a 3-0 vote at a noticed public hearing, which is the final action required for approval of a Conditional Use Permit. The applicant and his representatives attended the meeting and answered questions asked by the Planning Commission. A member of the public who regularly visits the applicant's store in Dinuba spoke in support of the project. There were no public comments that were in opposition of the project, and there were no appeals filed during the appeal period.

If a finding of public convenience or necessity is made and an ABC License is issued, Conditional Use Permit Application No. 2019-6 is subject to suspension, revocation, or modification if there are repeated violations of applicable City Codes, including noise violations and/or public nuisances.

### **ALCOHOLIC BEVERAGE CONTROL (ABC): PUBLIC CONVENIENCE OR NECESSITY**

The applicant requested to apply for a Type 20 Alcoholic Beverage Control License, which is described as follows:

*Type 20 – OFF SALE BEER & WINE - (Package Store) Authorizes the sale of beer and wine for consumption off the premises where sold. Minors are allowed on the premises.*

A Type 20 ABC License is different from a Type 21 (Off-Sale General) License, which authorizes the sale of beer, wine, and distilled spirits (a.k.a. liquor) for consumption off the premises where sold.

The location of this business is in Census Tract 66.04. According to the California Department of Alcoholic Beverage Control, Census Tract 66.04 allows a maximum of seven (7) "Off Sale" licenses based on the population within the Census Tract and the ratio of population to alcohol licenses. Currently there are a total of eight (8) "Off Sale" licenses within this census tract (See Attachment 3 for a map of existing "Off Sale" licenses). Of those 8 "Off Sale" licenses, five (5) are Type 20 licenses, and 3 are Type 21 (Off Sale Beer, Wine and Liquor). The addition of another "Off Sale" license would increase the total number of "Off Sale" licenses to nine (9), which is two (2) more than the authorized number. As a result, the increase would add to the "undue concentration" of retail licenses as identified in Business and Professions Code Section 23958.4 (2). However, Business and Professions Section 23958(b) (2) allows the local governing body to make a determination of "public convenience or necessity" that would be served by the issuance, and recommend that ABC allow an additional license.

The City Council is the decision-making body for findings of public convenience or necessity. As such, within the approval of Conditional Use Permit Application No. 2019-6 is a notation that any such approval shall become null and void should the City Council elect not to make findings of public convenience or necessity. In addition, ABC deems an application to be automatically denied if required findings of public convenience or necessity are not approved by the local agency. If the City Council chooses to not make findings of public convenience or necessity, the applicant will still be allowed to operate a convenience store as a by-right use; however, they would not be able to sell alcohol.

Part of the ABC license application process includes the identification of consideration points (schools, churches, hospitals, public playgrounds and youth facilities) and residences nearby. There are no consideration points, as listed, within 600 feet. The subject property is located within 100 feet of two multi-family residential buildings and two large single family residential properties (the single family homes are located closer to Myrtle Avenue than to the subject property).

Consistency with both the General Plan and Zoning Designations, the subject property's location in an area serving as a major commercial corridor where such sales activities should be expected, and the positive reputation of the applicant and their operation of their existing business in Dinuba, are the major determining factors for both the Planning Commission and staff recommending approval of the conditional use permit, and for staff's recommendation regarding public convenience or necessity.

### **ENVIRONMENTAL REVIEW**

Environmental Assessment No. 2019-13 determined that the project is Categorically Exempt under Section 15303 (Class 3/New Construction or Conversion of Small Structures) and Section 15332 (Class 32/In-Fill Development Project) of the California Environmental Quality Act (CEQA) Guidelines.

### **FISCAL IMPACT**

There is no fiscal impact to the City at this time.

**ATTACHMENTS**

1. Resolution No. 2019-097 – Approval of Finding of Public Convenience or Necessity
2. Planning Commission Resolution No. 2019-12 (with attached Site Plan and Conditions of Approval)
  - Exhibit A: Aerial View of Subject Properties
  - Exhibit B: Floor Plan dated August 16, 2019
  - Exhibit C: Operational Statement dated July 11, 2019
3. Exhibit A – Map of Current "Off Sale" licenses
4. Letters of Support for Applicant and Project

Motion: \_\_\_\_\_

Second: \_\_\_\_\_

**RESOLUTION NO. 2019-097**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REEDLEY APPROVING A FINDING OF PUBLIC CONVENIENCE OR NECESSITY RELATED TO CONDITIONAL USE PERMIT APPLICATION NO. 2019-6, AUTHORIZING THE SALE OF BEER AND WINE FOR OFF-SITE CONSUMPTION LOCATED AT 1577 EAST MANNING AVENUE**

WHEREAS, Conditional Use Permit Application No. 2019-6 pertains to authorizing the potential for sale of beer and wine for off-site consumption; and

WHEREAS, the subject property is at 1577 E Manning Avenue (APNs 370-100-12, 370-100-13, and 370-100-72), located on the south side of East Manning Avenue, between North Kady Avenue and South Buttonwillow Avenue; and

WHEREAS, the City of Reedley Planning Commission, at the regular meeting on October 3, 2019, held a public hearing to review Conditional Use Permit Application No. 2019-6 and Environmental Assessment No. 2019-13; and

WHEREAS, the City of Reedley Planning Commission using their independent judgment hereby approved Conditional Use Permit Application No. 2019-6 and Environmental Assessment No. 2019-13; and

WHEREAS, the City of Reedley Planning Commission approved the conditions of approval dated October 3, 2019 attached to Planning Commission Resolution No. 2019-12; and

WHEREAS, Sukhwinder Singh, the applicant, intends to submit an application to the State Department of Alcoholic Beverage Control for an alcoholic beverage sales license (Type 20); and

WHEREAS, there is currently an "undue concentration" of "Off Sale" ABC Licenses in Census Tract 66.04, where this project is located; and

WHEREAS, pursuant to Business and Professions Section 23958(b)(2), the local governing body is allowed to make a determination of "public convenience or necessity" that would be served by the issuance; and

WHEREAS, pursuant to Reedley Municipal Code Title 3, Chapter 11, the local governing body has the authority but not the obligation to make a "public convenience or necessity" finding in certain alcoholic beverage license proceedings; and

WHEREAS, on October 22, 2019 the City Council of the City of Reedley held a public meeting at the City of Reedley Council Chambers at 845 G Street and received a staff report, staff presentation and accepted public comments.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. The issuance of a Type 20 alcoholic beverage sales license located at 1577 E Manning Avenue will serve the public convenience or necessity.

2. The issuance of a Type 20 alcoholic beverage sales license located at 1577 E Manning Avenue shall be approved subject to the conditions of approval dated October 3, 2019 attached to Planning Commission Resolution No. 2019-12.
3. The City Clerk is directed to transmit a certified copy of this resolution to the California Department of Alcoholic Beverage Control.
4. This resolution is effective upon adoption.

The foregoing resolution is hereby approved and adopted this 22nd day of October, 2019, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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Frank Piñon, Mayor  
City Council

ATTEST:

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Sylvia Plata, City Clerk

**RESOLUTION NO. 2019-12**

**A RESOLUTION OF THE CITY OF REEDLEY PLANNING COMMISSION APPROVING  
CONDITIONAL USE PERMIT APPLICATION NO. 2019-6 AND RELATED  
ENVIRONMENTAL EVALUATION NO. 2019-13**

WHEREAS, a Conditional Use Permit Application No. 2019-6 pertains to authorizing the potential for sale of beer and wine for off-site consumption within a proposed 5,680 square-foot convenience store with quick service restaurant (QSR) options and dine-in seating to be constructed at 1577 East Manning Avenue; and

WHEREAS, should Conditional Use Permit Application No. 2019-6 be approved, the applicant will be seeking approval through the Department of Alcoholic Beverage Control (ABC) to conduct the sale of beer and wine for off-site consumption through a Type 20 License (Off-Sale Beer & Wine); and

WHEREAS, the project site is approximately 0.931 acres and is located on the south side of East Manning Avenue, between North Kady Avenue and South Buttonwillow Avenue (APNs 370-100-12, 370-100-13, and 370-100-72); and

WHEREAS, the project was evaluated and processed in accordance with provisions of the California Environmental Quality Act; and

WHEREAS, the City of Reedley Planning Commission, at the regular meeting on October 3, 2019, held a public hearing to review the conditional use permit application and environmental evaluation; and

WHEREAS, the Planning Commission received public testimony, oral and written staff report, and deliberated; and

WHEREAS, the City of Reedley Planning Commission determined that the proposed project is consistent with the subject properties' General Plan Planned Land Use Designation, Zone District designation and property development standards, pursuant to the Municipal Code; and

WHEREAS, Environmental Evaluation No. 2019-13 determined that this project is categorically exempt under Section 15303 (Class 3/New Construction or Conversion of Small Structures) and Section 15332 (Class 32/In-Fill Development Project) of the California Environmental Quality Act (CEQA) Guidelines; and

WHEREAS, pursuant to California Environmental Quality Act, the City of Reedley Planning Commission hereby finds that an environmental evaluation was conducted for this project and declares that no evidence has emerged as a result of said evaluation to indicate that the proposed project will have any potential, either individually or cumulatively, for adverse effect on surrounding environment.

NOW, THEREFORE, BE IT RESOLVED that the City of Reedley Planning Commission using their independent judgment hereby approves Conditional Use Permit Application No. 2019-6 and Environmental Evaluation No. 2019-13 based on the following:

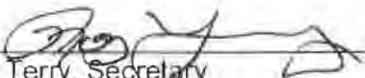
1. The above recitals are true and correct; and
2. The Planning Commission finds that Conditional Use Permit Application No. 2019-6 is consistent with the goals and polices of the Reedley General Plan; and
3. The Planning Commission finds pursuant to the Reedley Municipal Code Section 10-18-7A, that the Conditional Use Permit Application No. 2019-6 conditions have been applied to the land necessary for the preservation and enjoyment of a substantial property right; and
4. The Planning Commission finds pursuant to the Reedley Municipal Code Section 10-18-7B, that Conditional Use Permit Application No. 2019-6 is in accordance with the purposes of the zone district in which the site is located; and
5. The Planning Commission finds pursuant to the Reedley Municipal Code Section 10-18-7C, that the Conditional Use Permit Application No. 2019-6 proposed use will comply with each of the applicable provisions of this title; and
6. The Planning Commission approves Environmental Evaluation No. 2019-13, a Categorical Exemption under Sections 15301 (Class 1/Existing Facilities) and 15332 (Class 32/In-Fill Development Project) of the California Environmental Quality Act (CEQA) Guidelines, dated September 30, 2019; and
7. The Planning Commission approves the attached conditions of approval for Conditional Use Permit Application No. 2019-6, dated October 3, 2019.
8. This resolution is effective immediately upon adoption.

This foregoing resolution is hereby approved and adopted on October 3, 2019 by the following vote:

AYES: Hudson, Luzania, Perez.  
NOES: None.  
ABSTAIN: None.  
ABSENT: Conrad, Custodio.

  
\_\_\_\_\_  
Pete Perez, Chair  
City of Reedley Planning Commission

ATTEST:

  
\_\_\_\_\_  
Rob Terry, Secretary

**ATTACHMENT TO RESOLUTION No. 2019-12**

**CITY OF REEDLEY  
COMMUNITY DEVELOPMENT DEPARTMENT  
CONDITIONAL USE PERMIT APPLICATION No. 2019-6  
DRAFT CONDITIONS OF APPROVAL  
OCTOBER 3, 2019**

**NOTICE TO PROJECT APPLICANT**

In accordance with the provisions of Government Code Section 66020(d)(1), the imposition of fees, dedication, reservations or exactions for this project are subject to protest by the project applicant at the time of approval or conditional approval of the development or within 90 days after the date of imposition of fees, dedications, reservation, or exactions imposed on the development project.

This notice does not apply to those fees, dedications, reservations, or exactions which were previously imposed and duly noticed; or, where no notice was previously required under the provisions of Government Code Section 66020(d)(1) in effect before January 1, 1997.

**PART A- PROJECT INFORMATION**

Assessor's Parcel No.: 370-100-12, 370-100-13, and 370-100-72 (0.931 acres)

Job Address: 1577 East Manning Avenue, Reedley, CA 93654

Street Location: Located on the south side of East Manning Avenue, between North Kady Avenue and South Buttonwillow Avenue

Existing Planned Land Use: Community Commercial

Existing Zoning: CC (*Central & Community Commercial*) Zone District

Project Description: **Conditional Use Permit Application No. 2019-6** pertains to the authorization of the sale of beer and wine for off-site consumption within a proposed 5,680 square-foot convenience store with quick service restaurant (QSR) options and dine-in seating to be constructed at 1577 East Manning Avenue. The applicant is proposing to obtain a Type 20 License (Off-Sale Beer & Wine) from the California Department of Alcoholic Beverage Control. The project is considered an in-fill development project and is consistent with the 2030 General Plan Community Commercial Planned Land Use Designation and the CC (Central and Community Commercial) zone district.

**PART B – GENERAL CONDITIONS AND REQUIREMENTS**

1. Please note that this project may be subject to a variety of discretionary conditions of approval. These include conditions based on adopted City plans and policies, those determined through site plan review and environmental assessment essential to mitigate adverse effects on the environment including the health, safety, and welfare of the community, and recommended conditions for development that are essential to health, safety, and welfare, but would, on the whole, enhance the project and its relationship to the neighborhood and environment.
2. All discretionary conditions of approval will ultimately be deemed mandatory unless appealed verbally or in writing to the City of Reedley, Planning Commission at the scheduled public hearing regarding Conditional Use Permit Application No. 2019-6.
3. Approval of this special permit shall be considered null and void in the event of failure by the applicant and/or the authorized representative, architect, engineer, or designer to disclose and delineate all facts and information relating to the subject property and the proposed development including, but not limited to, the following:
  - a. All existing and proposed improvements including but not limited to buildings and structures, signs and their uses, trees, walls, driveways, outdoor storage, and open land use areas on the subject property and all of the preceding which are located on adjoining property and may encroach on the subject property; and
  - b. All public and private easements, rights-of-way and any actual or potential prescriptive easements or uses of the subject property; and
  - c. Existing and proposed grade differentials between the subject property and adjoining property zoned or planned for commercial use.
4. Approval of this special permit may become null and void in the event that development is not completed in accordance with all the conditions and requirements imposed on this special permit, the Zoning Ordinance, and all Public Works Standards and Specifications. The Community Development Department shall not assume responsibility for any deletions or omissions resulting from the special permit review process or for additions or alterations to construction plans not specifically submitted and reviewed and approved pursuant to this special permit or subsequent amendments or revisions.
5. The applicant shall indemnify, hold harmless and defend the City of Reedley and each of its officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, damages and costs arising from, resulting from, or in connection with a challenge or contest of the entitlement application and/or the project approvals; or claims or allegations of a violation of the California Environmental Quality Act (CEQA) or any another law, rule or regulations in connection with the granting issuance or approval by the City of any or all rights or benefits granted to the applicant

under this entitlement. The City will promptly notify the Applicant of any such claim, action, or proceedings against the City and the Applicant will either undertake the defense of the matter or abandon the matter and pay the City's associated legal costs or will advance funds to pay for defense of the matter by the City Attorney.

By a separate instrument, the parties will mutually address the defense of the matter, including but not limited to selection of attorney, attorney's fees, litigation expenses and administrative record preparation costs and deposits.

6. No uses of land, buildings, or structures shall be permitted other than those specifically approved pursuant to this site plan review application.
7. Development shall take place in accordance with all city, county, state and federal laws and regulations.
8. **The exercise of rights granted by this special permit shall commence on October 14, 2019.**
  - a. The decision of the Planning Commission may be appealed in writing to the City Council within 10 calendar days of the Planning Commission's decision pursuant to Reedley Municipal Code Section 10-18-20.
9. This Conditional Use Permit shall expire on October 14, 2021, pursuant to Reedley Municipal Code, Title 10, Section 10-18-11.
  - a. Approval may be extended for an additional period or periods of one year upon written application to the Community Development Department before expiration of the first approval.

**PART C – City of Reedley Departmental Requirements**

1. Community Development Department
  - a. Approval of Conditional Use Permit Application No. 2019-6 is contingent upon City Council approval of the finding of public convenience or necessity for the proposed sale of beer and wine for off-site sales at this location.
  - b. Applicant shall maintain compliance with all applicable State of California Department of Alcohol Beverage Control license requirements.
  - c. Development shall take place in accordance with the Community Commercial Land Use Designation, defined in the Reedley 2030 General Plan.

- d. Development shall take place in accordance with the CC (*Central and Community Commercial*) zone districts, defined in Title 10 of the Reedley Municipal Code.
- e. Development shall take place in substantial conformance with Exhibit B, dated July 11, 2019 and Exhibit C, dated August 16, 2019.
- f. Conditional Use Permit Application No. 2019-6 only pertains to the proposed conditional use of beer and wine sales for off-site consumption. The proposed construction of a convenience store is a by-right use and does not require the approval of the Planning Commission. Applicant shall submit a Site Plan Review Application showing the site layout of the by-right uses proposed to be developed on the site.
- g. Prior to the issuance of a certificate of occupancy of any proposed buildings or structures located over an existing property line, a Lot Line Adjustment Application shall be completed. Contact Ellen Moore, Associate Planner at (559) 637-4200 ext. 222 or via e-mail at [ellen.moore@reedley.ca.gov](mailto:ellen.moore@reedley.ca.gov) for more information.

2. Reedley Police Department.

- a. Applicant shall install a functional color digital camera system that records, stores and will playback images. The interior must have at least one camera placed to focus on all cash register transactions to include the clerk as well as the customer area.
- b. The establishment shall not allow illegal drugs to be sold, ingested, injected, or inhaled in the building premises or on any adjacent property under its control.
- c. Beer, malt beverages, and wine coolers in containers of 16 oz. or less shall not be sold as single containers; they shall be sold in manufacturer pre-packaged multi-unit quantities.
- d. Verification of "legal age" customers will occur during regular store hours by store employees. This will be accomplished only by physically viewing a valid identification card issued by a state agency which has the persons' photograph, date of birth, and name.
- e. No sales of alcohol shall be allowed except during the hours of operation as stated under Conditional Use Permit Application No. 2019-6.
- f. The Applicant shall not violate any Business & Professions Codes, specifically, but not limited to:
  - i. BP 24046 – Required to post ABC License on premises
  - ii. BP 25602 – Furnishing alcohol to an obviously drunk individual

- iii. BP 25612 – Signage
- g. The applicant shall maintain a copy of these conditions and all applicable licenses and permits issued by the city, county, state and federal governments at the premises.
- h. The establishment shall not allow alcoholic beverages to be consumed outside the building premises or any other adjacent property under its control.
- i. The establishment shall not allow any loitering on building premises or any adjacent property under its control.
- j. The establishment shall collect litter in the immediate area of operation and complete such litter control by no later than one hour after closing on each evening of operation.
- k. Any graffiti painted or marked upon the premises or any adjacent area under its control shall be removed or painted over within 48 hours.
- l. The above listed conditions are subject to amendment by the Reedley Police Department at any time.

**PART D – MISCELLANEOUS**

- 1. County of Fresno Department of Public Health:
  - a. Development shall take place in accordance with the comment letter provided by the County of Fresno Department of Public Health dated August 26, 2019. See Attachment 1.

Enclosures:  
Exhibit A: Aerial View of Subject Properties  
Exhibit B: Floor Plan dated August 16, 2019  
Exhibit C: Operational Statement dated July 11, 2019  
Attachment 1: County of Fresno Department of Public Health Comment Letter dated August 26, 2019

# Exhibit "A"

1577 Manning Ave



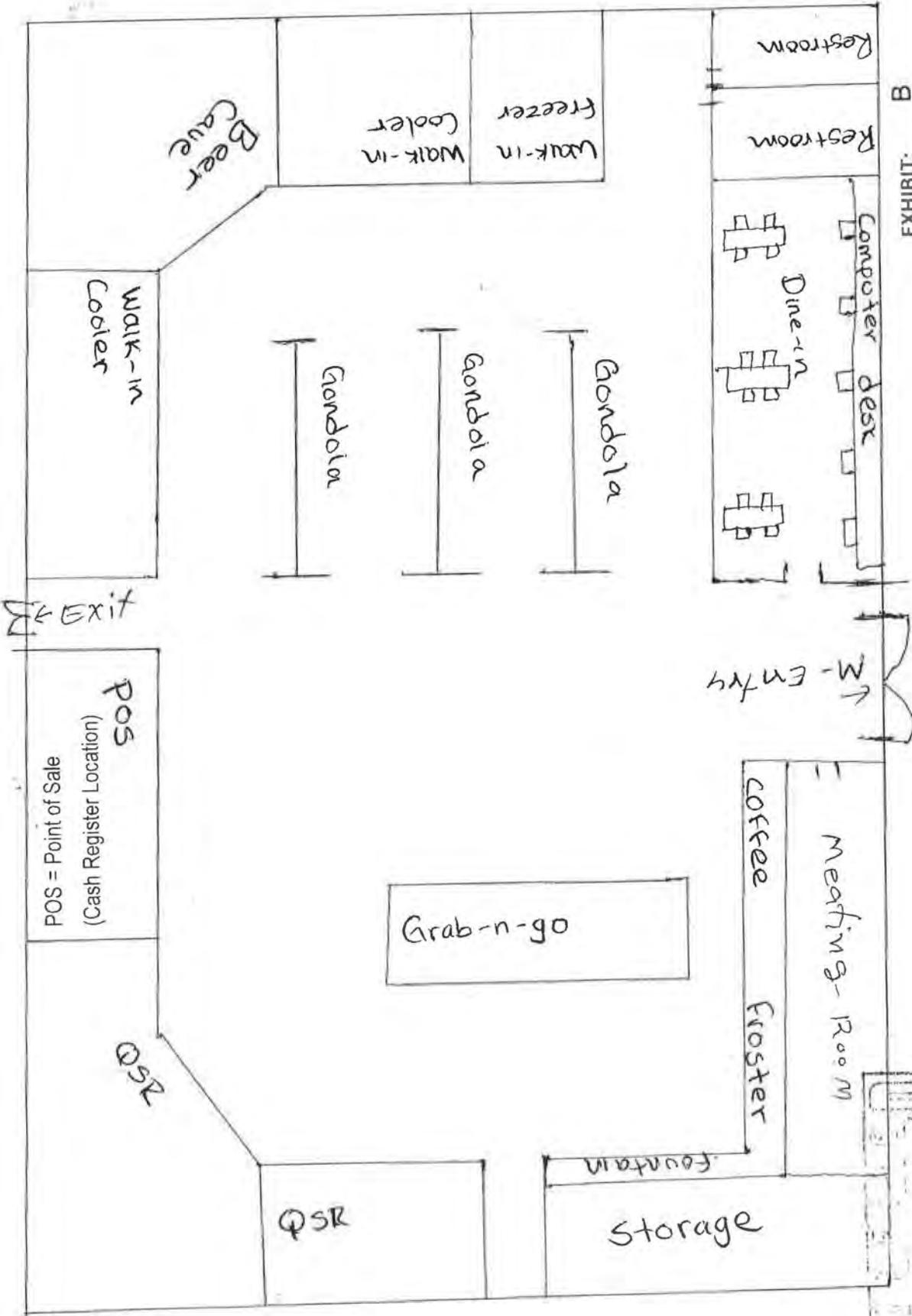


EXHIBIT: B  
 APP #: CUP 2019-6  
 DATE: 8/16/2019  
 APPROVED: *[Signature]*

1577 - E Manning  
 3 - 7751

AUG 16 2019  
 COMMUNITY OF POLICE OFFICERS

EXHIBIT: C

APP #: CUP 2019-6

DATE: 7/11/2019

**City of Reedley**

Community Development Department  
1733 Ninth Street  
Reedley, CA 93654  
(559) 637-4200  
<http://www.reedley.com>

APPROVED: *[Signature]*

**Operational Statement Template**

Our goal is to facilitate an accurate and complete description of your project in order to avoid unnecessary delays in gathering additional information. This is your opportunity to communicate in detail the important characteristics of your project/property that should be considered when your project is reviewed for completeness. Please use this template as a guide to explaining the scope of your project.

This template will assist you, various City departments and outside agencies, in their review, crafting of comments and conditions. If you have any questions about the requested information or need help completing any portions of this form please call the Community Development Department at (559) 637-4200 ext. 222. This form must be completed and submitted in order to process your application. If this operational statement is not submitted or incomplete, your application will not be accepted for processing.

1. Project Description: CIRCLE K/CHEVRON application is being submitted by SUKHWINDER SINGH on behalf of NSMANNING LLC and pertains to 42,000 SQFT acres of property located at 1577 E MANNING REEDLEY, CA

2. Operational Narrative: (Describe your proposed operation/development in detail, including information such as name of business, product or service, anticipated traffic and deliveries, special events, required equipment, on-site storage, demolition or adaptive reuse of existing structures, etc.).

PROPOSING TO BUILD CIRCLE K/CHEVRON WITH DRIVE THRU FRANCHISE RESTAURANT, MINI-MART ICE CREAM BAR, FROZEN YOGURT. CUP REQUIRED TO OBTAIN ABC OFF SALE BEER AND WINE LICENSE FOR MINI MART

3. List the hours of operation: 5AM-12AM Number of Days per Week: 7  
If Seasonal, list the months of operation: \_\_\_\_\_

4. Number of Customers or Visitors per day: N/A Maximum per Day: N/A  
During what hours will customers visit your property? \_\_\_\_\_

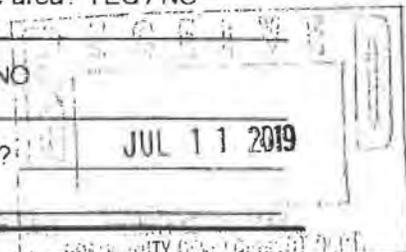
5. Number of current employees: \_\_\_\_\_ Future employees: 15-20 EMPLOYEES  
Will any live on site? YES / NO

6. Will the operation or equipment used generate noise above existing levels in the area? YES / NO  
If yes, explain \_\_\_\_\_

7. Will hazardous materials or waste be produced as part of this business? YES / NO  
If yes, explain \_\_\_\_\_

8. Which building(s) or what portion of the building(s) will be used in your operation?

IT WILL BE A 1 BUILDING OF APPROX 7,000 SQFT



I hereby declare under penalty of perjury that this application and all information submitted as part of this application are true and accurate to the best of my knowledge.

*S. Singh*  
Applicant's Signature

7-10-19  
Date

# CIRCLE K/CHEVRON

1577 E. Manning Reedley, CA

Email • [dinubacirclek@gmail.com](mailto:dinubacirclek@gmail.com) • (559) 356-2859

City of Reedley  
1733 Ninth Street  
Reedley, CA 93654

EXHIBIT: C

APP #: CUP 2019-6

DATE: 7/11/2019

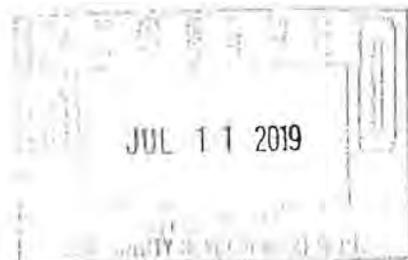
APPROVED: 

## DEAR CITY OF REEDLEY,

Myself, Sukhwinder Singh current owner of Circle K in Dinuba, CA

I am submitting a request for an approval on Conditional Use Permit application for the proposed Circle K with potential Chevron brand gasoline, drive thru franchise food chain, ice cream bar, and frozen yogurt. As current zoning of the property is C-C, it requires CUP for off sale beer and wine license. I would like to bring in a sophisticated and a clean facility to the City of Reedley, which will provide a lot more for the local community as well thru traffic on Manning. I run a very successful Circle K location in Dinuba, which was awarded by the City of Dinuba (business of the year), also by the State of California I was awarded with (best hang-out place out of the district). I would like to bring in same class facility to the City with the support of the community and City of Reedley.

Thank you!  
Sukhwinder Singh





**County of Fresno**  
**DEPARTMENT OF PUBLIC HEALTH**

August 26, 2019

Ellen Moore, Associate Planner  
City of Reedley  
Community Development Department  
1733 Ninth Street  
Reedley, CA 93654

LU0020170  
2600

Dear Ms. Moore:

PROJECT NUMBER: **CUP2019-6**

**Conditional Use Application No. 2019-6** Conditional Use Permit Application No. 2019-6 pertains to the authorization of the sale of beer and wine for off-site consumption within a proposed 4,920 square-foot convenience store. The applicant is proposing to obtain a Type 20 ABC License (Off-Sale Beer and Wine). The project is consistent with the 2030 General Plan Community Commercial Planned Land Use Designation and the CC (Central and Community Commercial) zone district.

**APN: 370-100-73**

**ZONING: CC (Central & Community Commercial)**

**ADDRESS: 1577 E. Manning Avenue**

Comments/Concerns:

Since specific retail/commercial tenants for this application have not been identified, the full range of 'CC' zoning uses must be considered. The potential adverse impacts could include (but are not limited to) storage of hazardous materials and/or wastes, solid waste, medical waste, water quality degradation, excessive noise, and odors.

Recommended Conditions of Approval:

- Prior to issuance of building permits, the applicant(s) will be required to submit complete food facility plans and specifications to the Fresno County Department of Public Health, Environmental Health Division, for review and approval. Contact the Consumer Food Protection Program at (559) 600-3357 for more information.
- Prior to operation, the applicant(s) shall apply for and obtain permits to operate a food facility from the Fresno County Department of Public Health, Environmental Health Division. A permit, once issued, is nontransferable. Contact the Consumer Food Protection Program at (559) 600-3357 for more information.

***Promotion, preservation and protection of the community's health***

1221 Fulton Street / P. O. Box 11867, Fresno, CA 93775

(559) 600-3271 • FAX (559) 600-7629

The County of Fresno is an Equal Employment Opportunity Employer

[www.co.fresno.ca.us](http://www.co.fresno.ca.us) • [www.fcdph.org](http://www.fcdph.org)

- Facilities that use and/or store hazardous materials and/or hazardous wastes shall meet the requirements set forth in the California Health and Safety Code (HSC), Division 20, Chapter 6.95, and the California Code of Regulations (CCR), Title 22, Division 4.5. Your proposed business will handle hazardous materials and/or hazardous waste and will be required to submit a Hazardous Materials Business Plan pursuant to the HSC, Division 20, Chapter 6.95 (<http://cers.calepa.ca.gov/>). For more information please contact the local Certified Unified Program Agency (CUPA) at (559) 600-3271.
- Prior to the issuance of building permits, the applicant shall submit three (3) sets of complete plans and specifications regarding the installation of any underground storage tanks to the Fresno County Department of Public Health, Environmental Health Division. Contact the Certified Unified Program Agency (CUPA), at (559) 600-3271 for more information.
- Prior to operations, the fuel facility applicant shall apply for and secure a Permit to Operate an Underground Storage Tank System from the Fresno County Department of Public Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 600-3271 for more information.
- The proposed facility construction and project has the potential to expose nearby residents to elevated noise levels. Consideration should be given to your City's municipal code.
- As a measure to protect ground water, all water wells and/or septic systems that exist or have been abandoned within the project area should be properly destroyed by an appropriately licensed contractor.
- Should any underground storage tank(s) be found during the project, the applicant shall apply for and secure an Underground Storage Tank Removal Permit from the Fresno County Department of Public Health, Environmental Health Division. Contact the Certified Unified Program Agency at (559) 600-3271 for more information.

The following comments pertain to demolition of existing structure(s):

- Should the structure(s) have an active rodent or insect infestation, the infestation should be abated prior to demolition of the structure(s) in order to prevent the spread of vectors to adjacent properties.
- In the process of demolishing the existing structure(s), the contractor may encounter asbestos containing construction materials and materials coated with lead based paints.
- If asbestos containing materials are encountered, contact the San Joaquin Valley Air Pollution Control District at (559) 230-6000 for more information.
- If the structure(s) were constructed prior to 1979 or if lead-based paint is suspected to have been used in these structure(s), then prior to demolition and/or remodel work the contractor should contact the following agencies for current regulations and requirements:

Ellen Moore  
August 26, 2019  
CUP 2019-6  
Page 2 of 2

- California Department of Public Health, Childhood Lead Poisoning Prevention Branch, at (510) 620-5600.
- United States Environmental Protection Agency, Region 9, at (415) 947-8000.
- State of California, Industrial Relations Department, Division of Occupational Safety and Health, Consultation Service (CAL-OSHA) at (559) 454-5302.
- Any construction materials deemed hazardous as identified in the demolition process must be characterized and disposed of in accordance with current federal, state, and local requirements.

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REVIEWED BY:

*Kevin Tsuda*

Kevin Tsuda, R.E.H.S.  
Environmental Health Specialist II

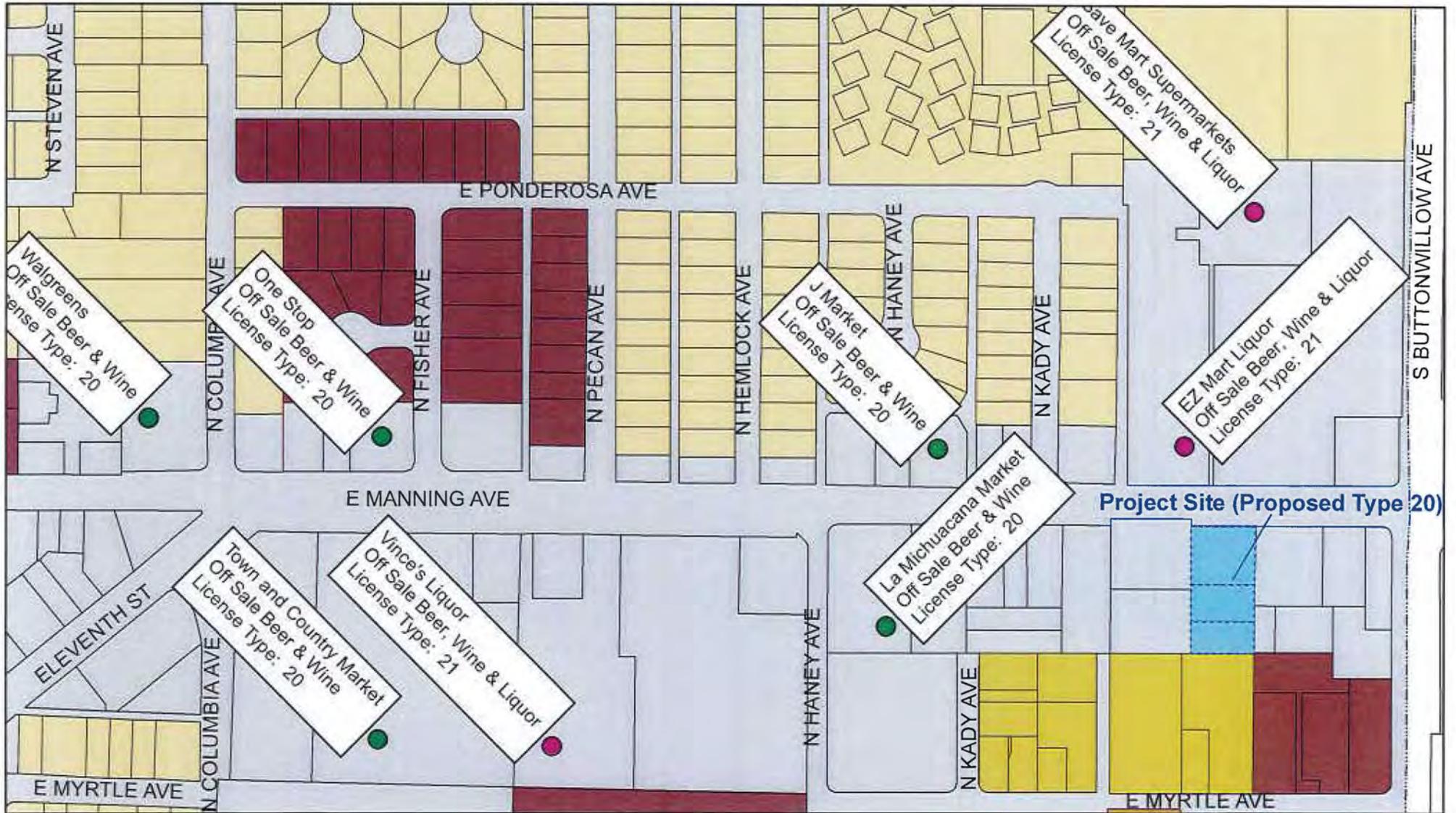
(559) 600-3271

---

KT

cc: Rogers, Moreno, Malavong & Oung- Environmental Health Division (CT. 66.04)

# Attachment 3 Map of Existing "Off Sale" ABC Licenses in Census Tract 66.04



## Legend

- ABC License Type**
- 20 (Off-Sale Beer & Wine)
  - 21 (Off-Sale Beer, Wine & Liquor)

- Residential Zoning Designations**
- R-1-7 One-Family Residential Zone District
  - RM-3 Multi Family Residential Zone District
  - RM-2 Multi Family Residential Zone District
  - R-1-6 One Family Residential Zone District



August 13, 2019

Ramon Rivera  
Kiwanis Division 18 Lt. Governor Elect  
Dinuba Chamber of Commerce – Past Board Chair  
Director of IT, Dinuba Unified School District  
1960 Golden Way  
Dinuba, CA 93618

To Whom It May Concern,

It is my pleasure to write this letter of support for Sukhwinder Sidhu, owner for Dinuba's Circle K Convenience Store. I have known Sidhu for about 7 years and can attest to his strength of community involvement and support. As the owner of Circle K and parent to three children in the public school system, Sidhu is an actively contributing member of the community.

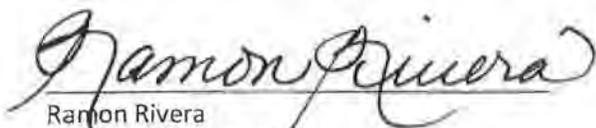
I first met Sidhu through his support to the Kiwanis Club of Dinuba events, eventually becoming a member of the club. Through Kiwanis, Sidhu has been an active member supporting our community primarily at the Multi-Cultural event every Last Sunday of September. He sponsors the event and volunteers with his family in the coordination and the work during the event. Through Kiwanis, Sidhu also contributes to providing scholarships to students of our community.

Sidhu is also an active business leader in our community as the owner of Circle K. He is been a board member of the Dinuba Chamber of Commerce. As a member of the board, he has been actively sponsoring and volunteering at the chamber events such as Raisin Festival, Cinco de Mayo, Annual Banquet, Chamber mixers and networking events.

As an employee of the Dinuba Unified School District, I personally attest that he supports the students in different aspects. He supports the different clubs and programs of the School District, He provides food at discounted prices, and he provides free Tutti Frutti to Kindergarten students at registration and other events/clubs throughout the district, and supports District events when sponsorship is needed.

Sidhu is an outstanding and active citizen with a great commitment to community service. Please feel free to contact me for any further information. Thank you for your consideration.

Sincerely,



Ramon Rivera  
it.rivera@outlook.com  
(559) 260-0358



August 7, 2019

Chairman Pete Perez  
Planning Commissioners  
City of Reedley Planning Commission

Dear Mr. Perez and Commissioners,

I am writing this letter on behalf of Sudwinder Sidhu, owner of Circle K, Togo's, Tacqueria, and Tutti Frutti in Dinuba. Sudwinder Sidhu, his wife Kulwinder and their 3 children have created a business that has become a community gathering place. Go there any time of day and you will see businesspeople, families, church groups, and young people enjoying one of the delicious foods from his three different franchises. He has a nice area for people to eat inside and outside, which promotes a sense of community as people stay and visit, kind of like the old country store, but better. The store opens at 5 am and stays open until midnight for those late-night cravings and to truly be convenient to his customers.

Sidhu has been a great asset to Dinuba. He has served on the Dinuba Chamber of Commerce board for three years and been very involved and supportive of our community. He is a member of Kiwanis Bilingual Club and an active supporter of his children's school. He believes in giving back, so he donates to and sponsors community groups, churches, schools, sports, and events. He has hosted free community events, like "Trunk or Treat" at Halloween and a Toy Give-away at Christmas. He is always reaching out to see how he can help improve our community and strengthen business, through collaboration and strong, ethical business practices.

Mr. Sidhu has shared that he is applying for an ABC license for a market he is opening in Reedley. While his Dinuba business does sell alcoholic beverages, the atmosphere is family friendly, attractive, and inviting. He and his family strive to keep their customers happy, offering a clean, well maintained business and great customer service. Everyone knows Sidhu and thinks highly of him. He in turn knows his customers, calling them by name. Each person is a valued customer and friend. Mr. Sidhu has been a real asset to Dinuba and as I stated his business is a gathering place for all our community, because that is his focus, to create a place that is comfortable and safe for everyone. He was named Business of the Year for the 26<sup>th</sup> Assembly District by Assemblyman Devon Mathis and Dinuba's Small Business of the Year for his superb business practices, high ethical standards, generosity, and entrepreneurship.

I am pleased to be able to write this letter on behalf of Mr. Sidhu, or "Sidhu", as we know him. I encourage you to come visit his location in Dinuba, see for yourself, how "Sidhu" can bring a successful business to life in Reedley, that serves the community and strengthens the local economy.

Sincerely,

Sandy Sills, CEO



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing

ITEM NO: 10

DATE: October 22, 2019

TITLE: APPROVE AND AUTHORIZE THE CITY MANAGER TO EXECUTE ALL DOCUMENTS AND PLAN CHANGES NECESSARY FOR THE PROVISION OF DENTAL, MEDICAL & VISION COVERAGE FOR ELIGIBLE CITY EMPLOYEES, RETIREES, AND DEPENDENTS FOR THE 2020 CALENDAR YEAR

SUBMITTED: Paul A. Melikian, Assistant City Manager 

APPROVED: Nicole R. Zieba, City Manager 

### RECOMMENDATION

It is recommended that the City Council approve and authorize the City Manager to execute all documents necessary for the provision of dental, medical and vision coverage and supporting services for eligible City employees, retirees, and dependents for the 2020 calendar/plan year.

### EXECUTIVE SUMMARY

Over the last few months, the City's insurance broker, Horstmann Financial and Insurance Services (Horstmann), solicited bids from various health insurance providers, including the City's current provider, Blue Shield of California (Blue Shield). The City has been with Blue Shield for almost two years following a transition from Anthem Blue Cross in January 2018. After a full evaluation of renewal options available to the City, staff recommends that the City Council authorize the City Manager to execute documents to remain with Blue Shield for the 2020 plan year, as well as retain Kaiser Permanente (Kaiser) as a provider option for employees and eligible retirees/dependents who are currently covered by Kaiser. As part of the renewal, staff had to consider several options to contain costs due to 2020 renewal premiums from Blue Shield initially coming in 12.9% higher than 2019, which was well over the increase of 5.0% assumed in the FY 2019-20 Adopted Budget. As part of the negotiations with Blue Shield representatives, Horstmann and City staff were able to reduce the increase down to 7.0%, provided the following two options were implemented: 1) No new enrollments into Kaiser will be allowed for the 2020 plan year and 2) the City switched its vision benefit from the Vision Service Plan (current provider) to Blue Shield's own vision plan. Employees currently covered by Kaiser will be able to keep their plan or switch to Blue Shield.

Blue Shield Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) premiums will be increasing 7.0% next year. The renewal received from Kaiser will result in a 2.45% increase in premiums for their plan. Based on the City's current enrollment in the HMO, PPO and Kaiser plans and benefit formula of contributing 100% towards the average premium of the two lowest plans, retaining the current medical providers results in a net 3.51% increase, or \$68,347 next year, to City contributions for eligible employees and retirees. The FY 2019-20 Adopted Budget assumed a 5.0% increase to premiums, so this increase is within budgeted amounts. Staying with Blue Shield also mitigates impacts to employees, eligible retirees and their dependents of having to change insurance.

## **BACKGROUND**

Attached are side by side plan comparisons for current 2019 HMO, PPO, and Kaiser medical plans to 2020 plans. The first page of the attachment shows current 2019 plan year premiums, and City and employee contributions compared to the contributions for 2020. The primary change to coverages in the 2020 plan year is the family deductible for the PPO plan, from \$1,000 to \$1,500, and the co-insurance coverage for Durable Medical Supplies for the HMO plan, which is improved from 50% to 20% out of pocket. There are no benefit changes to the Kaiser plan.

The following discussion points summarize the changes to required employee contribution amounts, based on the City's current contribution formula of the average of the two lowest priced plans:

- The HMO plan remains about the same for Employee Only coverage at \$12.67 per month, the Employee +1 coverage will go to \$43.01 per month (up from \$25.06/month); and contributions will increase from \$110.73 per month to \$150.19 per month for the HMO family plan.
- The PPO plan for Employee Only and Employee +1 will remain \$0; however contributions for family coverage will increase from \$39.13 per month in 2019 to \$74.33 per month in 2020.
- Out of pocket contributions for the Kaiser plan are reduced because of the small increase to Kaiser premiums in 2020 of 2.45% compared to Blue Shield of 7.0%. The Kaiser family plan will again be \$0 out of pocket. The employee only coverage will be \$30.03 per month and Employee +1 will only be \$10.24 per month.

## **Vision Coverage**

The City's current vision benefit with the Vision Service Plan (VSP) is ending its rate lock period. The City was provided a competitive renewal essentially keeping rates unchanged for the next four years at \$32,381 annually, based on current enrollment. However, staff is recommending at this time that the vision benefit be moved to Blue Shield's comparable plan due to two primary factors, namely: 1) It is approximately \$4,244 less annually than the VSP plan and 2) changing the vision benefit to Blue Shield allows the City to receive a crossover discount on the medical plan premiums. The Blue Shield plan also has a few notable improvements, including no copays for an eye exam or glasses, up to the coverage maximums. In addition, the frame allowance is increased from \$130.00 to \$150.00

## **Dental Coverage**

The City has been self-insured/funded for dental coverage since 2013. At that time, the City elected to maintain the coverage structure as it was when paying premiums into a standard dental insurance plan. Year after year, this self-funded benefit has generated savings to the City with no impact to employee and dependent dental care. Six years in, City staff have evaluated the benefit structure to determine if any changes were necessary to coverage. An area of the benefit that has received the most attention is the coverage for major procedures (i.e. implant, crown, root canal, etc.) which is covered at 50%, while minor procedures (i.e. fillings, etc.) are covered at 80%.

After review and determination that the cost impact is negligible to the City, staff is proposing to improve coverage for major procedures to 80% to be consistent with coverage for minor procedures, while keeping in place the current \$1,000 per person annual coverage cap. In addition, staff are proposing to change the maximum age for eligible dependents to 26 to be consistent with the maximum eligibility ages for the medical and vision plans in 2020. The current maximum age for the dental benefit is 19, unless documentation is submitted proving the dependent is a full-time student up to the age of 24. The cost for this change is also negligible given the number of dependents in this age range.

## **Conclusion**

Overall, staff are pleased with the results of the medical plan renewal, especially in light of rampant cost escalation for medical benefits in general, and the ability of the City to maintain, and even improve upon, coverage areas to full-time employees, eligible retirees, and their families within budgeted amounts. This

is especially important to consider because of another area of employee benefits, namely pensions, are expected to drastically increase in cost to the City over the next six years. At this juncture, the lockout of new enrollments to Kaiser for the 2020 plan year will be reviewed on an annual basis as market conditions change. As previously stated, employees and eligible dependents who currently have Kaiser coverage will be able to keep their plans, or if they choose, move into a Blue Shield HMO or PPO plan during the Open Enrollment period.

### **PREVIOUS COUNCIL ACTIONS**

On October 8, 2019 the City Council authorized the City Manager to execute all documents necessary to renew the existing Medicare Supplement Plan and related administrative plan services, from Retiree First/United American, to eligible City of Reedley retirees and dependents, effective January 1, 2020.

### **FISCAL IMPACT**

The City's contribution to medical plan coverage for all eligible full-time employees, pre-65 retirees, and their dependents is estimated to be \$1,947,439 in 2019. (This amount does not include coverage for eligible retirees and their dependents in the City sponsored Medicare Supplement Plan.) Based on the City's current benefit formula of contributing 100% towards the average premium of the two lowest plans, and retaining the current medical providers, this amount will rise to \$2,015,786 in 2019. This results in a net 3.51% increase, or \$68,347, to City contributions based on current enrollment in the HMO, PPO and Kaiser Plans, and is within budgeted assumptions included in the FY 2019-20 Adopted Budget.

### **ATTACHMENTS**

Rate Comparison 2019 vs. 2020

Benefit Comparisons for HMO, PPO & Kaiser Plans

Vision Benefit Comparison

**CURRENT RATES**

CITY OF REEDLEY			
Blue Shield & KAISER DIRECT - MONTHLY RATES			
EMPLOYER MONTHLY CONTRIBUTIONS & EMPLOYEE MONTHLY PAYROLL DEDUCTIONS			
EFFECTIVE JANUARY 1, 2019			
Active Regular Full-Time Employees			
Total Monthly Cost	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$615.52	\$1,288.13	\$1,838.44
Blue Shield HMO	\$639.37	\$1,338.26	\$1,910.04
Kaiser	\$679.49	\$1,354.92	\$1,760.18
City's Monthly Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blended Blue Shield PPO & Blue Shield HMO	\$627.45	\$1,313.20	
Blended Blue Shield PPO & Kaiser HMO			\$1,799.31
Employee Monthly Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$0.00	\$0.00	\$39.13
Blue Shield HMO	\$11.92	\$25.06	\$110.73
Kaiser	\$52.04	\$41.72	\$0.00
Employee Annual Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$0.00	\$0.00	\$469.56
Blue Shield HMO	\$143.04	\$300.72	\$1,328.76
Kaiser	\$624.48	\$500.64	\$0.00

**RENEWAL RATES**

CITY OF REEDLEY			
Blue Shield & KAISER DIRECT - MONTHLY RATES			
EMPLOYER MONTHLY CONTRIBUTIONS & EMPLOYEE MONTHLY PAYROLL DEDUCTIONS			
EFFECTIVE JANUARY 1, 2020			
Active Regular Full-Time Employees			
Total Monthly Cost	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$653.32	\$1,367.52	\$1,951.86
Blue Shield HMO	\$678.67	\$1,420.77	\$2,027.72
Kaiser	\$696.03	\$1,388.00	\$1,803.19
City's Monthly Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blended Blue Shield PPO & Blue Shield HMO	\$666.00		
Blended Blue Shield PPO & Kaiser HMO		\$1,377.76	\$1,877.53
Employee Monthly Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$0.00	\$0.00	\$74.33
Blue Shield HMO	\$12.67	\$43.01	\$150.19
Kaiser	\$30.03	\$10.24	\$0.00
Employee Annual Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$0.00	\$0.00	\$891.96
Blue Shield HMO	\$152.04	\$516.12	\$1,802.28
Kaiser	\$360.36	\$122.88	\$0.00

**DIFFERENCE**

CITY OF REEDLEY			
Blue Shield & KAISER DIRECT - MONTHLY RATES			
EMPLOYER MONTHLY CONTRIBUTIONS & EMPLOYEE MONTHLY PAYROLL DEDUCTIONS			
EFFECTIVE JANUARY 1, 2020			
Active Regular Full-Time Employees			
Total Monthly Cost	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$37.80	\$79.39	\$113.42
Blue Shield HMO	\$39.30	\$82.51	\$117.68
Kaiser	\$16.54	\$33.08	\$43.01
City's Monthly Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blended Blue Shield PPO & Blue Shield HMO	\$38.55		
Blended Blue Shield PPO & Kaiser HMO		\$64.56	\$78.22
Employee Monthly Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$0.00	\$0.00	\$35.20
Blue Shield HMO	\$0.75	\$17.95	\$39.46
Kaiser	(\$22.01)	(\$31.48)	\$0.00
Employee Annual Contribution	Employee Only	Employee + 1	Employee + 2 or more
Blue Shield PPO	\$0.00	\$0.00	\$422.40
Blue Shield HMO	\$9.00	\$215.40	\$473.52
Kaiser	(\$264.12)	(\$377.76)	\$0.00

**City of Reedley  
Current and Renewal January 1, 2020**

	Current/ Renewal		Current		Renewal		Current/ Renewal
	Blue Shield HMO Blue Shield HMO 20 RX 10/25/40		Blue Shield PPO Blue Shield PPO Combined Ded 35-500 80/60		Blue Shield PPO Blue Shield PPO Combined Ded 35-500 80/60		Kaiser HMO Kaiser
	In Network Benefit Only		In Network	Out of Network	In Network	Out of Network	In Network Benefit Only
Deductible Individual/Family	None		\$500 person/ \$1,000 Family max		\$500 Person / <b>\$1,500</b> Family max.		None
Maximum Out of Pocket Individual	\$1,500		\$4,000	\$10,500	\$4,000	\$10,500	\$1,500
Maximum Out of Pocket Family	\$3,000		\$8,000	\$21,000	\$8,000	\$21,000	\$3,000
Physicians Services							
Primary Care Physician	\$20		\$35	40% after Ded	\$35	40% after Ded	\$15
Specialists	\$20		\$35	40% after Ded	\$35	40% after Ded	\$15
Telephonic or Virtual Visit	\$5		\$5	Not Covered	\$5	Not Covered	Included
Diagnostic Lab & X-Ray	No Charge					max	No Charge
CT or CAT, PET scan, & MRI	No Charge		\$35 free standing/ \$60 Hospital after ded	40% after Ded/ \$350 max	\$35 free standing/ \$60 Hospital after ded		No Charge
Radiological & Nuclear Imaging Services	No Charge		20%	40% after Ded/\$350 Max	20% at free Standing/ <b>30%</b> at Hospital both after Ded	40% after Ded/\$350 Max	
Durable Medical Supply	50%/20% (2020)		20% after Ded	40% after Ded	20% after Ded	40% after Ded	No Charge
Diabetic Supply	50%/20% (2020)		20% after Ded	40% after Ded	20% after Ded	40% after Ded	No Charge
Hospital Inpatient	No Charge		\$100 plus 20% after Ded	40% after Ded/ \$600 max	20% after Ded (\$100 copay from current plan removed)	40% after Ded/ \$600 max	No Charge
Outpatient Surgery							No Charge
Hospital	No Charge		25% after Ded	40% after Ded/ \$350 max	25% after Ded	max	\$15
Ambulatory Surgery Center	No Charge		10% after Ded	max	10% after Ded		N/A
ER Charge	\$100		\$150 plus 20% after Ded		\$150 plus 20% ( <b>Ded Waived</b> )		\$50
Ambulance	\$100		20% after Ded		20% after Ded		No Charge
Chiropractor/Acupuncturist	\$10 per Visit/ 30 Combined Visits/ Appliance \$50 max		\$25 per Visit/ 12 visits Chiro/20 visits Acupuncture after Ded	40% after Ded/same limits	\$25 per Visit / 20 visits Chiro/20 visits Acupuncture <b>No Ded</b>	40% after Ded/same limits	Chiro Not Covered
Generic	\$10		\$10	25% +\$10	\$10	25% +\$10	\$5
Formulary Drugs	\$25		\$25	25% + \$25	\$25	25% + \$25	\$20
Non Formulary Drugs	\$40		\$40	25%+ \$40	\$40	25%+ \$40	\$20
Specialty Drugs	20% up to \$200		30% up to \$200	25% + 30%	30% up to \$200	25% + 30%	20% up to \$200

The above benefit comparisons are provided as a courtesy of Horstmann Financial and Insurance Services and are for discussion purposes only. Please refer to the EOC provided by the carrier to verify benefits. Horstmann Financial and Insurance Services is clear of any liability for any errors that may occur in the transference of information.

# City of Reedley

## Vision Options

### BENEFIT COMPARISON

Effective January 1, 2020

Plan Name	Current/Renewal Vision Service Plan Signature Plan C In Network	Blue Shield Vision Option Blue Shield Option MES Network In Network
Eye Exam	12 months	12 months
Materials		
Retail Lenses	12 months	12 months
Frames	12 months	12 months
Eye Exam & Glass Copay	\$25	\$0/\$0
Frame Allowance	\$130 Retail	\$150 Retail
Contact Lens Allowance <i>contacts in lieu of frames &amp; lenses</i>	\$130	<b>\$120</b> In addition to frame allowance
<b>Progressive lenses</b>		
Standard Progressive Lenses	\$0	100% up to a maximum of \$140
Premium Progressive Lenses	\$80-90	100% up to a maximum of \$140
Custom Progressive Lenses	\$120-\$150	100% up to a maximum of \$140
<b>Photochromic lenses</b>		
Single	Covered 100%	100% up to a maximum of \$115
Bifocal	Covered 100%	100% up to a maximum of \$130
Trifocal	Covered 100%	100% up to a maximum of \$150
Progressive	Covered 100%	100% up to a maximum \$200
Contact Fitting	up to \$60	Covered 100%
<b>Out of Network - allowance</b>		
Exam	\$50	\$60 Ophthalmologic/\$50 Optometric
Lenses		
Single/Bifocal/Trifocal/Lenticular/Progressive	\$50/\$75/\$100/\$125/\$75	<del>\$43/\$60/\$75/\$120/\$75</del>
Frames	\$70	<del>\$40</del>
Contacts	\$105	\$120
<b>RATES:</b>		
<b>Enrollment</b>	Current/ Renewal	Blue Shield Option
Composite Rate	113 \$23.88	\$20.75
Monthly Premium	\$2,698.44	\$2,344.75
Annual Premium	\$32,381.28	\$28,137.00
<b>\$ Increase</b>		(\$4,244.28)
% Increase		-13.11%
Rate Guarantee	4 Years	3 Years

Vision composite rates include coverage for the employee and eligible dependents. Employer contribution is 100% of the premium cost. All eligible employees are required to participate.

**Horstmann Financial & Insurance Services**

License No. 0582941

9/29/2019



## REEDLEY CITY COUNCIL

- Consent
- Regular Item
- Workshop
- Closed Session
- Public Hearing
- Receive/Review

ITEM NO: 11

DATE: October 22, 2019

TITLE: RECEIVE, REVIEW, AND FILE THE QUARTERLY INVESTMENT REPORT FOR 1<sup>ST</sup> QUARTER ENDING SEPTEMBER 30, 2019 FOR FISCAL YEAR 2019-20

SUBMITTED: Paul A. Melikian, Assistant City Manager 

APPROVED: Nicole R. Zieba, City Manager 

### RECOMMENDATION

That the City Council receive, review, and file the Quarterly Investment Report for 1<sup>st</sup> Quarter Fiscal Year 2019-20, ending September 30, 2019, as required by the City's Investment Policy last adopted on March 12, 2019. No action is required other than to receive, review, and file the report.

### EXECUTIVE SUMMARY

Year to date net interest earnings (net of fees) as of 1<sup>st</sup> quarter 2019-20 total \$206,416 which is 67.8% of annual budgeted interest earnings of \$304,424 across all funds. The prior 1<sup>st</sup> quarter net interest earnings for the same 12 month period one year ago (1<sup>st</sup> quarter FY 2018-19) were \$113,931. The attached investment/pooled cash report shows additional detail for cash balances by City fund. The treasury pool for the City totals \$20,804,562 as of September 30, 2019, including \$2,506,508 in bond trustee funds, \$231,755 on deposit in the California Employers' Retiree Benefit Trust, \$6,592,876 in Groundwater Treatment funds, and \$4,291,396 of remaining 2011 RDA bond proceeds. The cash balances in the funds are at a point in time only, and do not reflect pending receivable or payable amounts. All financial investment instruments are constantly monitored and assessed for safety, liquidity and yield. The City's idle funds are currently in principal safe investments that protect its pooled cash, such as a money market account at Five-Star Bank, rolling Certificates of Deposit through Multi-Bank Securities in various FDIC insured accounts, and the Central San Joaquin Valley Risk Management Authority investment pool, managed by Chandler Asset Management.

All investments in the portfolio are in compliance with the City's current Investment Policy, and staff does not anticipate any issues with regard to the City's ability to meet expenditure requirements for the next six months. (Government Code section 53646)

### BACKGROUND

On March 12, 2019 the City Council approved the annual statement of investment policy. The policy includes a self-imposed, 'best practice' reporting requirement to implement a Government Finance Officers Association (GFOA) recommendation that an agency's investment policy explicitly require periodic reporting. The attached Pooled Cash Report for the end of 1<sup>st</sup> quarter fiscal year 2019-20 shows cash balances/market value and interest earnings for every cash account and investment vehicle as of September 30, 2019. It is important to note that the pooled cash report also includes restricted funds such as unused/'frozen' RDA bond proceeds, deposits in trust, bond reserves, funds held for groundwater treatment, and RDA Successor Agency funds. Full account statements for all accounts are on file with the Administrative Services Department and available for inspection at any time.

Cash balances are pooled for investment and banking purposes, as it is not practical to have separate investment accounts for each City fund. Interest earnings are apportioned to each City fund based upon the percentage that a particular fund balance makes up of the total. For instance, if the City's General Fund balance was 10% of the total cash balances of the City, it would be credited with 10% of the investment interest earnings for the period.

**ATTACHMENTS**

1<sup>st</sup> Quarter Fiscal Year 2019-20 Investment/Pooled Cash Report

**POOLED CASH REPORT**  
**September 2019**

	ACTUAL CASH BALANCE OR PORTFOLIO MARKET VALUE	2018-19 FYTD INTEREST EARNINGS
PETTY CASH / CASH REGISTERS	\$ 5,000.00	\$ -
LAIF - LOCAL AGENCY INVESTMENT FUND	\$ 1,334.98	\$ 8
BNY - REDEVELOPMENT AGENCY BONDS - TRUSTEE ACCOUNTS*	\$ 748,219.76	\$ -
US BANK - WATER & SEWR BOND TRUSTEE ACCOUNTS*	\$ 1,758,287.52	\$ -
MECHANICS BANK MONEY MARKET	\$ 639,380.64	\$ 652
MECHANICS BANK CHECKING ACCOUNTS (OPERATING & PAYROLL)	\$ 68,785.60	\$ -
CHANDLER ASSET MANAGEMENT PORTFOLIO	\$ 5,098,861.82	\$ 42,339
MULTI BANK SECURITIES PORTFOLIO	\$ 9,589,894.46	\$ 143,147
FIVE STAR BANK MONEY MARKET	\$ 2,662,882.64	\$ 19,626
FIVE STAR BANK PUBLIC DONATION CHECKING ACCOUNT	\$ 159.01	\$ -
CALPERS BENEFIT TRUST FUND	\$ 231,755.15	\$ 2,208
<b>ACTUAL FYTD TOTAL CASH ~ ALL FUNDS</b>	<b>\$ 20,804,561.58</b>	<b>\$ 207,981</b>

\* Funds required by bond agreements to be held in trust by fiscal agent may include a variety of different investment options including, but not limited to, CD's, Treasury Notes and Money Market Funds

2019-20 ALL FUNDS COMBINED ACTUAL FYTD INTEREST EARNINGS	\$ 207,981
2019-20 ALL FUNDS COMBINED ACTUAL FYTD BANK FEES	\$ (1,565)
2019-20 ALL FUNDS COMBINED NET ACTUAL BANK INTEREST	\$ 206,416
2019-20 ALL FUNDS COMBINED BUDGETED INTEREST EARNINGS	\$ 304,424
2019-20 PERCENTAGE OF ACTUAL NET YTD INTEREST EARNINGS TO BUDGET	67.806%

*Prior Fiscal Year Comparison - Same Period*

2018-19 ALL FUNDS COMBINED ACTUAL FYTD INTEREST EARNINGS	\$ 114,935
2018-19 ALL FUNDS COMBINED ACTUAL FYTD BANK FEES	\$ (1,004)
2018-19 ALL FUNDS COMBINED NET ACTUAL BANK INTEREST	\$ 113,931
2018-19 ALL FUNDS COMBINED BUDGETED INTEREST EARNINGS	\$ 146,900
2018-19 PERCENTAGE OF ACTUAL NET YTD INTEREST EARNINGS TO BUDGET	77.557%

# POOLED CASH REPORT

September 2019

FUND	FUND NAME	CASH BALANCE
001	General Fund	\$ (1,119,671)
002	General Fund Reserve Set Aside	\$ 1,878,926
003	Public Safety Sales Tax	\$ 630,713
004	Public Safety Sales Tax Police Capital Set Aside	\$ 14,146
005	Gas Tax	\$ (33,327)
007	Street Projects Federal and State Funding	\$ 30,845
010	LTF - Article 3 Sidewalks	\$ 55,862
011	LTF - Article 8 Streets	\$ 6,800
013	FCTA - New Technology Sustainable Aviation	\$ -
014	FCTA - Flexible Funding	\$ (322,658)
015	FCTA - Americans with Disabilities Act (ADA)	\$ (38,927)
016	FCTA - Street Maintenance	\$ 350,143
017	FCTA - Pedestrian and Trails	\$ 70,928
018	FCTA - Bike Facilities	\$ 54,876
023	Road Repair Accountability Act	\$ 85,232
024	Community Development Block Grant (CDBG)	\$ (59,679)
027	Senior Nutrition Federal Grant	\$ (1,072)
029	Public Education and Governmental Access (PEG)	\$ (10,572)
030	Landscape Lighting and Maintenance District	\$ 112,428
031	Sustainable Ag Land Conservation Program	\$ (10,068)
032	Community Facilities District	\$ (172,746)
034	Streetscape	\$ 56,613
041	Airport	\$ (30,664)
047	Groundwater Treatment	\$ 6,592,876
048	Water Rate Stabilization	\$ 157,585
049	Water Capital	\$ 93,858
050	Water	\$ 72,749
051	Sewer Capital	\$ 2,807,792
052	Sewer	\$ (252,409)
053	Solid Waste	\$ 224,815
054	Solid Waste Capital	\$ 297,215
055	Vehicle Impact Fee	\$ 392,511
060	Equipment Shop ISF	\$ 118,865
065	Dental Benefit ISF	\$ 65,154
073	Deposits in Trust	\$ 224,719
075	COPS Program	\$ 30,804
078	CASp Certification	\$ 16,038
080	City Bond Funds	\$ 1,238,410
083	Transitional Housing Grant	\$ 285,067
100	DIF - Transportation	\$ 316,201
102	DIF - Law	\$ (2,517)
103	DIF - Fire	\$ 223,599
104	DIF - Storm Drain	\$ 84,220
105	DIF - Wastewater Facilities	\$ 330,729
109	DIF - Parks & Recreation Facilities	\$ 39,042
110	DIF - General Government Facilities	\$ 112,905
111	DIF - Water Facilities	\$ 60,494
895	RDA Successor Bond Fund	\$ 3,052,986
896	RDA Successor Low and Moderate Income Housing	\$ -
897	RDA Successor Retirement	\$ (65,536)
	CERBT Trustee - Cash With Fiscal Agent	\$ 231,755
	US Bank Trustee - Cash With Fiscal Agent	\$ 1,758,288
	BNY Trustee - Cash With Fiscal Agent	\$ 748,220
<b>All Funds - Cash Total</b>		<b>\$ 20,804,562</b>

REEDLEY PLANNING COMMISSION REGULAR MEETING – September 5, 2019

The regular meeting of the Reedley Planning Commission was held Thursday, September 5, 2019, in the City of Reedley Council Chambers, 845 "G" Street, Reedley. Chair Perez called the meeting to order at 5:00 p.m.

Pledge of Allegiance - led by C. Conrad

ROLL CALL

Commissioners Present: William Conrad, Ron Hudson, Rosemary Luzania, Pete Perez

Commissioners Excused: Alberto Custodio

City Staff Present: Rob Terry, Community Development Director, Ellen Moore, Associate Planner

PUBLIC COMMENT

Chair Perez opened the public comment period and closed the public comment period at 5:02 p.m. after noting there was no public comment.

CONSENT AGENDA

3. Minutes of Regular Meeting, August 15, 2019 - *Recommend Commission Approve*

C. Conrad moved, C. Hudson seconded, to approve the minutes of Regular Meeting, August 15, 2019. Motion carried by the following vote:

AYES: Conrad, Hudson, Luzania, Perez.  
NOES: None.  
ABSTAIN: None.  
ABSENT: Custodio.

PUBLIC HEARING

2. Consideration of Environmental Assessment No. 2019-6 and Vesting Tentative Subdivision Map No. 6267 (Fino Estates), related to the Single Family and Multi Family Development Proposed Just South of East Locke Avenue and East of North Frankwood Avenue

*Through Resolution No. 2019-11, staff recommends that the Planning Commission take the following actions:*

- a) ADOPT Environmental Assessment No. 2019-6, the Addendum to the City of Reedley certified Program Environmental Impact Report, prepared for the Reedley General Plan Update 2030, dated August 2, 2019
- b) APPROVE Vesting Tentative Subdivision Map No. 6267 (Fino Estates) authorizing the subdivision of land pursuant to the Subdivision Map Act.

Associate Planner E. Moore presented the staff report to the Planning Commission. The Planning Commission asked questions of staff. Chair Perez opened the public comment period at 5:19 p.m. Lee Fino, a representative of the property owners of the project, spoke on behalf of the project. Aaron Oliver of Lane Engineers, Inc., spoke on behalf of the project. Christie Bartlett, resident of 1865 North Concord Avenue, spoke about the project. Jose Renteria, resident of 122 East Aspen Drive, spoke about the project. Christie Bartlett asked questions about the project. Edward Besoyan, resident of 1863 North East Avenue, spoke about the project and asked questions about the project. Chair Perez closed the public comment period at 5:47 p.m.

C. Custodio moved, C. Hudson seconded, whereas the Planning Commission, using their independent judgement, recommended to the City Council approval of Environmental Assessment No. 2019-11 and Change of Zone Application No. 2019-2, through Resolution No. 2019-8. Motion carried by the following vote:

REEDLEY PLANNING COMMISSION REGULAR MEETING – September 5, 2019

AYES: Hudson, Luzania, Conrad, Perez.  
NOES: None.  
ABSTAIN: None.  
ABSENT: Custodio.

DIRECTOR'S REPORT

Director R. Terry provided an update on community development activity.

FUTURE AGENDA ITEMS

- September 19, 2019 – None at this time
- October 3, 2019 – Conditional Use Permit
- October 17, 2019 – None at this time
- November 7, 2019 – Tentative Map Extension Request and Farmland Preservation Workshop
- November 21, 2019 – None at this time
- December 5, 2019 – None at this time
- December 19, 2019 – None at this time

ADJOURNMENT

Meeting adjourned at 6:03 p.m.

ATTEST:

  
Rob Terry, Secretary

  
Pete Perez, Chair  
Reedley Planning Commission