CITY OF HUGHSON
CITY COUNCIL MEETING
CITY HALL COUNCIL CHAMBERS
7018 Pine Street, Hughson, CA

AGENDA
MONDAY, OCTOBER 28, 2013 – 7:00 P.M.

CALL TO ORDER: Mayor Matt Beekman

ROLL CALL: Mayor Matt Beekman
Mayor Pro Tem Jeramy Young
Councilmember Jill Silva
Councilmember George Carr
Councilmember Harold Hill

FLAG SALUTE: Mayor Matt Beekman

INVOCATION:

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1. PUBLIC BUSINESS FROM THE FLOOR (No Action Can Be Taken):

Members of the audience may address the City Council on any item of interest to the public pertaining to the City and may step to the podium, state their name and city of residence for the record (requirement of name and city of residence is optional) and make their presentation. Please limit presentations to five minutes. Since the City Council cannot take action on matters not on the agenda, unless the action is authorized by Section 54954.2 of the Government Code, items of concern, which are not urgent in nature can be resolved more expeditiously by completing and submitting to the City Clerk a "Citizen Request Form" which may be obtained from the City Clerk.

2. PRESENTATIONS:

2.1: Conduct Interviews of Candidates for the Planning Commission.

a. Hold nominations and make an appointment.

b. Administer Oath of Office.

3. CONSENT CALENDAR:

All items listed on the Consent Calendar are to be acted upon by a single action of the City Council unless otherwise requested by an individual Councilmember for special consideration. Otherwise, the recommendation of staff will be accepted and acted upon by roll call vote.

3.1: Approve the October 14, 2013 Regular Meeting Minutes.

3.2: Approve the Warrants Register.

3.3: Approve a Renewed Lease Agreement between the City of Hughson and Tenant Stanislaus County for the Property Located at 2413 3rd Street in Hughson.

3.4: Authorize the Holiday Closure from December 24, 2013 to January 2, 2014.

3.5: Adopt Resolution No. 2013-33 Local Transportation Funds (LTF) Claim, authorizing the City Manager to execute and submit the City of Hughson Local Transportation Fund (LTF) Claim for Fiscal Year 2013/2014, for $114,216 to the Stanislaus Council of Governments (StanCOG) as attached on behalf of the City of Hughson.

4. UNFINISHED BUSINESS:

4.1: Accept the Progress Report on the City of Hughson Lighting and Landscaping Districts and Benefit Assessment Districts and Related Actions.

5. PUBLIC HEARING TO CONSIDER THE FOLLOWING: None.

6. NEW BUSINESS:

6.1: Consider the Adoption of Resolution No. 2013-31, an Agreement with Stanislaus County to Perform Law Enforcement Services for the City of Hughson and Related Actions.

6.2: Presentation of a Certificate of Recognition to Mike Harden for his service to City of Hughson.

ADJOURN TO BRIEF RECESS AND REFRESHMENTS

RECONVENE TO THE CITY COUNCIL MEETING

6.3: Consider the Adoption of Resolution No. 2013-32, Adopting an Urban Forest Plan and Resource Guide.

7. CORRESPONDENCE: None.

8. COMMENTS:

8.1: Staff Reports and Comments: (Information Only – No Action)

City Manager:

City Clerk:

Community Development Director: **Strong Towns Blog, "If we don't maintain, it will fall apart".**

Director of Finance:

Police Services:

City Attorney:

8.2: Council Comments: (Information Only – No Action)

8.3: Mayor's Comments: (Information Only – No Action)

9. CLOSED SESSION TO DISCUSS THE FOLLOWING: None.

10. REPORT FROM CLOSED SESSION: None.

ADJOURNMENT:

WAIVER WARNING

If you challenge a decision/direction of the City Council in court, you may be limited to raising only those issues you or someone else raised at a public hearing(s) described in this Agenda, or in written correspondence delivered to the City of Hughson at or prior to, the public hearing(s).

UPCOMING EVENTS:

October 31	▪ Trunk or Tent & Treat Event, LeBright Fields, 5:00 p.m.- 9:00 p.m.
November 5	▪ Election Day
November 11	▪ Veterans Day- Holiday- City Hall will be Closed.
November 12	▪ City Council Meeting, City Hall Chamber Room, 7:00p.m. (Tuesday)
November 14	▪ Congressman Jeff Denham's Mobile Office, City Hall, 11-12 p.m.
November 19	▪ Planning Commission Meeting, City Hall Chamber Room, 6:00p.m.
November 25	▪ City Council Meeting, City Hall Chamber Room, 7:00p.m.
November 23-24	▪ 20th Century Arts & Crafts Faire, Hughson High School, 9a.m.- 4p.m.

November 28-29	▪ Thanksgiving- Holiday- City Hall will be Closed.
November 30	▪ Downtown Christmas Festival

RULES FOR ADDRESSING CITY COUNCIL

Members of the audience who wish to address the City Council are requested to complete one of the forms located on the table at the entrance of the Council Chambers and submit it to the City Clerk. **Filling out the card is voluntary.**

AMERICANS WITH DISABILITIES ACT/CALIFORNIA BROWN ACT NOTIFICATION FOR THE CITY OF HUGHSON

This Agenda shall be made available upon request in alternative formats to persons with a disability; as required by the Americans with Disabilities Act of 1990 (42 U.S.C. Section 12132) and the Ralph M. Brown Act (California Government Code Section 54954.2).

Disabled or Special needs Accommodation: In compliance with the Americans with Disabilities Act, persons requesting a disability related modification or accommodation in order to participate in the meeting and/or if you need assistance to attend or participate in a City Council meeting, please contact the City Clerk's office at (209) 883-4054. Notification at least 48-hours prior to the meeting will assist the City Clerk in assuring that reasonable accommodations are made to provide accessibility to the meeting.

AFFIDAVIT OF POSTING

DATE: October 25, 2013 **TIME:** 5:00pm

NAME: Dominique Spinale **TITLE:** Deputy City Clerk

Notice Regarding Non-English Speakers:

Pursuant to California Constitution Article III, Section IV, establishing English as the official language for the State of California, and in accordance with California Code of Civil Procedures Section 185, which requires proceedings before any State Court to be in English, notice is hereby given that all proceedings before the City of Hughson City Council shall be in English and anyone wishing to address the Council is required to have a translator present who will take an oath to make an accurate translation from any language not English into the English language.

General Information: The Hughson City Council meets in the Council Chambers on the second and fourth Mondays of each month at 7:00 p.m., unless otherwise noticed.

Council Agendas: The City Council agenda is now available for public review at the City's website at www.hughson.org and City Clerk's Office, 7018 Pine Street, Hughson, California on the Friday, prior to the scheduled meeting. Copies and/or subscriptions can be purchased for a nominal fee through the City Clerk's Office.

Questions: Contact the City Clerk at (209) 883-4054.

CITY OF HUGHSON AGENDA ITEM NO. 3.1
SECTION 3: CONSENT CALENDAR

Meeting Date: October 28, 2013
Subject: Approval of the City Council Minutes
Presented By: Dominique Spinale, Deputy City Clerk

Approved By: _____

Staff Recommendation:

Approve the Regular Meeting Minutes of October 14, 2013 as presented.

Background and Overview:

The Draft Minutes of the October 14, 2013 meetings are prepared for the City Council's review.

CITY OF HUGHSON
CITY COUNCIL MEETING
CITY HALL COUNCIL CHAMBERS
7018 Pine Street, Hughson, CA

MINUTES
MONDAY, OCTOBER 14, 2013 – 7:00 P.M.

CALL TO ORDER: Mayor Matt Beekman

ROLL CALL:

Present: Mayor Matt Beekman
Councilmember Jill Silva
Councilmember George Carr
Councilmember Harold Hill

Absent: Mayor Pro Tem Jeramy Young

Staff Present: Raul Mendez, City Manager
Daniel J. Schroeder, City Attorney
Darin Gharat, Chief of Police Services
Dominique Spinale, Management Analyst/Deputy City Clerk
Lisa Whiteside, Finance Manager

INVOCATION: Pastor Ken Sartain

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1. PUBLIC BUSINESS FROM THE FLOOR (No Action Can Be Taken):

No Public Comments.

2. PRESENTATIONS: **None.**

3. CONSENT CALENDAR:

All items listed on the Consent Calendar are to be acted upon by a single action of the City Council unless otherwise requested by an individual Councilmember for special consideration. Otherwise, the recommendation of staff will be accepted and acted upon by roll call vote.

3.1: Approve the September 23, 2013 Regular Meeting Minutes.

3.2: Approve the Warrants Register.

3.3: Appoint Miguel Oseguera to the Hughson Planning Commission.

Mayor Beekman pulled item 3.3 at the request of Staff, as the City received a second application for the vacant Planning Commission seat. Staff will bring this item back to Council on October 28, where Council may interview the applicants and make an appointment to the Planning Commission.

Mayor Beekman pulled item 3.2 for discussion.

Beekman/Silva 4-0 (Young –Absent) motion passes to approve item 3.1 of the Consent Calendar.

Mayor Beekman asked staff some questions on the Warrants.

Beekman/Silva 4-0 (Young-Absent) motion passes to approve item 3.2 of the Consent Calendar.

4. UNFINISHED BUSINESS:

4.1: Progress Report on the City of Hughson Lighting and Landscaping Districts and Benefit Assessment Districts.

City Manager Mendez presented this item to Council. The City Council directed the City Manager to include action ending the relationship with NBS Local Government Solutions in the next progress report. No additional action was taken by the Council on this item.

4.2: Progress Report on the 2013 League of California Cities Annual Conference and Exposition.

City Manager Mendez presented this item to Council. No action was taken by the Council on this item. It was reported that the 2014 League of California Cities Annual Conference and Exposition would be held in Los Angeles September 3-5.

5. PUBLIC HEARING TO CONSIDER THE FOLLOWING: None.

6. NEW BUSINESS:

6.1: Review the Revised Electronic Communications, Devices, and Internet Access Policy and Approve the Policy by Adopting Resolution No. 2013-30.

Management Analyst Spinale presented this item to the Council and answered various questions pertaining to the policy and its language.

Hill/Carr 4-0 (Young-Absent) motion passes to adopt Resolution No. 2013-30, the revised Electronic Communications, Devices, and Internet Access Policy.

7. CORRESPONDENCE: None.

8. COMMENTS:

8.1: Staff Reports and Comments: (Information Only – No Action)

City Manager: **City Manager Mendez discussed the Fire 2+2 meeting and the Trunk or Tent and Treat event scheduled for October 31.**

City Clerk: **City Clerk Spinale updated the Council on the new audio system in the City Chamber.**

Community Development Director: **Director Clark provided an update on the PG&E Pipeline Project.**

Director of Finance:

Police Services: **3rd Quarter Police Services Report.**

City Attorney: **Attorney Schroeder reminded the Council that the City issued IPADs are for City use only.**

8.2: Council Comments: (Information Only – No Action)

Councilmember Carr updated the Council on his attendance at the Mosquito Abatement District and Fire 2+2 meetings.

Councilmember Hill updated the Council on his attendance at the Fire 2+2 meeting and the Juvenile Hall Open House in Modesto.

8.3: Mayor's Comments: (Information Only – No Action)

Mayor Beekman asked staff for an update on grants and advised that the City should have a booth at the Hughson Harvest Festival.

9. CLOSED SESSION TO DISCUSS THE FOLLOWING: 7:57 P.M.

9.1: CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
Initiation of litigation pursuant to subdivision (c) of Section 54956.9**:**

One (1) potential case

10. REPORT FROM CLOSED SESSION: 8:21 P.M.

No reportable action was taken.

ADJOURNMENT:

Councilmember Carr motioned for adjournment, followed by Mayor Beekman. The meeting adjourned at 8:21 P.M.

_____
MATT BEEKMAN, Mayor

_____
DOMINIQUE SPINALE, Deputy City Clerk

CITY OF HUGHSON AGENDA ITEM NO. 3.2
SECTION 3: CONSENT CALENDAR

Meeting Date: October 28, 2013
Subject: Approval of Warrants Register
Enclosures: Warrant Register
Presented By: Lisa Whiteside, Finance Manager

Approved By: _____

Staff Recommendation:

Approve the Warrants Register as presented.

Background and Overview:

The warrant register presented to the City Council is a listing of all expenditures paid from October 21, 2013 through October 23, 2013.

Fiscal Impact:

There are reductions in various funds for payment of expenses.

REPORT.: Oct 23 13 Wednesday | City of Hughson | ID #: PY-DP
RUN....: Oct 23 13 Time: 15:21 | Cash Disbursement Detail Report | CTL.: HUG
Run By.: MARTHA SERRATO | Check Listing for 10-13 Bank Account.: 0100

Check Number	Check Date	Name	Gross Amount	Description
44418	10/21/2013	STATE OF CALIFORNIA	1211.89	PAYROLL TAXES
44419	10/21/2013	THE HARTFORD	579.66	DEFERRED COMPENSATION
44420	10/21/2013	CalPERS SUPPLEMENTAL INCO	20.00	DEFERRED COMPENSATION
44421	10/21/2013	UNITED WAY OF STANISLAUS	2.00	UNITED WAY
44422	10/23/2013	ABS PRESORT	866.18	PRINTING OF UTILITY BILLING
44423	10/23/2013	AFLAC	747.38	AFLAC
44424	10/23/2013	ANDREWS ELECTRIC	622.62	MOTOR REPAIR PARTS TULLY RD WATER LIFT STATION
44425	10/23/2013	AT&T	1827.48	PHONE
44426	10/23/2013	AVILA, MONICA	210.00	SR CENTER DEPOSIT REFUND
44427	10/23/2013	BARTLE WELLS ASSOCIATES,I	3816.00	PROFESSIONAL SERVICES 9/1
44428	10/23/2013	BLUE SHIELD	11728.00	HEALTH PREMIUMS NOV 2013
44429	10/23/2013	BORGES & MAHONEY CO.	1053.00	REBUILD CHLORINE RESIDUAL AT 3 WELL SITES
44430	10/23/2013	W.H. BRESHEARS	173.88	DIESEL FUEL 10/8/13
44431	10/23/2013	CENTRAL VALLEY ELECTRONIC	1903.98	REPAIRS FIX AUDIO SYST. IN C.C.
44432	10/23/2013	CLARK'S PEST CONTROL	102.00	PEST CONTROL
			57.00	PEST CONTROL
		Check Total:	159.00	
44433	10/23/2013	CLUTCH & TRANSMISSION TEC	2458.44	OVERHAUL TRANSMISSION L & P
44434	10/23/2013	ENVIRONMENTAL SYSTEMS	1788.93	OCTOBER STREET SWEEPING
44435	10/23/2013	FARMERS BROTHERS COFFEE	101.14	COFFEE
44436	10/23/2013	G3 ENGINEERING, INC	7356.80	METERING PUMPS FOR WELL 8
44437	10/23/2013	GEOANALYTICAL LAB.	440.78	LAB TESTING
			30.00	LAB TESTING FOR WATER TEST.
			30.00	ARSENIC LAB TESTING
			440.78	LAB TESTING FOR WATER TEST.
44437	10/23/2013	GEOANALYTICAL LAB.	30.00	LAB TESTING FOR WATER TEST.
		Check Total:	971.56	

Check Number	Check Date	Name	Gross Amount	Description
44438	10/23/2013	HUGHSON CHRONICLE	278.60	ARSENIC NOT. WEEK OF 10/8/13
44439	10/23/2013	CITY OF HUGHSON	1337.79	LEBRIGHT FIELD LLD WATER
			846.67	FONTANA RANCH PARK
			41.95	LLD WALNUT HAVEN III
			147.72	BRITTANY WOODS
			408.77	SANTA FE LLD
			27.88	STARN PARK LLD
			40.84	RHAPSODY LLD
			25.00	RHAPSODY
			190.92	STERLING GLENN II
			189.48	STERLING GLENN III
			58.12	LLD FEATHERS GLEN
			62.44	FONTANA RANCH SOUTH
			223.15	STARN PARK LLD WATER SERV
		Check Total:	3600.73	
44440	10/23/2013	HUGHSON FARM SUPPLY	5.30	SUPPLIES FOR WATER SYSTEM
			1.77	SUPPLIES FOR WATER SYSTEM
			4.28	SUPPLIES FOR WATER SYSTEM
		Check Total:	11.35	
44441	10/23/2013	HUGHSON TIRE	15.00	TIRE REPAIR ON CODE ENFOR CE. FORD EXPEDITION
44442	10/23/2013	VALLEY PARTS WAREHOUSE, I	29.04	COUPLER/ADAPTER & BLOW GUN
			3.48	BUSHING
			85.15	SEAL
			47.02	HI POWER V-BELT
			8.95	HEAT SHRINK TUBING
			11.17	CONNECTOR
			1.69	HEAT SHRINK TUBING
			8.59	NAPA 10W40
		Check Total:	195.09	
44443	10/23/2013	INDUSTRIAL ELECTRICAL CO	360.00	SERVICE CALL FOR TULLY RD LIFT STATION
44444	10/23/2013	INLAND POTABLE SERVICES,	3105.00	WATER TANK INSPECTION
44445	10/23/2013	KEY SEAL PRODUCTS, INC	250.77	ASPHALT SEAL AT WELL # 8
44446	10/23/2013	MCR ENGINEERING, INC	21081.60	TULLY & SANTA FE, NON POT ABLE WATER, 4TH, PG&E
44447	10/23/2013	NEUMILLER & BEARDSLEE	1200.00	LEGAL SERVICES SEPT 2013
			9330.44	LEGAL SERVICES SEPT 2013
			140.00	LEGAL SERVICES
			20.00	LEGAL SERVICES SEPT 2013

Check Number	Check Date	Name	Gross Amount	Description
		Check Total:	10690.44	
44448	10/23/2013	PACIFIC PLAN REVIEW	4802.50	CONTRACT SRVCS PLANNING/B
			325.00	CONTRACT SRVCS PLANNING/B
			97.50	CONTRACT SRVCS PLANNING/B
			130.00	CONTRACT SRVCS PLANNING/B
			130.00	CONTRACT SRVCS PLANNING/B
			170.00	CONTRACT SRVCS PLANNING/B
			212.50	CONTRACT SRVCS PLANNING/B
			212.50	CONTRACT SRVCS PLANNING/B
			340.00	CONTRACT SRVCS PLANNING/B
			130.00	CONTRACT SRVCS PLANNING/B
		Check Total:	6550.00	
44449	10/23/2013	P.E.R.S.	8097.33	RETIREMENT
44450	10/23/2013	PURCHASE POWER	349.58	POSTAGE
44451	10/23/2013	RAMIREZ, JUAN JOSE	180.00	SR CENTER RENTAL DEP. REF.
44452	10/23/2013	RICOH USA, INC	2583.83	POSTAGE MACHINE RENTAL
44453	10/23/2013	SAFETLITE	480.41	REPLACEMENT SIGN
44454	10/23/2013	SHORE CHEMICAL COMPANY	576.01	CHLORINE FOR WATER DISTRIB.
44455	10/23/2013	SHRED-IT CENTRAL CA	123.18	SHREDDING
44456	10/23/2013	STANISLAUS COUNTY SHERIFF	16326.96	SLESF LAW ENFORCEMENT JULY-AUG 2013
			19872.56	SLESF LAW ENFORCEMENT
			67315.26	LAW ENFORCEMENT SERVICES Sep-13
		Check Total:	103514.78	
44457	10/23/2013	STEPP MANUFACTURING CO.,	614.43	HEATING ELEMENT
44458	10/23/2013	TURLOCK IRRIGATION DIST.	40045.74	ELECTRIC
44459	10/23/2013	TURLOCK, CITY OF	176.40	CNG FUEL
44460	10/23/2013	UNIVAR USA, INC	538.74	SODIUM HYPOCHLORITE
			505.63	SODIUM HYPOCHLORITE
			455.99	SODIUM HYPOCLORITE
		Check Total:	1500.36	
44461	10/23/2013	VASQUEZ, MARIA	210.00	SR CENTER RENTAL DEPOSIT REFUND

REPORT.: Oct 23 13 Wednesday | City of Hughson
RUN....: Oct 23 13 Time: 15:21 | Cash Disbursement Detail Report | ID #: PY-DP
Run By.: MARTHA SERRATO | Check Listing for 10-13 Bank Account.: 0100 | CTL.: HUG

Check Number	Check Date	Name	Gross Amount	Description
44462	10/23/2013	CORBIN WILLITS SYSTEM	571.40	ENHANCEMENT & SERVICE FEE
		Cash Account Total:	242759.97	
		Total Disbursements:	242759.97	

City of Hughson
Cash Disbursement Detail Report
Check Listing for 10-13 Bank Account.: 0100

Check Number	Check Date	Vendor Number	Name	Gross Amount	Discount Amount	Net Amount	Payment Information: Invoice #	Payment Information: Description
044463	10/25/13	ARR00	ARROWHEAD MOUNTAIN SPRING	15.41	.00	15.41	025664277	BOTTLED WATER
044464	10/25/13	BAY02	BAY ALARM CO	463.87	.00	463.87	B31025	ALARM MONITORING
044465	10/25/13	GCS01	GC SERVICES	1150.00	.00	1150.00	B31025	WIRELESS SERVICE
044466	10/25/13	GEO01	GEOANALYTICAL LABORATORIE	55.00	.00	55.00	Z310307	MONITORING OF WASTEWATER PERMIT FOR WWTP
				150.00	.00	150.00	Z311007	MONITORING OF WASTEWATER PERMIT FOR WWTP
				55.00	.00	55.00	Z311703	MONITORING OF WASTEWATER PERMIT FOR WWTP
				55.00	.00	55.00	Z312406	MONITORING OF WASTEWATER PERMIT FOR WWTP
				410.00	.00	410.00	Z312407	MONITORING OF WASTE WATER PERMIT FOR WWTP
			Check Total.....:	725.00	.00	725.00		
044467	10/25/13	GRA03	W.W. GRAINGER, INC.	67.51	.00	67.51	262461412	LOCK OUT HASP
044468	10/25/13	GRO01	FERGUSON ENTERISES, INC 1	102.44	.00	102.44	0936771	WATER SERVICE LINE REPAIR ON WHITMORE
044469	10/25/13	SYN02	SYNAGRO WEST, LLC	3786.59	.00	3786.59	30-102280	SLUDGE REMOVAL
044470	10/25/13	USA01	USA BLUE BOOK	25.55	.00	25.55	158097	PUMP PARTS FOR CHLORINE P ULSE PUMP AT WELL #8
044471	10/25/13	USA03	USA WASTE OF CALIFORNIA,	102539.21	.00	102539.21	B31025	GARBAGE FEE LESS FRANCHIS E JULY/AUG/SEPT 2013
044472	10/25/13	VSP01	VISION SERVICE PLAN	423.06	.00	423.06	B31025	MEDICAL INSURANCE WITHHEL
			Cash Account Total.....:	109298.64	.00	109298.64		
			Total Disbursements.....:	109298.64	.00	109298.64		

CITY OF HUGHSON AGENDA ITEM NO. 3.3
SECTION 3: CONSENT CALENDAR

Meeting Date: October 28, 2013
Subject: Consideration of a Renewed Lease Agreement with Tenant Stanislaus County for Property Located at 2413 3rd Street in Hughson - APN 018-042-025
Presented By: Thom Clark, Community Development Director

Approved By: _____

Staff Recommendation:

Authorize the Mayor to sign the lease agreement and its associated documents with tenant Stanislaus County for property located at 2413 3rd Street in Hughson.

Background and Overview:

The City of Hughson signed a Development Agreement with the United Samaritan Foundation (USF) dated February 13, 1998 and recorded with Stanislaus County Recorder's Office as Document #98-032011-00 relating to the development, maintenance, and oversight of the buildings and grounds on Third Street between Elm Street and the alley to the north.

The City of Hughson Acting on behalf of USF, leases out portions of the buildings to various tenants, pursuant to the Development Agreement. Stanislaus County is a tenant and leases space at 2413 3rd Street for various social service programs including Temporary Assistance for Needy Families (TANF), Medi-Cal, and Food Stamp Programs.

The current lease agreement with Stanislaus County has expired and the parties wish to renew the lease, under the same basic terms and conditions of the last lease agreement signed in July of 2008. The monthly rent will stay the same at $1.00 per square foot. Commercial lease rates declined in some years since 2008 but are holding steady now.

Legal:

The City Attorney, as well as County Counsel, has approved the lease agreement as to form.

Fiscal Impact:

The monthly lease rate for this building is $1,036.00.

Stanislaus County
Striving to be the Best

GENERAL SERVICES AGENCY

Keith D. Boggs
Assistant Executive Officer
GSA Director/Purchasing Agent

1010 10th Street, Suite 5400, Modesto, CA 95354

Phone: (209) 525-6319
Fax: (209) 525-7787

October 15, 2013

CITY OF HUGHSON
OCT 17 2013
RECEIVED

Thom Clark, Director of Planning & Building
City of Hughson
PO Box 9, 7018 Pine Street
Hughson, CA 95326

RE: Lease of property at 2413 3rd Street from City of Hughson acting on behalf Of United Samaritans Foundation

Dear Thom:

Per our recent conversations, enclosed are duplicate originals of the renewal lease for the above-referenced property, each of which has been approved as to form by our County Counsel. We have made the requested changes to correct inconsistencies in the document as discussed with Raul. We have also revised the term commencement date to November 1, 2013 as it is my understanding you will be presenting this to your Board toward the end of this month.

Once approved, please have both signed and returned to me for further processing. Please also be sure to have Sections 12 and 23 properly initialed (on pages 5 and 6, respectively). With regard to the "Supplemental Lease Documents," there is only one document that needs to be signed at this time, which is the Notice of Lease which I have flagged for you. Please be sure to remember that the signature must be notarized. You may then return all of the documents to me for further processing. Once I have obtained all signatures I will return a fully executed copy to you for your records.

Should you have any questions please feel free to contact me. Thank you for your assistance.

Sincerely,

Melinda

Melinda Pallotta, C.P.P.O.
Contract Administrator/Purchasing Supervisor

Enclosures

LEASE AGREEMENT

LEASE SUMMARY:

Lease date: November 1, 2013

Landlord: City of Hughson, acting on behalf of United Samaritans Foundation pursuant to the Development Agreement dated February 13, 1998 and recorded with Stanislaus County Recorder's Office as Document #98-0032011-00

Tenant: Stanislaus County

Address of Landlord:
City of Hughson
7018 Pine Street, PO Box 9
Hughson, CA 95326

Address of Tenant:
Attn: Stanislaus County Purchasing Agent
1010 Tenth Street, Suite 5400
Modesto, CA 95353

Premises Address: 2413 3rd Street, Hughson, CA

APN: 018-042-025

Premises Square Footage: 1,036 (approximately)
Term: Three (3) years commencing at 12:01 a.m. on 11/1/2013 to 11:59 p.m. on 10/31/2016
Monthly Basic Rent: $1,036.00 ($1.00 per sq. ft.)
Termination date: October 31, 2016
Permitted Use: StanWorks programs including but not limited to TANF, Medi-Cal and Food Stamp Programs

AGREEMENT:

This Lease Agreement (the "Lease Agreement") is entered into in the City of Modesto, State of California, on November 1, 2013 between the **COUNTY OF STANISLAUS**, a political subdivision of the State of California, ("Tenant"), and **City of Hughson acting on behalf of United Samaritans Foundation pursuant to the Development Agreement dated February 13, 1998 and recorded with the Stanislaus County Recorder's Office as Document #98-0032011-00** ("Landlord"), in consideration of the premises, and the agreements, terms and conditions set forth, below.

1. Premises: Landlord leases to Tenant, and Tenant hires from Landlord, those certain premises in the County of Stanislaus, more particularly described as a portion of 2413 3rd Street, Hughson, California 95326 ("Premises").

2. Payment: Tenant agrees to pay to Landlord for the Premises above-described, during the term designated below, $1,036.00 (1,036 sq ft @ $1.00/sq. ft.) month for rent payable on the first day of the month following the month for which the obligation accrues.

3. Term: The term of this Lease Agreement shall be for a period of three (3) years beginning at 12:01 A.M. on November 1, 2013 and terminating at 11:59 P.M. on October 31, 2016.

4. Option to Renew: Tenant has the option to renew this Lease Agreement for two (2) one-year renewal periods on the same terms. Tenant shall exercise these options in writing at least one (1) month prior to the termination of the existing lease period. Renewal rental rates will be at the monthly basic rate.

5. Utilities:

5.1 Landlord shall pay for the furnishing of all water, garbage, electric and gas which may be used in or upon the premises during the term of this Lease or any extension or holdover period.

5.2 Tenant shall pay for the furnishing of telephone service which may be used in or upon the Premises during the term of this Lease Agreement, or any extension or holdover period, provided that Tenant has contracted directly with the utility companies.

6. Use of the Premises: Tenant may use the Premises for the purpose of StanWorks programs including but not limited to TANF, Medi-Cal and Food Stamp Programs. Tenant shall not use or permit the Premises to be used for any other purpose or purposes without first obtaining the written consent of Landlord, which consent shall not be withheld unreasonably.

7. Maintenance:

7.1. Landlord Representations: Landlord represents to Tenant that (i) the Premises, the Building and all Common Areas (including electrical, heating, ventilating and air conditioning ("HVAC"), mechanical, plumbing, gas and fire/life safety systems in the Building and similar building service systems) comply with all current laws, codes, and ordinances, including the Americans With Disabilities Act; and are in reasonable good working order and condition; (ii) the Building and Premises comply with all covenants, conditions, restrictions and underwriter's requirements; and (iii) the Premises, Building and Common Areas are free of the presence of any Hazardous Materials (as hereinafter defined) and (iv) Landlord has not received any notice from any governmental agency that the Building or the Premises are in violation of any law or regulation. Landlord represents, based upon a professional inspection of the Premises and the Building and the Asbestos Report that the Premises and the Building contain no asbestos containing materials (other than as may be reflected in the Asbestos Report). Landlord shall, prior to Tenant's occupancy, abate, at Landlord's sole cost and expense, all asbestos containing materials to the extent required by law and provide Tenant with an updated report from a licensed California Asbestos contractor to that effect.

7.2. Landlord Obligations: Landlord shall, at Landlord's own expense, keep and maintain in good repair and working order and promptly make repairs to and perform maintenance upon and replace as needed: (1) the structural elements of the Building, including without limitation, all permanent exterior and interior walls, floors and ceilings, roof, concealed plumbing, stairways, concealed electrical systems and telephone intrabuilding network cable and pest control service; (2) mechanical (including HVAC), electrical, plumbing and fire/life safety systems serving the Building; (3) the Common Areas; (4) exterior windows of the Building; and (5) elevators serving the Building. Landlord, at its sole cost and expense, shall also perform all maintenance and repairs to the Premises, and shall keep the Premises in good condition and repair, reasonable wear and tear excepted. Landlord's repair obligations include, without limitation, repairs to: (1) the floor covering (if such floor covering is carpeting it shall be replaced as needed but not less often than after five (5) years of use); (2) interior partitions; (3) doors; (4) the interior side of demising walls (which shall be repainted as needed but not less often than every five (5) years and (5) signage.

7.2.1 Landlord to provide HVAC: Landlord shall supply cooling, ventilating and heating with capacity to produce the following results effective during Normal

Working Hours established by the Lease Agreement and within tolerances normal in comparable office buildings; maintenance of inside space conditions of not greater than 78 degrees Fahrenheit when the outside air temperature is not more than 93 degrees Fahrenheit dry bulb and 70 degrees Fahrenheit wet bulb, and not less than 70 degrees Fahrenheit when the outside air temperature is not lower than 42 degrees Fahrenheit dry bulb. Interior space is designated at a rate of one zone for approximately each 1,000 square feet and one diffuser for each 200 square feet of usable square footage within the Premises. If energy requirements prohibit Landlord from complying with these requirements, Tenant shall not unreasonably withhold its consent to temporary waivers or modifications.

7.2.2. Excluding normal wear and tear, and, excluding heating and cooling equipment, Tenant shall, at Tenant's sole expense, be responsible for the cost of repairing any area damaged by Tenant or Tenant's agents, employees, invitees and visitors and the repair of low voltage electronic, phone and data cabling and related equipment that is installed by or for the exclusive benefit of Tenant. All repairs and replacements shall: (a) be made and performed by contractors or mechanics approved by Tenant, which consent shall not be unreasonably withheld or delayed, (b) be at least equal in quality, value and utility to the original work or installation, (c) be in accordance with all laws.

7.3. Entry: Tenant shall permit Landlord, or an authorized agent of landlord, free access to the Premises at all reasonable times for the purpose of inspection or for making necessary improvements or repairs.

7.4. Tenant's Right to Repair: If Tenant provides written notice (or oral notice in the event of an emergency such as damage or destruction to or of any portion of the Building structure and/or the Building systems and/or anything that could cause material disruption to Tenant's business) to Landlord of an event or circumstance which requires the action of Landlord with respect to repair and/or maintenance, and Landlord fails to provide such action within a reasonable period of time, given the circumstances, after the giving of such notice, but in any event not later than five (5) days after the giving of such notice, then Tenant, at its sole option, may either proceed to take the required action (provided, however, that no such notice shall be required in the event of an emergency which threatens life or where there is imminent danger to property or a possibility that a failure to take immediate action could cause a material disruption in Tenant's normal and customary business activities) or may surrender the Premises and shall not be liable for any further lease payments under this Lease Agreement. Tenant shall have access to the Building to the extent necessary to perform the work contemplated by this provision. If such action was required under the terms of this Lease Agreement to have been taken by Landlord and was not taken by Landlord within such period (unless such notice was not required as provided above), and Tenant took such required action, then Tenant shall be entitled to prompt reimbursement by Landlord of Tenant's reasonable costs and expenses in having taken such action. If not reimbursed by Landlord within ten (10) days, Tenant shall be entitled to deduct from Basic Rent payable by Tenant under this Lease Agreement the amount set forth in its invoice for such work.

8. Asbestos Notification: In September, 1989, the Governor of California signed AB-1564, an Asbestos Notification law, codified in Section 25915 et seq. of the Health and Safety Code. Health and Safety Code Section 25915(a) states.

Notwithstanding any other provisions of the law, the owner of any building constructed prior to 1979, who knows that the building contains asbestos-containing construction materials, shall provide notice to all employees of that owner working within the building.

Should the Landlord know of any asbestos-containing material, Landlord will notify Tenant within ten (10) days.

If Tenant suspects or has reason to believe that the Premises contains asbestos-containing material, Landlord shall within ten (10) days of Tenant's request supply Tenant with an Asbestos Survey Report done by a qualified hazardous material specialist. If Landlord fails to have requested testing done, Tenant shall have the required testing done and all related cost shall be deducted from the lease payment. If test is positive and abatement is necessary, Landlord shall provide the Tenant an Asbestos Abatement Plan within thirty (30) days.

9. Building Ventilation: Premises shall comply with Title 8, Section 5142, California Code of Regulations, "Mechanically Driven Heating, Ventilating and Air Conditioning (HVAC) Systems" to provide minimum building ventilation. Provided, however, that Landlord may terminate this Lease Agreement should it decide that repair expenses, do not merit the continuance of this Lease Agreement. Tenant shall be given notice by Landlord of said decision and notice shall provide Tenant adequate time to make other arrangements.

10. CAL/OSHA Inspections: If the Premises is cited by CAL/OSHA, Landlord shall be required to abate said citations. Provided, however, that Landlord may terminate this Lease Agreement should it decide that abatement cost, do not merit the continuance of this Lease Agreement. Tenant shall be given notice by Landlord of said decision and notice shall provide Tenant adequate time to make other arrangements.

11. CASP Inspection: Pursuant to California Civil Code §1938, Landlord certifies that the Premises has undergone inspection by a Certified Access Specialist (CASp), and, that the property has been determined to meet all applicable construction-related accessibility standards pursuant to California Civil Code section 55.53. A true and correct copy of the CASp report has been provided to the Tenant.

12. Confidentiality of Protected Health Information: ___X___ **CHECK IF APPLICABLE**
For purposes of this section this Agreement, "protected health information" or "PHI" shall have the meaning defined by the Standards for Privacy of Individually Identifiable Health Information, 45 C.F.R. Part 160 and Subparts A and E of Part 164 (the "Privacy Standards") as promulgated by the Department of Health and Human Services ("HHS") pursuant to the Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), any applicable amendments pursuant to the Health Information Technology for Economic and Clinical Health (HITECH) Act, (Pub. L No. 111-5), and California law. Tenant agrees to reasonably safeguard PHI from any intentional or unintentional disclosure in violation of the Privacy Standards by implementing appropriate administrative, technical, and physical safeguards to protect the privacy of PHI. Tenant further agrees to implement appropriate administrative, technical and physical safeguards to limit incidental disclosures of PHI, including disclosures to Landlord, its contractors, subcontractors and agents.

The parties agree that neither the Landlord, its contractors, subcontractors or agents shall need access to, nor shall they use or disclose, any PHI of Tenant. In the event, however, PHI is disclosed by Tenant or its agents to Landlord, its contractors, subcontractors or agents, regardless as to whether the disclosure is inadvertent or otherwise, Landlord agrees to take

reasonable steps to maintain – and to require its contractors, subcontractors and agents to maintain – the privacy and confidentiality of such PHI. Landlord agrees to promptly notify Tenant upon learning of any disclosure of PHI to Landlord or Landlord's contractors, subcontractors and agents.

The parties agree that the foregoing does not create, and is not intended to create, a "business associate" relationship between the parties as that term is defined by the Privacy Standards.

Landlord has read and understands specifically those terms contained in paragraph number 12 listed directly above.

_____
Landlord's Initials

13. Holding Over: In case Tenant holds over beyond the end of the term of this Lease Agreement, with the consent expressed or implied of Landlord, such tenancy shall be from month to month only, subject to the terms and conditions of this Lease Agreement, but shall not be deemed to be a renewal. The rent to be paid in a hold over situation shall be at the rate provided in the terms of this Lease Agreement.

14. Janitorial Services: Tenant shall furnish janitorial service as is necessary for the Premises.

15. Alterations: The parties agree not to make any alterations in or on the Premises without first securing the written consent of the other party, and further agree to make such alterations only at such time that is agreeable to the other party.

16. Notices: Notices desired or required to be given by this Lease Agreement or by any law now in effect, or later enacted, may be given by enclosing the Notice in a sealed envelope addressed to the party for whom intended and by depositing such envelope, with postage prepaid, in United State mail. The envelope containing the Notice shall be addressed to Landlord as follows:

City of Hughson
7018 Pine Street, PO Box 9
Hughson, CA 95326

or other place as may be designated in writing by Landlord and the envelopes containing the Notices to the Tenant shall be addressed as follows:

Stanislaus County Purchasing Agent
1010 10th Street Place Suite #5400
Modesto, CA 95354

17. Loss: Landlord agrees that should the demised Premises be so badly damaged by fire, incidents of war, earthquake, or other violent action of the elements as to render them wholly unfit for Tenant's occupancy, then this Lease Agreement shall be terminated immediately upon the happening of any such event whereupon Tenant shall surrender the Premises and shall not be liable for any further payments. In the event of any lesser damage by any such cause, Landlord shall restore the Premises to the condition it was in immediately prior to the event causing the damage, and the lease payment shall abate in proportion to the area not used by Tenant during the period of restoration. If Landlord should fail to pursue restoration work with reasonable diligence to completion, Tenant, at its sole option may surrender the Premises and shall not be liable for any further lease payments under this Lease Agreement.

18. Successors: Each and all of the terms and agreements contained in this Lease Agreement shall be binding upon and shall inure to the benefit of the successors in interest of Landlord, and wherever the context permits or requires, the successors in interest to Tenant.

19. Trade Fixtures: Tenant shall install such fixtures, equipment, and personal property as may be necessary and convenient for its operation. Such furniture, equipment, and personal property may be removed at any time during Tenant's tenancy or within a reasonable time thereafter, and shall not be considered part of the Premises. Removal of the same shall not damage or deface the Premises, and if the Premises shall be so damaged, Tenant shall repair such damage at its own expense.

20. Fire and Other Perils Insurance: The parties agree to be responsible for damage by the perils of fire, extended coverage, and vandalism to those items of real and personal property for which they hold title or for which they have assumed liability to others.

21. Waiver of Rights of Subrogation: Landlord and Tenant agree that in the event of loss due to any of the perils for which they have agreed to provide insurance, each party shall look solely to its insurance for recovery. Landlord and Tenant grant to each other on behalf of any insurer providing insurance to either of them with respect to the Premises, a waiver of any right of subrogation which any insurer of one party may acquire against the other by virtue of payment of any loss under such insurance.

22. Liability Insurance: Tenant agrees to hold Landlord harmless from loss occurring on the Premises and arising out of Tenant's occupancy of the Premises. Tenant assumes no liability for any loss caused by the sole negligence of Landlord.

23. Lack of Funding: If, during the term of this Lease Agreement, Tenant, Stanislaus County, in its sole discretion, determines that sufficient funds are not available to allow for continuation of this Lease Agreement or current County owned space becomes available, Tenant may terminate this Lease Agreement upon one hundred twenty (120) days written notice to Landlord without further obligation to Landlord.

Landlord has read and understands specifically those terms contained in paragraph 23 listed directly above.

_____
Landlord's Initials

24. Surrender: Tenant shall surrender the Premises to Landlord at the expiration of this Lease Agreement in as good a condition as at the commencement of it, excepting reasonable wear and tear, damages and destruction by the elements, or other persons.

25. Subordination and Mortgages:

25.1. Subordination and Non-Disturbance. Tenant agrees, at Landlord's option, to subordinate this Lease Agreement to the lien of any mortgages or deeds of trust now or hereafter in force against the building; provided, however, Tenant's obligation to subordinate this Lease Agreement is expressly conditioned upon Tenant receiving a written agreement in the form of Document I in the Supplemental Lease Documents delivered to Landlord concurrently with this Lease Agreement and provided further that no such subordination shall affect any option to extend the Term of this Lease Agreement, right of first offer to lease additional Premises, option to purchase or right of first offer to purchase the property which may be included in this Lease Agreement.

25.2 Existing Deeds of Trust. The beneficiary under any existing deed of trust affecting the building shall provide a written agreement to tenant in the form of Document I in the Supplemental Lease Documents delivered to Landlord concurrently with this Lease Agreement within thirty (30) days after the execution of this Lease Agreement.

25.3 Request for Notice. Landlord acknowledges that Tenant intends to record a Request for Notice with respect to any mortgages or deeds of trust affecting the property in the form of Document II in the Supplemental Lease Documents delivered to Landlord concurrently with this Lease Agreement.

25.4 Notice of Default. If any mortgagee or beneficiary under a deed of trust affecting the property gives written notice of its name and address to Tenant by registered mail requesting any such notice with reference to this Section, Tenant agrees to use its best efforts (but without liability for failure to do so) to give such mortgagee a copy of any notice of default served upon Landlord which could permit Tenant to terminate this Lease Agreement and an additional ten (10) days within which to cure such default.

26. Estoppel Certificate: Tenant shall, within thirty (30) days after written request of Landlord, execute, acknowledge and deliver to Landlord or its designee a written statement in the form of Document III in the Supplemental Lease Documents delivered to Landlord concurrently with this Lease Agreement (properly completed) but shall have no other obligation to deliver any other form of estoppel certificate. It is intended that any such statement delivered pursuant to this Section may be relied upon by a prospective purchaser of Landlord's interest or holder of any mortgage upon Landlord's interest in the Premises.

27. Entire Agreement: This Lease Agreement supersedes any and all other agreements, either oral or in writing, between any of the parties herein with respect to the subject matter hereof and contains all the agreements between the parties with respect to such matter. Each party acknowledges that no representations, inducements, promises or agreements, oral or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein, and that no other agreement, statement or promise not contained in this Lease Agreement shall be valid or binding.

28. Duplicate Counterparts: This Lease Agreement may be executed in duplicate counterparts, each of which shall be deemed a duplicate original.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF Landlord has executed this Lease Agreement and Tenant, County of Stanislaus, by order of the Board of Supervisors, has caused this Lease Agreement to be executed on its behalf by the County Purchasing Agent on the day, month and year above written.

TENANT
COUNTY OF STANISLAUS
GSA Purchasing Division

By: _____
Keith D. Boggs, Assistant Executive Officer,
GSA Director/Purchasing Agent

APPROVED AS TO CONTENT:
Stanislaus County
Community Services Agency

By: _____
Kathryn M. Harwell, Director

LANDLORD
CITY OF HUGHSON

By: _____
Matt Beekman, Mayor

APPROVED AS TO FORM
John P. Doering, County Counsel

By: _____
Carrie M. Stephens, Deputy County Counsel

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SUPPLEMENTAL LEASE DOCUMENTS

For

STANISLAUS COUNTY
GENERAL SERVICES AGENCY – PURCHASING DIVISION
LEASE AND AGREEMENT

DEPARTMENT: Community Services Agency as Tenant

LANDLORD: City of Hughson on behalf of United Samaritans Foundation pursuant to the Deevlopment Agreement dated February 13, 1998 and recorded with the Stanislaus County Recorder's office as Document #98-0032011-00

2413 3rd Street, Hughson , CA

****

Document I - Subordination, Nondisturbance and Attornment Agreement

Document II – Request for Notice

Document III – Tenant Estoppel Agreement

Document IV – Memorandum of Lease

DOCUMENT I

SUBORDINATION, NONDISTURBANCE AND ATTORNMENT AGREEMENT

AND WHEN RECORDED MAIL TO:)
)
Stanislaus County)
Attn: Purchasing Agent)
PO Box 3229)
Modesto, CA 95353-3229)

Space above for Recorder's Use

SUBORDINATION, NONDISTURBANCE AND ATTORNMENT AGREEMENT

NOTICE: THIS SUBORDINATION, NONDISTURBANCE AND ATTORNMENT AGREEMENT RESULTS IN YOUR LEASEHOLD ESTATE BECOMING SUBJECT TO AND OF LOWER PRIORITY THAN THE LIEN OF SOME OTHER OR LATER SECURITY INSTRUMENT.

This Subordination, Nondisturbance and Attornment Agreement ("Agreement") is entered into as of the ____ day of _____, 2013 by and among STANISLAUS COUNTY, a body politic and corporate ("Tenant"), City of Hughson acting on behalf of United Samaritans Foundation pursuant to the Development Agreement dated February 13, 1998 and recorded with the Stanislaus County Recorder's Office as Document #98-0032011-00 [*Insert name of Landlord*], ("Borrower") and [*Insert name of Lender*], ("Lender").

Factual Background

A. Borrower owns certain real property more particularly described in the attached Exhibit A. The term "Property" herein means that real property together with all improvements (the "Improvements") located on it.

B. Lender has made or agreed to make a loan to Borrower. The Loan is or will be secured by a deed of trust or mortgage encumbering the Property (the "Deed of Trust") .

C. Tenant and Borrower (as "Landlord") entered into a lease dated November 1, 2013 (the "Lease") under which Borrower leased to Tenant a portion of the Improvements located within the Property and more particularly described in the Lease (the "Premises").

D. Tenant is willing to agree to subordinate certain of Tenant's rights under the Lease to the lien of the the Deed of Trust and to attorn to Lender on the terms and conditions of this Agreement. Tenant is willing to agree to such subordination and attornment and other conditions, provided that Lender agrees to a nondisturbance provision, all as set forth more fully below.

Agreement

Therefore, the parties agree as follows:

1. Subordination. The lien of the Deed of Trust and all amendments, modifications and extensions thereto shall be and remain at all times a lien on the Property prior and superior to the Lease, except that if Tenant is granted any option to extend the Term of the Lease, right of first offer to lease additional premises or option to purchase the Property or right of first offer to purchase the Property in the Lease, such provisions shall not be affected or diminished by any such subordination..

2. Definitions of "Transfer of the Property" and "Purchaser". As used herein, the term "Transfer of the Property" means any transfer of Borrower's interest in the Property by foreclosure, trustee's sale or other action or proceeding for the enforcement of the Deed of Trust or by deed in lieu thereof. The term "Purchaser", as used herein, means any transferee, including Lender, of the interest of Borrower as a result of any such Transfer of the Property and also includes any and all successors and assigns, including Lender, of such transferee.

3. Nondisturbance. The enforcement of the Deed of Trust shall not terminate the Lease or disturb Tenant in the possession and use of the leasehold estate created thereby.

4. Attornment. Subject to Section 3 above, if any Transfer of the Property should occur, Tenant shall and hereby does attorn to Purchaser, including Lender if it should be the Purchaser, as the landlord under the Lease, and Tenant shall be bound to Purchaser under all of the terms, covenants and conditions of the Lease for the balance of the Lease term and any extensions or renewals of it which may then or later be in effect under any validly exercised extension or renewal option contained in the Lease, all with the same force and effect as if Purchaser had been the original landlord under the Lease. This attornment shall be effective and self-operative without the execution of any further instruments upon Purchaser's succeeding to the interest of the landlord under the Lease.

5. Lender Not Obligated. Lender, if it becomes the Purchaser or if it takes possession under the Deed of Trust, and any other Purchaser shall not (a) be liable for any damages or other relief attributable to any act or omission of any prior Landlord under the Lease including Borrower; or (b) be subject to any offset or defense not specifically provided for in the Lease which Tenant may have against any prior landlord under the Lease; or (c) be bound by any prepayment by Tenant of more than one month's installment of rent; or (d) be obligated for any security deposit not actually delivered to Purchaser; or (e) be bound by any modification or amendment of or to the Lease unless the amendment or modification shall have been approved in writing by the Lender.

6. Notices. All notices given under this Agreement shall be in writing and shall be given by personal delivery, overnight receipted courier or by registered or certified United States mail, postage prepaid, sent to the party at its address appearing below. Notices shall be effective upon receipt (or on the date when proper delivery is refused). Addresses for notices may be changed by any party by notice to all other parties in accordance with this Section..

To Lender: _____
_____
_____
_____

To Borrower: City of Hughson
7018 Pine Street, PO Box 9
Hughson, CA 95326

To Tenant: Stanislaus County
Attn: Purchasing Agent
PO Box 3229
Modesto, CA 95353-3229

7. Miscellaneous Provisions. This Agreement shall inure to the benefit of and be binding upon the parties and their respective successors and assigns. This Agreement is governed by the laws of the State of California without regard to the choice of law rules of that State.

TENANT: STANISLAUS COUNTY,
a body politic and corporate

By:_____
Keith D. Boggs, Assistant Executive Officer,
GSA Director/Purchasing Agent

BORROWER: CITY OF HUGHSON

By:_____
Matt Beekman, Mayor

LENDER: [*Insert name of Lender*],

By:_____
Name:_____
Title:_____

DOCUMENT II

REQUEST FOR NOTICE

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

Stanislaus County
Attn: Purchasing Agent
PO Box 3229
Modesto, California 95353-3229

REQUEST FOR NOTICE

(UNDER SECTION 2924B CIVIL CODE)

In accordance with Section 2924b, Civil Code, request is hereby made that a copy of any Notice of Default and a copy of any Notice of Sale under the Deed of Trust described below:

Date of Recording of Deed of Trust

Instrument Number of Deed of Trust

Trustor

Trustee

Beneficiary

be mailed to Stanislaus County, Attn: Purchasing Agent, PO Box 3229, Modesto, California 95353-3229.

LENDER:

By:_____

Name: _____

Title:

(ALL SIGNATURES MUST BE ACKNOWLEDGED)

COUNTY OF _____ ss.

On this ____ day of _____, 20__, before me, _____ a Notary Public in and for the State of California, personally appeared _____ _____ personally known to me (or proved on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Signature_____

My commission expires _____.

DOCUMENT III

TENANT ESTOPPEL CERTIFICATE

To: [Insert name of party to rely on document]

_____

_____

_____

Attn: _____

Re: Date of Certificate: _____
Lease Dated: _____
Current Landlord: _____
Located at: _____
Premises: _____
Commencement Date of Term: _____
Expiration Date: _____
Current Rent: _____

Stanislaus County ("Tenant") hereby certifies that as of the date hereof:

1. Tenant is the present owner and holder of the tenant's interest under the lease described above, as it may be amended to date (the "Lease"). The Lease covers the premises described above (the "Premises") in the building (the "Building") at the address set forth above.

2. (a) A true, correct and complete copy of the Lease (including all modifications, amendments, supplements, side letters, addenda and riders of and to it) is attached to this Certificate as Exhibit A.

(b) The current Rent is set forth above.

(c) The term of the Lease commenced on the Commencement Date set forth above and will expire on the Expiration Date set forth above, including any presently exercised option or renewal term. Tenant has no option or right to renew, extend or cancel the Lease, or to lease additional space in the Premises or Building, or to use any parking other than that specified in the Lease.

(d) Except as specified in the Lease, Tenant has no option or preferential right to purchase all or any part of the Premises (or the land of which the Premises are a part).

(e) Tenant has made no agreement with Landlord or any agent, representative or employee of Landlord concerning free rent, partial rent, rebate of rental payments or any other similar rent concession except as expressly set forth in the Lease.

3. (a) The Lease constitutes the entire agreement between Tenant and Landlord with respect to the Premises, has not been modified changed, altered or amended and is in full force and effect. There are no other agreements, written or oral, which affect Tenant's occupancy of the Premises.

[(b) To the knowledge of Tenant, Tenant has not given Landlord written notice of a material default under the Lease which has not been cured.]

(b) The interest of Tenant in the Lease has not been assigned or encumbered. Tenant is not entitled to any credit against any rent or other charge or rent concession under the Lease except as set forth in the Lease. No rental payments have been made more than one month in advance.

4. All contributions required to be paid by Landlord to date for improvements to the Premises have been paid in full and all of Landlord's obligations with respect to tenant improvements have been fully performed.

IN WITNESS WHEREOF, the Tenant has executed this Tenant Estoppel Certificate as of the day set forth above.

STANISLAUS COUNTY

By: _____

Keith D. Boggs, Assistant Executive Officer,
GSA Director/Purchasing Agent

DOCUMENT IV

MEMORANDUM OF LEASE

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

Stanislaus County
Attn: Purchasing Agent
PO Box 3229
Modesto, CA 95353-3229

This document is recorded for the benefit of Stanislaus County and recording is exempt from recording fees pursuant to California Government Code Section 27383. This transaction is exempt from documentary transfer tax pursuant to California Revenue and Taxation Code Section 11922.

MEMORANDUM OF LEASE

This Memorandum of Lease ("Memorandum") is made and entered into by and between City of Hughson acting on behalf of United Samaritans Foundation pursuant to the Development Agreement dated February 13, 1998 and recorded with the Stanislaus County Recorder's Office as Document #98-0032011-00 (the "Landlord"), and STANISLAUS COUNTY, a public body corporate and politic duly organized and existing under the laws of the State of California (the "Tenant") who agree as follows:

Landlord and Tenant hereby enter a Lease of certain property (the "Lease") in the County of Stanislaus, State of California, described in Exhibit A attached hereto and incorporated herein by reference, for a term commencing on November 1, 2013, and ending on a date three (3) years after the commencement date, unless such term is extended or sooner terminated pursuant to the terms and conditions set forth in a certain unrecorded Lease between Landlord and Tenant dated November 1, 2013.

Tenant has the option to extend the term of the Lease for two one-year periods, subject to the terms and conditions of the Lease.

This Memorandum has been prepared for the purpose of giving notice of the Lease and of its terms, covenants, and conditions, and for no other purposes. The provisions of this Memorandum shall not in any way change or affect the provisions of the Lease, the terms of which remain in full force and effect.

Dated: November 1, 2013

TENANT COUNTY OF STANISLAUS	LANDLORD CITY OF HUGHSON
By: _____ Keith D. Boggs, Assistant Executive Officer, GSA Director/Purchasing Agent	By: _____ Matt Beekman, Mayor

---

State of California }
} SS.
County of Stanislaus }

On this ___ day of_____, 2013, before me, _____, a Notary Public, personally appeared Matt Beekman, Mayor of the City of Hughson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity and that by his signatures on the instrument the person or entity upon behalf of which the persons acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Notary's Signature

State of California }
} SS.
County of Stanislaus }

On this ___ day of_____, 2013, before me, _____, a Notary Public, personally appeared KEITH D. BOGGS, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity and that by his signature on the instrument the person or entity upon behalf of which the person acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Notary's Signature

CITY OF HUGHSON AGENDA ITEM NO. 3.4
SECTION 3: CONSENT CALENDAR

Meeting Date: October 28, 2013
Subject: Approval of City Hall Closure during the Holiday Period of December 24, 2013 through January 1, 2014.
Presented By: Dominique Spinale, Management Analyst

Approved By: _____

Staff Recommendation:

Authorize the closure of City Hall from December 24, 2013 through January 1, 2014.

Background and Overview:

For the last two holiday seasons, the City Council has approved the closing of City Hall during the period of December 24 through January 1. The City annually observes December 25 and January 1 as regular holidays. The month of December is the slowest time of the year for City services and government offices in general. From past experience, office traffic is typically very slow during this week and building permit activity is nearly non-existent. Additionally, the closure during the holiday season allows City employees the opportunity to spend time with their families with minimal effects or consequences to the community.

Closure in Summary

City Hall is already scheduled to be closed on Wednesday, December 25 in observance of Christmas Day and January 1 for New Year's Day. With this proposal, City Hall would be closed five additional days including Tuesday, December 24 (Christmas Eve) and Thursday through Tuesday, December 26 through December 31, 2013. City Hall is would open for business on Thursday, January 2.

As practiced with past closures during the holiday season, City employees would be required to use vacation time or be on unpaid leave for the additional five days. Vacation time used by employees during this period helps to lower future vacation accrual liabilities.

Select Public Works staff would still be working and performing critical work tasks. Additionally, normal on call procedures would be followed in order to handle any

emergencies that may occur during this time. The City Manager would also be available during this time by phone or as needed to address any issues that may arise that warrant an immediate response. All City staff has also been polled and are agreeable to the City Hall closure as described.

Preparation for Closure

Following approval of the closure for the upcoming holiday season, the City would have eight weeks to inform the community that City Hall will be closed. City staff would post an announcement of the closure in the November and December newsletter that is mailed to every utility bill customer at the beginning of the month, as well as post signs at City Hall and provide notifications on the City website and Facebook page. With adequate notice and outreach, community members will be made aware that the City will be closed and can make arrangements to take care of City business either before or after the closure.

City utility bills are currently due on the last day of the month. With the office closure, the deadline for utility bills would be extended to Monday, January 6, 2014.

Fiscal Impact:

The holiday closure as recommended is expected to result in nominal utility savings associated with the City buildings being closed and in fuel costs due to maintaining only minimal staffing in Public Works.

CITY OF HUGHSON AGENDA ITEM NO. 3.5
SECTION 3: CONSENT CALENDAR

Meeting Date: **October 28, 2013**
Subject: **Approval of Fiscal Year 2013/2014 Local Transportation Fund Claim**
Presented By: **Lisa Whiteside, Finance Manager**

Approved By: _____

Staff Recommendation:

Adopt Resolution No. 2013-33 Local Transportation Funds (LTF) Claim, authorizing the City Manager to execute and submit the City of Hughson Local Transportation Fund (LTF) Claim for Fiscal Year 2013/2014, for **$114,216** to the Stanislaus Council of Governments (StanCOG) as attached on behalf of the City of Hughson.

Background and Overview:

In order to receive the annual allocation of LTF funds, the City Council of the City of Hughson is required to pass a resolution approving the LTF Claim, and authorize the City Manager to submit the application on behalf of the City of Hughson to StanCOG. The annual allocation of the LTF funds must be approved through StanCOG (Policy Board), which then can be used to improve local streets, sidewalk, and bicycle facilities. This process is required for the City of Hughson to receive the Fiscal Year 2013/2014 allocation of **$114,216** of Local Transportation Funding.

CITY OF HUGHSON
CITY COUNCIL
RESOLUTION NO. 2013-33

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUGHSON APPROVING AND AUTHORIZING THE SUBMISSION OF THE 2013/14 LOCAL TRANSPORTATION FUND (LTF) CLAIM AND AUTHORIZING THE CITY MANAGER TO EXECUTE AND SUBMIT THE CLAIM ON BEHALF OF THE CITY OF HUGHSON

WHEREAS, the Hughson City Council is considering and has established priorities for Capital Improvement Projects and the City Manager has prepared for filing with the Stanislaus Council of Governments (StanCOG) the City's annual Transportation Development Act claim in accordance with applicable rules and regulations, in the amount of **$114,216** for the fiscal year 2013/2014 to be drawn from the Local Transportation Fund; and

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Hughson hereby approves the 2013-2014 LTF Claim, and authorizes the City Manager to execute and submit the Claim as attached on behalf of the City of Hughson to the Stanislaus Council of Governments.

PASSED AND ADOPTED by the City Council of the City of Hughson at its regular meeting held on this 28th day of October, 2013 by the following roll call votes:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

_____
MATT BEEKMAN, Mayor

ATTEST:

_____
DOMINIQUE SPINALE, Deputy City Clerk

TRANSPORTATION DEVELOPMENT ACT
LOCAL TRANSPORTATION FUND
CLAIM FOR FISCAL YEAR 2013/14 OTHER PURPOSES

TO: Stanislaus Council of Governments
1111 I Street, Suite 308
Modesto, CA 95354

FROM:

Applicant: City of Hughson

Address: P.O. Box 9

City: Hughson, CA Zip: 95326

Contact Person: Raul Mendez Phone: 209-883-4054

E-mail Address: rmendez@hughson.org Fax: 209-883-2638

The City of Hughson hereby requests, in accordance with the Transportation Development Act and applicable rules and regulations, that its claim for other purposes be approved in the amount of $ 114,216 for fiscal year 2013/14, to be drawn from the Local Transportation Fund.

When approved, please transmit this claim to the County Auditor for payment. Approval of the claim and payment by the County Auditor to this applicant is subject to such monies being on hand and available for distribution, and to the provisions that such monies will be used only in accordance with the terms contained in the approving resolution to the Stanislaus Council of Governments.

The claimant certifies that this Local Transportation Fund claim and the financial information contained therein is reasonable and accurate to the best of my knowledge and conforms with the requirements of the Transportation Development Act and applicable rules and regulations.

Submitted by: _____
Raul Mendez
Title: City Manager

Date: _____

StanCOG Board of Directors:

Date of approval: _____

Resolution #: _____

_____
StanCOG Approving Authority
Vincent Canales, Jr., Finance Director

CLAIMANT: City of Hughson

LOCAL TRANSPORTATION FUND
CLAIM FOR OTHER PURPOSES
FY 2013/14

TABLE 1

1.	Planning, Local --PUC 99262/99402	$	-
2.	Transit _____ *	$	-
3.	Streets and Roads --PUC 99400 (a)	$	109,181
4.	Nonmotorized - 2% LTF funds --PUC 99233.2/99234	$	5,035
5.	Nonmotorized - Other LTF funds --PUC 99233.2/99234	$	-
6.	**TOTAL CLAIM**	**$**	**114,216**

This table is to be filled out by StanCOG staff

City of Hughson
Total LTF available to be claimed for other purposes:

FY 2013/14 Nonmotorized apportionment	$	4,645
FY 2012/13 Nonmotorized supplemental	$	390
Total 2% Nonmotorized	$	5,035
FY 2013/14 Other Purposes apportionment	$	82,205
FY 2012/13 Other Purposes supplemental	$	26,976
Total Other Purposes	$	109,181
Total available to be claimed at this time	**$**	**114,216**

*** If you have proposed transit expenditures, please fill in the appropriate PUC Code.**

CLAIMANT: City of Hughson

NONMOTORIZED PROJECTS
FY 2013/14
(Use additional forms if necessary)

TABLE 2
BREAKDOWN BY PROJECT

BRIEFLY DESCRIBE PROJECTS AND EXPENDITURES INCLUDED IN THE 3 YEAR PERIOD BELOW										
		MODE			*FOR BIKE PROJECTS ONLY*					
ID	PROJECT TITLE	BIKE	PED	PLAN	PROJECT IN StanCOG's BIKE PLAN *	PROJECT IN CITY/CO BIKE PLAN *	2011/12 ACTUAL EXPENDITURES	2012/13 ESTIMATED EXPENDITURES	2013/14 CLAIM	ACTUAL / ESTIMATED EXPENDITURES FOR 3 YEAR PERIOD
	Update of Nonmotorize Plan			X			$3,878.00	$4,808.00	$5,035.00	$13,721.00
							$0.00	$0.00	$0.00	$0.00
							$0.00	$0.00	$0.00	$0.00
							$0.00	$0.00	$0.00	$0.00
							$0.00	$0.00	$0.00	$0.00
TOTAL FUNDS APPROPRIATED TO PROJECTS							**$3,878.00**	**$4,808.00**	**$5,035.00**	**$13,721.00**

TABLE 3
BREAKDOWN BY CATEGORY

RECORD LTF FUNDS ONLY							
	% of Total Expenditures	2009/10 Actual	2010/11 Actual	2011/12 Actual	2012/13 Estimate	2013/14 Claim	5 Year Total
Bicycle facilities	18.05%	$0.00	$3,600.00	$0.00	$0.00	$0.00	$3,600.00
Pedestrian facilities	13.17%	$0.00	$2,628.00	$0.00	$0.00	$0.00	$2,628.00
Preparation of Bicycle Plan	68.78%	$0.00	$0.00	$3,878.00	$4,808.00	$5,035.00	$13,721.00
TOTAL AMOUNT OF BIKE/PED EXPENDITURES		**$0.00**	**$6,228.00**	**$3,878.00**	**$4,808.00**	**$5,035.00**	**$19,949.00**

DOES THIS CLAIM MEET THE MINIMUM 50% BICYCLE EXPENDITURE STANCOG PERFORMANCE STANDARD? **YES**

StanCOG 50% bicycle expenditure requirement: The 5 year bicycle expenditures must be 50% or greater.

TABLE 4
FUNDS HELD IN RESERVE AT JURISDICTION

RECORD LTF FUNDS ONLY				
	2009/10	2010/11	2011/12	2012/13
Fiscal year beginning fund balance	$0.00	$0.00	$0.00	$4,808.00
Plus fiscal year 2% nonmotorized claim	$0.00	$6,228.00	$3,878.00	$0.00
Plus interest	$0.00	$0.00	$0.00	$0.00
Minus nonmotorized expenditures	$0.00	($6,228.00)	($3,878.00)	($4,808.00)
Fiscal year ending fund balance	**$0.00**	**$0.00**	**$0.00**	**$0.00**

1. Prior year(s) LTF carryover held by jurisdiction applied towards FY 2013/14 Nonmotorized claim (TABLE 4)	$0
2. Interest earned on previously paid LTF funds held by jurisdiction (required by State law) (TABLE 4)	$0
3. FY 2013/14 Nonmotorized 2% funds applied towards FY 2013/14 projects (must match Page 2, Line 4)	$5,035
4. FY 2013/14 Other LTF funds applied towards Nonmotorized claim (must match Page 2, Line 5)	$0
5. FY 2013/14 Nonmotorized 2% funds to be held at StanCOG	$0
6. Total of lines #1 through #5 above	$5,035

SEE PAGE 3b FOR NONMOTORIZED REGULATIONS/POLICIES AND NOTES

CLAIMANT: City of Hughson

NONMOTORIZED PROJECTS
FY 2013/14
(Continued)

NONMOTORIZED REGULATION/POLICY REMINDERS:

A. State law allows a jurisdiction to use LTF to update a Bicycle Action Plan once every five years (PUC 99234(h)).

B. State law allows a jurisdiction to use up to 20% of the amount available each year to restripe Class II bicycle lanes (PUC 99234(h)).

C. State law allows a jurisdiction to use up to 5% of the amount available each year to supplement moneys from other sources to fund bicycle safety education programs, but the funds shall not be used to fully fund the salary of any one person (PUC 99233.3).

D. All funds must be spent within five years of receipt. Over the five-year period shown in Table 3, at least 50% of funds must be spent for bicycle purposes. StanCOG will not allocate funds to any jurisdiction which is in violation of these policies.

NOTES:

* By StanCOG policy, all bike projects must appear in either StanCOG's Bicycle Action Plan, or in a City or County bicycle plan, to be eligible for LTF funding.

** Beginning with FY 2003/04, nonmotorized funds will only be allocated by StanCOG for specific projects. If no project is identified, funds will be held in reserve at StanCOG for eventual use by that jurisdiction.

CLAIMANT: City of Hughson

ANNUAL PROJECT AND FINANCIAL PLAN

PROJECTS FOR OTHER PURPOSES
FY 2013/14

(Use additional forms as necessary)

TABLE 5

Briefly describe all proposed projects and indicate proposed project expenditures

Project Title & Brief Description	Will this Project add new travel lanes? **Yes or No**	Will this Project use Federal Funds? **Yes or No**	Is this Project consistent with the RTP **Yes or No**	Total Project Cost	LTF Funds Utilized
Tully Road-Santa Fe to Whitmore	No	Yes	No	$ 60,104	$ 1,500
5th Street Project	No	Yes	No	$ 286,326	$ 107,681
TOTAL				**346,430.00**	**109,181.00**

1. LTF carryover applied towards FY 2013/14 Other Purposes	-
2. Interest earned on LTF carryover (required by State law)	180.00
3. FY 2013/14 apportionment applied towards FY 2013/14 Other Purposes	109,181.00
4. Total of Lines 1, 2 and 3 above	109,361.00

CITY OF HUGHSON AGENDA ITEM NO. 4.1
SECTION 4: UNFINISHED BUSINESS

Meeting Date: October 28, 2013
Subject: Progress Report on the City of Hughson Lighting and Landscaping Districts and Benefit Assessment Districts and Related Actions
Presented By: Raul L. Mendez, City Manager

Approved By: _____

Staff Recommendation:

1. Accept the progress report on the City of Hughson Lighting and Landscaping Districts and Benefit Assessment Districts.
2. Authorize the City Manager to end the agreement with NBS Local Government Solutions for administrative services with the City of Hughson's special assessment districts.

Background:

On August 12, 2013, the City Council held a public hearing to consider the annual review of special assessment districts for Fiscal Year 2013-2014. After the public hearing, the City adopted resolutions approving the annual report, confirming the assessment and ordering the levy for the City of Hughson Lighting and Landscaping Districts and Benefit Assessment Districts for Fiscal Year 2013-2014.

The City of Hughson ("City") utilizes special financing districts to provide various services and improvements to the property owners within the City. These are currently comprised of two types of assessments, Lighting and Landscaping Districts and Benefit Assessment Districts. Each Lighting and Landscaping District (LLD) was formed and the annual assessments are levied pursuant to the Lighting and Landscaping Act of 1972, Part 2 of Division 15 of the California Streets and Highways Code (the "1972 Act"). Each Benefit Assessment District (BAD) was formed and the annual assessments are levied pursuant to the Benefit Assessment Act of 1982 (the "1982 Act"), Part 1 of Division 2 of the California Government Code.

During the August 12, 2013 public hearing and a subsequent special meeting held on September 16, 2013, the City Council expressed concerns regarding the condition of the City's special assessment districts. Specifically, those special assessment districts with low or negative reserve balances were discussed at

length along with others with structural operating deficits. The Council directed staff to develop a short term and long term strategy to strengthen the fiscal stability of each district.

During the September 23, 2013 regular meeting, the City Council had an opportunity to discuss concerns with NBS Local Government Solutions who has been working with the City of Hughson since 2005. At that meeting, information was shared by NBS Local Government Solutions regarding the preparation and work needed to develop the required Engineer's Report and the process for establishing the annual assessments. The dialogue focused on the Engineer's Reports not only establishing the appropriate assessment level as provided for by State law but also being an accurate depiction of the fiscal condition of each respective district. The City Manager indicated that the special assessment districts would be a priority moving forward and staff would work on a variety of improvement areas. Technical administrative and engineering support was also discussed and City staff was directed to explore other options including working with Stanislaus County through a memorandum of understanding given their expertise with Lighting District, Landscape and Lighting Districts and County Service Areas.

Progress Report:

A progress report will be provided at each regular meeting until such time as the City Council directs otherwise. The following is a summary of the work done by staff on the City's special assessment districts since the last reporting.

Administrative and Engineering Assistance – The City Manager has had further discussions with Stanislaus County Public Works regarding a partnership for technical assistance and support with the City's special assessment districts. Stanislaus County Public Works has the internal technical expertise based on the comparable services they currently provide for their Lighting and Landscape and Lighting Districts and County Service Areas and are receptive to partnering with the City of Hughson. Based on the local expertise and cost-effectiveness, the City Manager recommends developing a memorandum of understanding with Stanislaus County Public Works to outline the arrangement for necessary administrative and engineering assistance and returning to Council for consideration for a Memorandum of Understanding at a future date. As discussed during the October 14, 2013, this will necessitate ending the current relationship with NBS Local Government Solutions. The current agreement provides for cancellation of the contract with 30 days written notice. As directed, City staff has begun to survey and benchmark other municipalities for the provision of these services as another option in the future.

General and Special Benefit Analysis – The City Attorney continues to research formation documents for the City's special assessment districts and will advise accordingly relative to General and Special Benefit discussion. It appears that there may be different tiers of benefits that have more impact than others and so legal counsel continues to explore the process for incorporating the tiers via the Engineer's Report and Proposition 218 requirements in the upcoming fiscal year.

Utility Efficiencies – City Public Works has made progress in implementing a Light Emitting Diode (LED) retrofit program that can result in long-term energy efficiency savings through Pacific, Gas and Electric Company. Street light information has been provided to PG&E and City staff is awaiting their response regarding the level of participation that should be pursued and for what specific areas within the City. Also, and as reported previously, Turlock Irrigation District (TID) in the upcoming months will validate the light inventory information provided to them by the City to ensure that charges are being applied appropriately based on wattage. This has the potential of resulting in an estimated annual electrical cost savings of nearly 25% when looking at just one district (Fontana Ranch South) as an example. In addition, City staff has developed a protocol for shutting off water service in the fall/winter months which is anticipated to result in significant water charge savings of approximately $1,800 across several assessment districts over the three month period.

Special Assessment Districts Borrowing/Loans – The City Attorney continues to explore provisions in State law allowing Lighting and Landscaping Districts to borrow funds for improvement needs for a period not to exceed 10 years. The General Fund is a possible source of funding for this purpose. The City Attorney is also reviewing State law regarding borrowing between districts which may be a viable solution to correct any deficits that exist in the Fontana Ranch North and South subdivisions.

Miscellaneous – As part of this in-depth review of the special assessment districts, it was discovered that the two new lots in the Fontana Ranch North subdivision that were created after the City sold the park site back to the developer needed to be included in the corresponding Lighting and Landscaping District and Benefit Assessment District. The City Attorney has concluded that the two new lots that were created need to be included as part of the corresponding special assessment districts since they are now receiving a special benefit like other lots and that process will be initiated in the upcoming weeks. This change will be incorporated into the Fiscal Year 2014-2015 Engineer's Report accordingly.

Fiscal Impact:

The current Lighting and Landscaping Districts and Benefit Assessment Districts provide the City of Hughson with funding annually to provide specific services and improvements to properties within their respective approved boundaries. For Fiscal Year 2013-2014, annual assessments are expected to generate a total of $199,295.42, an increase of 5% when compared to the prior fiscal year, for associated labor, administration, utilities, equipment, materials, and preparation of the annual Engineer's Report.

CITY OF HUGHSON AGENDA ITEM NO. 6.1
SECTION 6: NEW BUSINESS

Meeting Date: October 28, 2013
Subject: Approval of Resolution No. 2013-31, an Agreement with Stanislaus County to Perform Law Enforcement Services for the City of Hughson and Related Actions
Enclosures: (1) Stanislaus Law Enforcement Services Agreement
(2) Exhibits A, B, C (General Law Enforcement Service Level Request, Property Inventory, Budget and Rates)
Presented By: Raul L. Mendez, City Manager
Michael Harden, Law Enforcement Consultant

Approved By: _____

Staff Recommendation:

1. Approve Resolution No. 2013-31, an agreement with Stanislaus County to perform law enforcement services for the City of Hughson.

2. Authorize the Mayor to execute the agreement with Stanislaus County for law enforcement services.

3. Authorize the City Manager to execute the General Law Enforcement Service Level request for Fiscal Year 2013-2014.

Background/Summary:

On September 1, 2001, the City of Hughson (City) entered into a five-year agreement with Stanislaus County (County) to perform law enforcement services. On September 1, 2006, the City and County agreed to extend the agreement for an additional five-year period and in 2011 the agreement was extended for an additional two-year period which expired on June 30, 2013.

In anticipation of the expiration of the law enforcement agreement, the City began discussions with the County in the Spring of 2013. Stanislaus County currently has law enforcement contracts with four incorporated cities which include Hughson, Waterford, Patterson and Riverbank. With the exception of Riverbank, all other law enforcement agreements expired on at the end of Fiscal Year 2012-2013. As such, Stanislaus County approached the three cities about standardizing the agreements so that they all were in similar format for simplicity and consistency with exhibits customized to each city's desired level of service and accompanying staffing plan, property inventory and annual budget.

Due to the desire by the County to have a standardized agreement, and the negotiation with respective cities on certain contract provisions, there was a delay in the completion of the work necessary to finalize for consideration by the contract expiration date. Stanislaus County met with City representatives over the Spring and into the Summer months to address outstanding issues. The Sheriff, with mutual consent of the cities, extended the existing law enforcement agreements under the same terms and conditions until new multi-year agreements were prepared and approved for renewal. In early October, the City of Hughson hosted a meeting with Stanislaus County representatives from the Chief Executive Office and County Counsel, Sheriff Adam Christianson and the City Managers from Patterson, Riverbank and Waterford to finalize the said agreement for formal consideration.

Summary of Proposed Law Enforcement Agreement:

The following is a summary of the main elements of the proposed law enforcement agreement.

- The term of the agreement is from July 1, 2013 through June 30, 2016. No later than six months prior the expiration of the term, the parties shall meet and confer in good faith regarding an extension.

- Either party may terminate this agreement, without cause, upon 180 days written notice. Transition plan will be prepared and implemented by both parties and be completed no later than three months from expiration.

- County shall provide, within the corporate limits of the City, general law enforcement services and functions of the type provided by the Stanislaus County Sheriff under the statues of the State of California, and under the municipal codes of City of Hughson.

- The County shall provide only those general law enforcement services set forth in the General Law Enforcement Service Request attached hereto as Exhibit A. No later than July 1 of each year, the City and the County shall sign new Exhibits A, B & C and attach them to this agreement as an amendment. The City may request a change in the level of service at any time by submitting a written request to the County and through a meet and confer process.

- The proposed agreement maintains the cost sharing arrangement for the Chief of Police between the City of Hughson, the City of Waterford and Stanislaus County. Like in Fiscal Year 2012-2013, the City of Hughson will be responsible for 33% of the costs for the Chief of Police with the balance shared by City of Waterford (33%) and Stanislaus County (34%).

- The proposed law enforcement services contract adds an additional .5 FTE (Full Time Equivalent) for a Sergeant who will be in the field as an added

uniformed presence and will supervise the assigned deputies that provide law enforcement services to the City of Hughson.

- The staffing level for other law enforcement positions remains the same as provided for in the prior agreement or 4 Patrol Deputies (with backfill), 1 Swing Deputy, and 1 Legal Clerk.

- Although the County is not requesting the City to pay administrative costs, the County anticipates budgeting issues may require it to capture those additional costs in the future. If the County elects to charge the City, the costs will be included through an amendment of the Exhibits provided.

- Each month the County will provide standard reports to the City through the Chief of Police, reporting the monthly statistical crime and response and community policing information occurring within the City limits.

- The County will prepare news releases concerning major crime investigations within the City and will send a copy of the release to the City within a reasonable time prior to its release to news outlets.

- The City shall only pay its share of the accumulated leave accrual of the Chief of Police upon vacating the position for any reason and shall only be responsible for percentage of time assigned to the City of the actual leave accrual.

- The position of the Chief of Police will be filled in accordance with County policy. The County shall provide the City with a list of qualified Lieutenants to serve as Chief of Police. The City may interview the candidates and provide the County with the City's recommendation.

- The County may replace the Chief of Police after 90 days written notice to the City. The County will remove the Chief of Police within 30 days of receipt of a written request from the City stating the reasonable cause for said request.

- The Chief of Police, or designee, will attend all City Council meetings and will be available to City staff at all reasonable times. The Chief of Police will meet with City officials on a periodic basis to assure control over the quality and service and identify goals and programs to create a safer community.

- The County may provide a replacement for any staff member that is absent from duty for sick or annual leave for longer than 80 consecutive hours.

- All personnel assigned to the City, including Primary Patrol deputy, may assist with incidents outside the City limits involving critical and life threatening situations, however if a critical incident occurs in the City while personnel are assisting outside the City limits, the County will either dispatch additional forces to the City or will release the assigned personnel to respond.

- Pursuant to the first contract, the City transferred title to certain vehicles and installed equipment to the County (four Ford Crown Victoria). Upon termination of this agreement, the County will transfer to the City title for vehicles similar to those identified as the vehicles originally transferred to the County. City shall provide any decals or special signage that is used to distinguish the vehicles with City markings.

Upon approval of the law enforcement agreement by the City of Hughson, Stanislaus County will forward all signed documentation to the Stanislaus County Board of Supervisors for consideration and action. It is anticipated that this will occur in November 2013.

Fiscal Impact:

For Fiscal Year 2013-2014, the estimated cost for law enforcement services is $1,121,333. This represents approximately a 3% increase from the previous year cost ($29,103). Although increases to staffing costs are anticipated, decreases to overtime and Stanislaus Regional 911 expenses provided a substantial offset. The cost of this agreement was included in the Final Budget as adopted by the City Council on September 23, 2013.

CITY OF HUGHSON
CITY COUNCIL
RESOLUTION NO. 2013-31

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUGHSON APPROVING AGREEMENT WITH STANISLAUS COUNTY TO PERFORM LAW ENFORCEMENT SERVICES FOR THE CITY OF HUGHSON

WHEREAS, On September 1, 2001, the City of Hughson (City) entered into a agreement with Stanislaus County (County) to perform law enforcement services for the City which was subsequently extended through June 30, 2013,

WHEREAS, the County desired to have one form contract to use with the City and other cities in which it performs also enforcement services,

WHEREAS, the County, the City and other cities have negotiated a form law enforcement agreement to be used with all cities served by the County, and

WHEREAS, the term of the 2013 Stanislaus County Law Enforcement Services Agreement with the County will be from July 1, 2013 through June 30, 2016.

NOW THERFORE BE IT RESOLVED by the City Council of the City of Hughson as follows:

1. Approves the 2013 Stanislaus County Law Enforcement Services Agreement attached hereto as Exhibit "A."

2. Authorizes the Mayor to execute the 2013 Stanislaus County Law Enforcement Services Agreement.

3. Authorizes the City Manager to execute the General Law Enforcement Service Level request for Fiscal Year 2013-2014 and any other documents required by the agreement.

PASSED AND ADOPTED by the Hughson City Council at a regular meeting thereof held on October 28, 2013, by the following roll call vote:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

_____
MATT BEEKMAN, Mayor

ATTEST:

_____
DOMINIQUE SPINALE, Deputy City Clerk

STANISLAUS COUNTY

LAW ENFORCEMENT SERVICES

AGREEMENT

City of Hughson
2013-2016

STANISLAUS COUNTY

LAW ENFORCEMENT SERVICES

AGREEMENT

THIS AGREEMENT, is made and entered into by and between the County of Stanislaus, a political subdivision of the State of California (hereinafter referred to as "County"), and the City of Hughson, a municipal corporation, (hereinafter referred to as "City"), (the County and City are each sometimes referred to herein as a "Party," and collectively as "Parties.")

RECITALS

WHEREAS, City desires County to perform law enforcement services and functions within its boundaries; and

WHEREAS, County agrees to perform such law enforcement services and functions as described herein and pursuant to the terms and conditions hereinafter set forth; and

WHEREAS, the parties to this Agreement have the legal authority to enter into this Agreement pursuant to the provisions of Article I, Chapter 1, Part 2, Division 1, Title 5, sections 51300, *et seq*., and Chapter 5, Division 7, Title 1, sections 6500, *et seq*., and section 55632 of the Government Code of the State of California.

NOW, THEREFORE, the parties hereto agree as follows:

1. Term. The Term of this Agreement shall be July 1, 2013, though June 30, 2016 (the "Term") unless sooner terminated or extended as provided for herein.

   A. Extension. No later than six months prior to the expiration of the Term, the Parties shall meet and confer in good faith regarding the extension of the Term. If the negotiations are not completed, the Sheriff is authorized to extend this Agreement for two terms of three months each.

2. Termination. Either Party may terminate this Agreement, without cause, upon 180 days written notice to the other Party.

   A. Termination Process.

      i. Transition Plan. Upon expiration of the Term or upon receipt of notice of termination, the Parties may prepare and implement a transition plan that quickly and orderly transitions the law enforcement responsibilities from the County to the City. The transition plan should be completed no later than three months following the termination date. The transition plan may identify and address personnel, equipment, workload, on-going investigations, and any other issues related to the transition. The City and County shall agree to the cost of developing and implementing the transition plan and the City shall pay the agreed upon amount.

3. Law Enforcement Services.

A. County shall provide, within the corporate limits of the City, general law enforcement services and functions of the type coming within the jurisdiction of, and customarily rendered by, the Stanislaus County Sheriff under the statues of the State of California, and under the municipal codes of City. The County shall provide only those general law enforcement services set forth in the General Law Enforcement Service Request attached hereto as Exhibit A.

B. No later than July 1 of each year, the City and the County shall sign new Exhibits A, B & C and attach them to this Agreement as an amendment. The City may request a change in the level of service at any time by submitting a written request to the County. County will meet and confer with the City to discuss the change within 30 days of the request and, if appropriate, prepare new Exhibits for signature by the Parties, which shall be attached as an amendment hereto.

C. If the City is unable to fund this Agreement in its entirety, the City will notify the County in writing at least 60 days prior to any proposed changes regarding the level of service set forth in Exhibit A. The County will make a reasonable effort to accommodate the service level changes requested by the City.

4. Reporting.

A. Activity Reports. Each month the County will provide standard reports to the City through the Chief of Police, reporting the monthly statistical crime and response and community policing information occurring within the City limits. The parties shall meet and confer regarding the content of the monthly reports.

B. Media Releases. The County will prepare news releases concerning major crime investigations within the City and will send a copy of the release to the City within a reasonable time prior to its release to news outlets.

5. Compensation.

A. Contract Amount.

i. City shall pay the County's actual cost to provide the City the general law enforcement services set forth in Exhibits A, B, and C. The term "actual cost" includes the cost associated with absences from work due to sick, vacation, special accrued leave time (SALT), holiday, training and disability leaves or other leaves; and payments made by the County to personnel assigned to City for accrued leave time upon retirement or separation of service.

1. City acknowledges that the City historically has not directly or indirectly compensated the County for the administrative costs incurred by the County in providing the additional staff support services required to provide the services to the City and which administrative costs would not be incurred in the absence of the existence of this Agreement. These so far un-captured support services costs

include, but are not limited to; case, property and records management, crime scene identification, administration, information technology, background checks, internal affairs, human resources, payroll, financial and specialized training. Although the County is not at this time requesting the City to pay administrative costs, the County anticipates budgeting issues may require it to capture those additional costs in the future. The County's administrative costs will be charged to the City, if at all, through an amendment of the Exhibits.

ii. The City shall compensate the County for its services under this Agreement at the rates and in the estimated annual amount forth on Exhibit C, (the "Annual Contract Amount"). At the close of each fiscal year, County shall re-establish the rates and the estimated Annual Contract Amount and revise Exhibit C accordingly.

iii. In the event salaries, wages and benefits of the County officers and employees are changed at a time not coincident with the close of the fiscal year, the rates for salaries and wages set forth in Exhibit C and the rates and estimated Annual Contract Amount shall be readjusted to reflect the appropriate rates. In the event insurance costs for County 's liability or workers' compensation programs are changed at a time not coincident with close of the fiscal year, the reimbursement rates for County 's liability program set forth in Exhibit C shall be readjusted to reflect the appropriate amounts, which the City shall pay effective 30 days after written notification to City.

iv. City shall pay the County's insurance costs attributable to the services provided under this Agreement, including but not limited to, general liability, self-insurance, unemployment and worker compensation.

v. The City shall pay its share of the accumulated leave accrual of the Chief of Police upon that employee vacating the Chief of Police position for any reason. The City's share shall be defined as the percentage of time assigned to the City of the total actual leave accrual.

B. Billing.

i. 30 days after the close of each calendar month, County shall deliver to City a statement covering 1/12 (one-twelfth) of the estimated Annual Contract Amount and City shall pay County the amount stated thereon within 30 days after receipt of the statement. At the end of each quarter (March, June September, and December) County shall calculate its actual cost to provide services under this Agreement for that quarter and provide a quarterly statement of actual costs to the City. At the close of the fiscal year the County will provide the City with a final reconciliation ("true-up") showing the amount due either party. The party owing shall pay the other party within 30 days after issuance of the final reconciliation statement.

ii. Notwithstanding any provision of law to the contrary, including, but not limited to section 907 of the California Government Code. If any amount due to County from City is not received by County within 30 days after the date of billing, County may

satisfy such indebtedness from any and all funds of City collected by County, after giving written notice to City of County's intention to do so.

6. Revenues.

A. All revenues currently received by the City as revenue pertaining to police services or generated by police services will continue to be City revenue with the exception of Peace Officer Standards and Training (POST) reimbursement, Police Reserve revenue and individual booking fee recovery revenue. The County makes no commitment to any revenues other than that the revenues will not be diverted for County use by this Agreement, except for those excluded above.

B. Booking fees may be charged to City for arrests made by deputy sheriffs assigned to the City Police Services if the County charges Booking Fees to the other nine cities as outline in Government Code Section 29550, AB1805 – Booking Fee Solution and County Code Section 4.52.010.

C. The proceeds from incidental asset forfeitures that occur in the City by a City assigned deputy shall be allocated to the "law enforcement agency" or City pursuant to California asset forfeiture laws. Any proceeds from a planned activity that occurs in the City over which the County has full control will be shared equally between the City and Sheriff unless otherwise agreed upon in advance. The proceeds from a planned and coordinated activity that occurs in the County jurisdiction, from an incident that originates within the City will be shared equally between the County and City. If assistance is provided to any other law enforcement agency either in the City or outside the City, by deputies who are on duty within the City, the County will make a good faith effort to obtain a share of any forfeiture proceeds for the City to offset any use of the officers. The City agrees that all money received under this provision will be used only as authorized in sections 11470 *et seq.*, of the California Health and Safety Code.

7. Organization. County will provide the services to be performed herein through the following staffing:

A. Chief of Police.

i. Appointment Process: The position of Chief of Police will be filled in accordance with County policy and employee collective bargaining unit contracts. The County shall provide a list of Lieutenants qualified to serve as the Chief of Police for the City. The City may interview the candidate(s) and provide the County with the City's recommendation of the candidate to be appointed as the Chief of Police. After considering the recommendations of the City, the County will assign a Lieutenant who will act as the Chief of Police (the "Chief of Police").

ii. Replacement Process. The County may replace the Chief of Police after 90 days written notice to the City. The County will remove the Chief of Police within 30 days of receipt of a written request from the City stating the reasonable cause for said request. Upon the City's request, the County shall temporarily appoint a person as acting Chief of Police and fill a vacant Chief of Police position within 60

days of receipt of the City's request and in accordance with County policy and employee collective bargaining unit contracts as described in 7(A)(i).

iii. Service Expectations. The Chief of Police will generally manage law enforcement activities on behalf of the City. The Chief of Police will coordinate the delivery of law enforcement services under this Agreement and manage and supervise the personnel assigned to provide law enforcement services to the City. The Chief of Police, or designee, will attend all City Council meetings and will be available to City Staff at all reasonable times. The Chief of Police will meet with City officials on a periodic basis, the frequency of which will be determined by the City, to assure local control over the quality and service and to identify goals and programs to create a safer community.

B. Assigned Sergeants. In addition to the Chief of Police, the County may assign one or more Sergeants to work within the City to assist the Chief of Police to assist with the supervision of other assigned personnel, and to provide law enforcement services to the City. The number of Sergeants assigned shall be indicated in Exhibit A.

C. Assigned Deputies. The County shall assign Deputy Sheriffs to provide law enforcement services to the City, in the number indicated in Exhibit A.

D. Other Staff. The County shall assign other departmental staff necessary to provide the law enforcement services required to be performed herein as indicated in Exhibit A.

8. Administration of Personnel.

A. Independent Contractor. The County is acting as an independent contractor under this Agreement so that:

i. This agreement does not create any relationship of employer or employee, or principal and agent between City and County or any of County's agents or employees. All persons employed in the performance of this Agreement shall be employees of County for all purposes. No person employed by County hereunder shall have any status, right or privilege of City employees, including, but not limited to, City pension, or City civil service.

ii. No officer, employee or department of County shall perform for City any law enforcement service or function not coming within the scope of the duties of such officer, employee or department in performing such services or functions for County.

iii. The planning, organization, scheduling, direction, supervision, standards of performance and discipline of Sheriff's personnel and all other matters incidental to the delivery of general Law Enforcement Services to the City shall be at the sole discretion of the County and the Sheriff. The Sheriff shall retain exclusive authority over the activities of his or her personnel and equipment working in the City.

iv. The night, day and evening patrol, supervisory and clerical shifts shall be established by the Sheriff after consultation with the City Manager.

v. All employment matters relating to County employees assigned to the City will be handled in accordance with County policy and procedures and employee bargaining unit contracts, including, but not limited to, officer complaints, discipline, promotion and duty assignments.

vi. Any pay for performance review of County personnel assigned to provide services under this Agreement shall follow the procedures of the County and the Stanislaus County Sheriff's Management Association (SSMA). The City may participate in the performance reviews of the assigned Chief of Police as an evaluator, by notifying the County of their assignment of one or more of the following participants or their designee: the City Manager, the Mayor, or City Council member.

vii. The Sheriff shall give prompt consideration to all requests of the City regarding the delivery of general Law Enforcement Services. The Sheriff shall make every effort to comply with these requests if they are considered within good law enforcement practices.

viii. In the event of a dispute between parties regarding the extent of the duties and functions to be rendered or the minimum level or manner of performance of such services, the determination made by the Sheriff shall be final and conclusive.

B. City's Right to Request Replacement Personnel. The City shall have the right to request the County to replace County personnel assigned to provide services under this Agreement, provided such request is made for reasonable cause.

C. Sick Leave Temporary Replacement. If an assigned employee is absent from duty due to illness or injury for longer than 80 consecutive hours, the County may provide a replacement if available in accordance with Exhibit A.

D. Disciplinary Temporary Replacement. If an assigned employee is absent from duty due to a disciplinary action for longer than 24 hours, the County may provide a replacement in accordance with Exhibit A.

E. Annual Leave. If an assigned employee is absent from duty for annual leave, a planned absence, or an unplanned absence, for a period of 80 consecutive hours, the County may provide a temporary replacement until such time as the assigned employee is able to return to duty.

F. Vacancies. Any vacancies will be filled using the County's procedures for filling vacancies within the Sheriff's Department as defined in Department policy or Personnel Memorandum of Understanding (MOUs). New officers assigned will receive appropriate orientation regarding special characteristics and needs of City. The term of an employee's assignment will comply with the applicable Personnel MOU.

G. Staffing. The County shall ensure that a minimum of one patrol deputy (the "Primary

Patrol") is on duty within the City limits at all times, except when the deputy is out of the City to transport a prisoner to the County jail, attend court, completing a traffic stop that begins in and terminates out of the City limits or when providing backup or mutual aid to another law enforcement officer or at the direction of the Sheriff or designee.

i. Temporary staffing absences of the Primary Patrol deputy will be filled with existing City Police Services deputies and if none is available, then with Sheriff deputies on straight time, and if none is available, Sheriff deputies on overtime.

ii. All personnel assigned to the City, including the Primary Patrol deputy, may assist with incidents outside the City limits involving critical and life threatening situations. However, if a critical incident occurs in the City while the personnel are assisting outside the City limits, the County will either dispatch additional forces to the City or will release the assigned personnel to respond.

9. City Responsibilities. In support of the County providing the law enforcement services described herein, the City promises:

A. Municipal Authority. The city hereby confers municipal police authority on such County employees as might be engaged in enforcing City ordinances within City boundaries.

B. Criminal Justice Services. The City shall provide the criminal justice system services necessary to support this Agreement attributable to the enforcement of state and municipal laws within the City.

C. Supplies. The City shall supply at its own cost and expense any special stationery, supplies, notices, forms, logos, insignias, name tags, badges, and/or uniforms which are to be issued in the name of the City.

D. Facilities. The City shall furnish at its own cost and expense office space reasonably deemed necessary by the Sherriff to provide the law enforcement services herein described and all furniture and furnishings, office supplies, janitorial service, HVAC, upkeep and maintenance, and utilities.

10. Equipment and Vehicles.

A. Vehicles.

i. Pursuant to the first contract between the County and City for law enforcement services, the City transferred title to certain vehicles and installed equipment to the County. The original vehicles and their replacements, are identified in the Property Inventory attached hereto as Exhibit B.

ii. Upon termination of this Agreement the County will transfer to the City title for vehicles similar to those identified as the vehicles originally transferred to the County in Exhibit B, excluding any enhancements added to the vehicle and paid for by the County. Similar vehicles are defined as a vehicle having the same

functionality, upgrades and mileage within ±5,000 miles of the current mileage of the vehicle in use. Any vehicle being leased by the County at the time of termination that is assigned to City, will not be replaced but the City will be provided the option of taking over the lease from County if no other similar vehicle is available.

iii. Any vehicles purchased using City funds during the Term of this Agreement shall be added to Exhibit B. Exhibit B shall be reviewed annually by the Parties and if necessary will be updated to reflect the deletion of vehicles no longer needed for law enforcement service and returned to the City and the addition of any vehicles provided by City or purchased with City funds.

iv. Vehicles shall be used to provide to law enforcement services at the discretion of the Sheriff or designee and in compliance with the Sheriff's Department policies.

v. The City shall reimburse the County for the actual cost to operate any vehicle used in the performance of the law enforcement services provided herein, (herein after the "Vehicle Cost Reimbursement"). The cost included in the Vehicle Cost Reimbursement amount includes, but is not limited to: fuel, maintenance, replacement costs, financing costs, fleet services and costs of insurance.

vi. County shall invoice City monthly for the estimated Vehicle Cost Reimbursement. The estimated Vehicle Cost Reimbursement will be computed annually on a cost per mile basis and will be the same as the vehicle operating costs calculated for other County vehicles in the same class, plus an additional charge for the cost of insurance. The actual Vehicle Cost Reimbursement will be calculated quarterly (March, June, September, and December). The Parties will "true-up" the estimated cost with the actual cost at the close each fiscal year. The current estimated Vehicle Cost Reimbursement rates are shown in Exhibit C and shall be updated each fiscal year by the County.

vii. City shall provide to, or reimburse County for, any decals or special signage that is used to distinguish the vehicles with City markings.

viii. The estimated Vehicle Cost Reimbursements shall be billed separately and trued-up at the end of each quarter per Section B, Billing..

ix. Vehicles will be replaced according to the County's General Services Agency Fleet Services Policy, as approved and adopted by the Board of Supervisors from time to time. The March 12, 2013, Fleet Services Policy established the following minimum guidelines consistent with current/historical trend analysis to quantify planning for the replacement of County Vehicles.

Vehicle Type	Years	Miles
Patrol vehicles	5	100,000
Sedan, passenger minivans (Detectives/Chief)	8	100,000

Light truck/van, medium truck	10	100,000

x. Other factors used in evaluating replacement include vehicle condition, maintenance/cost history, and suitability for current use. With respect to necessary repairs, consideration will be given to the cost of such repairs and impact on the vehicle's useful life, compared with the cost of acquiring a new vehicle in order to determine the most cost-effective option. Specialty vehicles will be evaluated on a case-by-case basis. The Fleet Manager may extend the life of a vehicle on a year-to-year basis so long as the vehicle is safe and reliable, and meets all required emission standards. Upon termination of this Agreement, the City shall not be entitled to that portion of the Vehicle Cost Reimbursement collected from the City allocated to the replacement of the vehicles.

B. Motorcycles.

i. If the City desires to have motorcycle officer(s) assigned to the City, the City will fund 100% of the purchase, equipment, repair, maintenance, and insurance. The County will not charge a per mile replacement fee for the motorcycle(s). At the end of the motorcycle(s)' useful life, should the City wish to continue motorcycle operations, the City will fund 100% of a replacement motorcycle(s).

ii. Motorcycle(s) will be taken out of service following minimum guidelines consistent with current/historical trend analysis to quantify planning for the replacement of motorcycle(s) at approximately 40,000 miles or end of manufactures warranty.

iii. The motorcycle will be registered to the County. County agrees that upon termination of this agreement the County will transfer ownership of motorcycle(s). Excluded are any enhancements added to the vehicle and paid for by the County.

iv. The County through County's Fleet Manager will maintain the service records of the motorcycle(s) and assign a County vehicle number. County may use a certified motorcycle service center to make the repairs and maintenance of the motorcycle(s). County shall invoice City at least quarterly for each motorcycle(s) providing police services to City. Said cost will include gasoline, repairs, and maintenance and insurance costs of each motorcycle. City agrees to provide to, or reimburse, County for any decals or special signage that is used to distinguish the motorcycle(s) with City markings. Actual motorcycle(s) costs for gasoline, repairs and maintenance will be "trued up" quarterly (March, June, September and December). This "true-up" method will be utilized to close each fiscal year for those items listed in Exhibit C.

v. The County will provide a certified employee who will be assigned as the City's motor officer. Motorcycle(s) shall be used to provide to law enforcement services at the discretion of the Sheriff or designee and in compliance with County, Sheriff's Department and City policies.

C. Equipment.

i. The County shall purchase those supplies, equipment, services and materials needed for the performance of law enforcement services within the City limits, and the City shall reimburse the County for the cost to procure.

ii. Equipment purchased by the County at the cost of the City shall be placed on the Property Inventory attached hereto as Exhibit B. The City has provided to the County certain police equipment, which is included in the Property Inventory shown on Exhibit B. Exhibit B shall be reviewed annually and if necessary will be updated to reflect the deletion of items no longer needed for law enforcement service and returned to the City and the addition of any equipment provided by City and all other equipment purchased at the City's expense.

iii. Any equipment purchased using City funds will be used in performance of the law enforcement services in the City and will not be used for non-City functions, except for mutual aid situations, unless authorized by the City Manager. City equipment will be maintained in a manner, and replaced at the City's cost and expense at a point in time that is consistent with the customary maintenance and replacement schedule for like equipment provided by the County in policing the unincorporated areas.

iv. Upon termination, and subject to the Transition Plan referred to in paragraph 2 of this Agreement, the County will return to the City those items identified in Exhibit B, or equipment of equal or similar value, except those items that have reached the end of their useful life or is non-serviceable.

v. County will advise City when any item listed in Exhibit B is no longer needed or becomes non-serviceable.

11. Liability and Indemnification.

A. County's Obligation. City, its officers and employees, by this Agreement, shall not assume any liability for the direct payment of any salary or wages to any County officer or employee performing services hereunder for City, nor for the direct payment of compensation or indemnity to any County officer or employee for any injury to or illness of such officer or employee arising out of their employment by County, and County shall hold harmless, defend and indemnify City, its officers and employees, against any and all costs, expenses, claims, suits and liability for bodily and personal injury to or death of any person and for injury to or loss of any property resulting therefrom or arising out of or in any way connected with any negligent or wrongful acts or omissions of County, its officers and employees, in performing or authorizing the performance of or in failing to perform or authorize the performance of any work, services or functions provided for, referred to in or in any way connected with any work, services or functions to be performed under this Agreement.

B. City's Obligation. County, its officers and employees, by this Agreement, shall not assume any liability for the negligent or wrongful acts or omissions of City, nor of any

officer or employee thereof, nor for any dangerous condition of the streets, public work, or property of City, and City shall hold harmless, defend and indemnify County, its officers and employees, against any and all costs, expenses, claims, suits and liability for bodily and personal injury to or death of any person and for injury to or loss of any property resulting therefrom or arising out of or in any way connected with any negligent or wrongful acts or omissions of City, its officers and employees, in performing or authorizing the performance of or in failing to perform or authorize the performance of any work, services or functions provided for, referred to in or in any way connected with any work, services or functions to be performed under this Agreement.

C. City Ordinances. Notwithstanding the forgoing, the County does not assume liability or responsibility for or in any way release the City from any liability or responsibility that arises in whole or in part from the enforcement of City ordinances, rules or regulations. In any case, claim, suit, action or administrative proceeding in which the enforceability and/or validity of any such City ordinance, rule or regulation is at issue, the City shall defend and indemnify and hold harmless the County, and its officers and employees, against any and all costs, expenses, claims, suits and liability that arises in whole or in part from enforcement of City ordinances, rules or regulations.

D. Injuries to County Employees. Notwithstanding the forgoing, County warrants that it is insured, or is permissibly self-insured, for workers' compensation coverage and agrees that its employees providing services to City pursuant to this Agreement will be covered by County's workers' compensation program or insurance for all injuries arising out of or occurring in the course and scope of their employment. Furthermore, County shall not pursue any action against City, including, but not limited to an action for subrogation, if a County employee performing service pursuant to this Agreement obtains worker's compensation benefits which may be or are attributable to the conduct or alleged negligent or wrongful act or omission of City, its officers and or employees, or dangerous conditions of the street or property of City.

12. Default.

A. Cure. In the event a party to this Agreement fails to perform pursuant to the terms and conditions of this Agreement, the party to whom an obligation is owed will provide the non-performing party with at least 30 days prior written notice of said non-performance, upon which the non-performing party will have the opportunity to comply with the request for performance, or in the event of continued non-performance, the parties shall have the right to then pursue any and all available legal remedies.

B. Failure to give Notice. Failure to give, or delay in giving, Notice of Default shall not constitute a waiver of any obligation, requirement or covenant required to be performed hereunder. Except as otherwise expressly provided in this Agreement, any failure or delay by either Party in asserting any rights and remedies as to any breach shall not operate as a waiver of any breach or of any such rights or remedies. Delay by either Party in asserting any of its rights and remedies shall not deprive such Party of the right to institute and maintain any action or proceeding which it may deem appropriate to protect, assert or enforce any such rights or remedies.

13. Attorney Fees. In the event that a party to this Agreement commences litigation to enforce the performance of this Agreement, the prevailing party shall be entitled to an award of its costs of litigation, including the cost of expert and attorneys' fees.

14. Notices.

A. Any notice or notices provided for by this Agreement to be given or served upon the County shall be given or served by letter deposited in the United States Mail, postage prepaid and addressed to:

Stanislaus County Sheriff's Department
250 E. Hackett Rd
Modesto, CA 95358

B. Any notice or notices provided for by this Agreement to be given or served upon the City shall be given or served by letter deposited in the United States Mail, postage prepaid and addressed to:

City of Hughson
7018 Pine Street
Hughson, CA 95326

15. Audits.

A. Pursuant to Government Code section 8546.7, City and County shall be subject to examination and audit by the State Auditor for a period of 3 years after final payment by City to County under this Agreement. City and County shall retain all records relating to the performance of this Agreement for said 3 year period as a minimum.

B. County agrees that relevant records shall be made available to the City to audit and examine if the City requests such audit and examination by contacting the Sheriff or his representative at least 10 working days prior to the commencement of the audit and examination.

16. Necessary Acts. The parties to this Agreement hereby authorize their respective officers and employees to do all things reasonably necessary to accomplish the purposes of this Agreement.

17. Designations. County designates the Sheriff of Stanislaus County, or his designee, to represent County in all matters pertaining to the administration of this Agreement. The City designates its City Manager, or his designee, to represent City in all matters pertaining to the administration of this Agreement. Both City and County will provide the full cooperation and assistance of its officers, agents, and employees to each other in performance of this Agreement.

18. Modification Only in Writing. This Agreement may not be modified, amended, changed,

added to, or subtracted from by the mutual consent of the parties hereto if such amendment or change is not in written form and executed with the same formalities as this Agreement and attached to the original Agreement to maintain continuity. Notwithstanding anything to the contrary, no oral agreement or directive from or between either Party, or their designees shall operate to amend or change the terms of this Agreement.

19. Entire Agreement. This Agreement contains the entire Agreement of the parties, and no representations, inducements, promises, or agreements otherwise between the parties, not embodied herein, or incorporated herein by reference shall be of any force or effect. Notwithstanding anything to the contrary, no term or provision hereof may be changed, waived, discharged, or terminated unless the same is in writing executed by the parties above.

20. Severability. If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction, or if it is found in contravention of any federal, state or County statute, ordinance or regulation, the remaining provisions of this Agreement or the application thereof shall not be invalidated thereby and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

21. Precedence. The contract documents consist of this Agreement and Exhibits A, B and C. In the event of a conflict between or among the contract documents, the order of precedence shall be the Exhibits and then the provisions of the main body of this Contract, i.e., those provisions set forth in the recitals and articles of this Agreement.

22. No Third Party Beneficiary. This Agreement shall not confer third party beneficiary status on any non-party, including the citizens of either Party.

23. Successors and Assigns. This Agreement shall be binding on and enforceable by and against the parties to it and their respective heirs, legal representatives, successors and assigns.

24. Duplicate Counterparts. This Agreement may be executed in any number of counterparts, and each such counterpart, executed telecopy, fax or photocopy shall be deemed to be an original instrument, but all of which together shall constitute one and the same Agreement.

25. Legal Requirements. The Parties shall comply with all applicable federal, state, and local laws in performing this Agreement.

26. Venue. The laws of the State of California shall apply to the construction and enforcement of this Agreement. Any action at law, suit in equity, or judicial proceedings for the enforcement of this Agreement or any provision hereto shall be in the Superior Court of Stanislaus County.

Signatures on following page:

IN WITNESS WHEREOF, the Parties have executed the Agreement in the County of Stanislaus, State of California.

COUNTY OF STANISLAUS

By: _____
Vito Chiesa, Chairman
Board of Supervisors

Date: _____

ATTEST:
Christine Ferraro Tallman,
Clerk of the Board

By: _____
Deputy Clerk

APPROVED AS TO CONTENT:

By: _____
Adam Christianson,
Sheriff

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: _____
Thomas E. Boze,
Deputy County Counsel

CITY OF HUGHSON

By:_____
Matt Beekman,
Mayor

Date: _____

ATTEST:

By: _____
Dominique Spinale,
Deputy City Clerk

APPROVED AS TO CONTENT:

By: _____
Raul L. Mendez,
City Manager

APPROVED AS TO FORM:

By: _____
Dan J. Schroeder,
City Attorney

EXHIBITS A, B, & C
TO
STANISLAUS COUNTY
LAW ENFORCEMENT SERVICES
AGREEMENT

City of Hughson
(2013-2016)

EXHIBIT A

CITY OF HUGHSON
GENERAL LAW ENFORCEMENT
SERVICE LEVEL
REQUEST

1. City Request. City requests the County to perform the general law enforcement services listed here below at the staffing level shown. The Sheriff and the City Manager have discussed and agree to the services and staffing levels described below.

2. Property Inventory. The Sheriff and the City Manager have reviewed the Property Inventory attached as Exhibit B and agree that it is accurate and complete.

3. Contract Rates. The Sheriff and the City Manager have reviewed the Contract Rates attached as Exhibit C and accept those rates.

4. Services to be Performed. County will provide to City the following General Law Enforcement Services:
   a. Patrol, Investigation, Traffic and all Auxiliary and Technical Service, case, property, and records management, crime scene identification, administration, information technology, backgrounds, internal affairs, human resources, payroll, financial and specialized training.

5. Excluded Services: Any services of which the County may be a party, such as a J.P.A. or task force M.O.U., such as, S.D.E.A, StanCATT, Cal-MMET, HIDTA, and SR911.

6. Ancillary Services: County will provide the following ancillary Services: STARS Program; Reserve Program.

7. Special Events: The City and County shall share equally the cost of law enforcement services for the annual "Hughson Fruit and Nut Festival."

8. Staffing Level. The staffing level which will be provided is as follows:

Patrol	Four Primary Patrol deputies (one deputy on A & B squads, both day and graveyard shifts).	Backfill One 24/7, 365 days
Swing	One deputy on swing shift 4/10 schedule.	No backfill
Sergeant*	50% of a Sergeant split between the City and the City of Waterford, Swing shift	No backfill
Chief*	33% of a Chief of Police, normal business hours, split between the County, the City, and the City of Waterford.	No backfill
Clerical	One, normal business hours, 8 hours/day, 5 days/week.	No backfill

a. * The Chief of Police will have split duties and responsibilities and will split time between the County, the City and the City of Waterford. The Sergeant will split time between the City and the City of Waterford. The cost of these positions shall be allocated as shown below. The County will ensure that the Chief of Police and Sergeant divides his/her time in a manner that ensures the proper management of the City law enforcement services. If the time allocation changes, the parties will meet and confer in good faith and adjustment this cost sharing formula in accordance with their mutual agreement.

	CITY of Hughson	COUNTY	CITY of Waterford
Chief of Police	33%	34%	33%
Sergeant	50%	0%	50%

9. Facilities: The City shall provide the existing police facility at 7018 Pine Street, Hughson, for the County to conduct law enforcement services.

APPROVED AND ACCEPTED BY:

STANISLAUS COUNTY SHERIFF: CITY MANAGER:

By: _____ By:_____

Adam Christianson, Sheriff

Raul L. Mendez, City Manager

Date: _____ Date: _____

EXHIBIT B
HUGHSON POLICE SERVICES
PROPERTY INVENTORY
AS OF JUNE 2013

Vehicle inventory per original agreement in 2001:

1. 1997 Ford Crown Victoria #PD1, Patrol Vehicle (#97-901) 73,993 miles
2. 1998 Ford Crown Victoria #PD2, Patrol Vehicle (#98-902) 46,110 miles
3. 2000 Ford Crown Victoria #PD3, Patrol Vehicle (#00-903) 18,851 miles
4. 2000 Ford Crown Victoria #PD4, Patrol Vehicle (#00-904) 3,038 miles

Current vehicle inventory as of May 2013:

1. 2007 Ford Crown Victoria #07-07 Patrol Vehicle 80,877 miles
2. 2009 Ford Crown Victoria #09-18 Patrol Vehicle 47,077 miles
3. 2009 Ford Crown Victoria #09-20 Patrol Vehicle 49,095 miles
4. 2009 Ford Crown Victoria #09-49 Patrol Vehicle 80,625 miles

The following inventory of the major items of the Police Department:

Office: Chief

1. 1-black leather chair **(In Records)**
2. 1-Motorola HT 750 portable radio, serial #672TAW2150, with charger **(Listed in 2007 Inventory)**
3 1-Streamlight flashlight SL20, serial #UG729855 with charger

Office: Lieutenant (Fidel's Office)

1. 1-Streamlight flashlight SL20, serial #00233445, with charger
2. 1-Streamlight Stinger flashlight, serial #279402, with charger
3. 4-locking drawer file cabinets **(In Records)**
4. 1-Hale meg-a-phone, serial # 21269 **(Still have)**
5. 1-Bogen tripod, serial #none **(Still have)**
6. 1-Motorola portable radio HT750, serial #672TANU940 **(Listed in 2007 Inventory)**
7. 1-Panasonic pencil sharpener, serial # none **(Report Writing Room)**
8. 1-black riot style helmet
9. 3-blue cloth wood chairs **(Lobby)**
10. 1-wooden coffee table **(Lobby)**
11. 1-Rugged Exposure Binoculars 12 x 50 serial #none, with case

Office: The Locker Room)

1. 1-Motorola HT750 portable radio w/charger serial #672TANU943**(Listed in 2007 Inventory)**
2. 1-Brown Cloth Desk Chair **(Locker Room)**
3. 1-Streamlight SL20 Flashlight w/charger serial #00233446
4. 1-Riot Helmet

Interview Room:

1. 1-Motorola HT 750 portable radio, serial #672TAW2149, with charger & mic **(Listed in 2007 Inventory)**
2. 1-Motorola HT 750 portable radio, serial #672TANN510, with charger & mic **(Listed in 2007 Inventory)**
3. Streamlight SL20 flashlight, serial #00233438 with charger
4. Streamlight SL20 flashlight, serial #00233439 with charger
5. 1-black riot style helmet
6. 1-gray 4 drawer file cabinet

Office: Computer Room

1. Mitron System MSC300T (Radar Data Recorder Device) serial #60309**(In Fidel's Office)**
2. Wood Table w/sliding doors **(Under Refrigerator in Patrol Room)**

3. Metal File Organizers
4. Upright 2 door metal cabinet **(In Locker Room behind door)**
5. Wooden Fixed Finger Print Kit **(In Records)**
6. Wall Mount Corkboard **(On wall in Patrol Room)**

Office: Patrol Room

1. Motorola HT 750 portable radio serial #672TAW2102 with charger & mic **(Current Inventory)**

Office: C.L.E.T.S. Room (Extra Help Station)

1. Pelouze Pelstar 5 Brown Scale Digital**(Evidence Room)**
2. 2-Blue Cloth chairs **(Chief's Office)**
3. Rugger Exposure Binoculars
4. Sharp ELZ603G Calculator serial #3C049336 **(Chief's Office)**

Manufacturer	Model	Caliber	Action	Finish	Serial Number
Remington	870	12 Gauge	Pump	Blue	W793194M
Remington	870	12 Gauge	Pump	Blue	W223517V
Remington	870	12 Gauge	Pump	Blue	W100894V
Remington	870	12 Gauge	Pump	Blue	V793203V
Remington	870	12 Gauge	Pump	Blue	V682925V
Remington	870	12 Gauge	Pump	Blue	V679530V
Remington	870	12 Gauge	Pump	Blue	T336643V
Remington	870	12 Gauge	Pump	Blue	T198803V
Colt LE	AR-15				LBD017190
Colt LE	AR-15				LBD017241
Colt LE	AR-15				LE004534
Colt LE	AR-15				LE004778
Colt LE	AR-15				LE005153
Colt LE	AR-15				LE005156

Purchased in 2002 with H-Bar AR-15's and were later modified by Sheriff's Office Armory.

County Oracle Inventory Records January 2013:

Asset Tag#	Asset Description	Serial Number
86150	Kardex Shelving	N/A
	Access Security System	N/A
87301	Security System with Cameras	N/A
82658	Motorola XTS1500 Portable	687TGWE029
82661	Motorola XTS1500 Portable	687TGWE027
82663	Motorola XTS1500 Portable	687TGWE028
82669	Motorola XTS1500 Portable	687TGWE025
82672	Motorola XTS1500 Portable	687TGWE023
82678	Motorola XTS1500 Portable	687TGWE024
86688	Stalker Radar	5854

MODEL	SERIAL #	MODEL #	
DEPUTIES'S OFFICE			
CANNONDALE BICYCLE	R026076		
CANNONDALE BICYCLE	R027545		
CANON DIGITAL CAMERA		EOS1	
COMPUTER SPEAKERS	11870ALUS0021855		
HP SCANJET 5550C SCNNER	SG41X3108R		
HP SCANJET SCANNER	CN18M1G11W		
IN FOCUS PROJECTILE	AHHP40300148		
JUMP START CHARGER		38391	
KEYBOARD	KFKEA4SA		
LASER JET 2200DN PRINTER	JPBGC20580		
MEGA PHONE	M21269		
MICROSOFT MOUSE		1013	
MICROSOFT WIRELESS MOUSE		1008	
SONY CAM CORDER		449694	
SONY KEYBOARD	E97600		
SONY MONITOR	SDMH593		
SONY TOWER		3015577	
STALKER RADAR	SP008019		
TINT METER INSPECTOR	LL2960027282		
TOSHIBA TV	91582230A	MV20FM3	
LOCKER ROOM			
8PORT GIGABIT SWITCH	SRW2008P		
ACER MONITOR		95202314943	
DELL KEYBOARD	ON242F		
DELL MOUSE	10P027LG		
DELL TOWER	BZJ1VK1		
REGULATED POWER SUPPLY	RPS1210		
WIRE OUTLET		9300776	
PATROL ROOM DESK			
HP MONITOR	CNP514J33Q		Lease
HP MOUSE		308059452	
HP TOWER	2UB5200C1R		Lease
IMPRES ADAPTIVE CHARGER`	V340WPLN4114AR		
MOTOROLA BATTERY	003AUC2NTN9858C		
MOTOROLA XTS PORT RADIO	407CKT6678		
CLETS DESK			
DELL KEYBOARD	035KKW		
HP MONITOR	CNP514J2W		Lease
HP TOWER	2UB4460B3		Lease
KODAK EASY SHARE	KCGET61006506		
LOGITECH MOUSE	LHL01558655		
DEPUTY'S DESK			
CHARGER	CH002234		
HP KEYBOARD		355630001	Lease

HP MONITOR	CNP512X1PK		Lease
HP MOUSE		323614001	
HP TOWER	2UB5200C1Q		Lease
IMPRES RADIO CHARGER	3776739267MKV03		
MOTOROLA PORTABLE RADIO	407CKT6728		
STALKER II RADAR	AS005854		

DEPUTY'S DESK

HP KEYBOARD		43502001	Lease
HP MONITOR	CNP514J33F		Lease
HP MOUSE		417966001	
HP TOWER	2UA81308BJ		Lease
PROVIEW MONITOR	F6MZ51117974U		

DEPUTY'S DESK

BOSTITCH STAPLER	103J62T		
HP COLORLASERJET4600DB	JPHMF46326		
HP KEYBOARD		352750001	Lease
HP MONITOR	CND8082V30		Lease
HP MOUSE		417966001	
HP TOWER	2UB52005CF		Lease
OLYMPUS RECORDER			100154023
POLYCOM	H8084102B75C		
XEROX HOLE PUNCH	SN031505		

PATROL'S SUPPLY ROOM

SUNBEAM SCALE	MODEL DC4102		

RECORDS

FELLOWES	HRL125041207WB0010738		
FUJITSU SCANNER		523284	
HP MONITOR	CND8082V2J		Lease
LOGITECH KEYBOARD	MCT24411563		
MICROSOFT TOWER		23065028	
MOTOROLA STATIONAL RADIO	GCN6113B		
PANASONIC PENCIL SHARPENER	KP100		

CLERK'S DESK

ATTECH COMPUTER	00300820	City Tag #05059	
AVAYA HEADPHONE	BG957139		
HP KEYBOARD		352750001	Lease
HP LASERJET1200 SERIES	CNBRH68268		
HP MONITOR	CNP512X1PV		Lease
MICROSOFT MOUSE	X0800412106		
PANASONIC ELECTRIC STAPLER		234293	

CHIEF'S OFFICE

HP KEYBOARD	BC2AA0ES9VPM2Q		Lease
HP MONITOR	CNP512X1XW		Lease
HP TOWER	2UA81308BK		Lease

MICROSOFT WIRELESS MOUSE	2003DJPD0169
TECH SOLUTIONS SHREDDER	???

ARMORY

GLOCK 22	FCH718
GLOCK 22	FCH717

RADIOS

MOTOROLA PORTABLE RADIO	672TANU940
MOTOROLA PORTABLE RADIO	672HFJ6725
MOTOROLA PORTABLE RADIO	672TAW2102

MISCELLANEOUS

EXHIBIT C
HUGHSON POLICE SERVICES – CONTRACT RATES

			Budget 2012/2013	Budget 2013/2014	Budget Variance	Var %
Staffing						
Lieutenant/Chief (No Backfill)			0.33	0.33	0.00	0%
Sergeant/Swing (No Backfill)			0	0.5	0.50	
Deputy Sheriff/Patrol (Backfill)			4	4	0.00	0%
Deputy Sheriff/Swing (4/10 schedule)			1	1	0.00	0%
Legal Clerk III (No Backfill)			1	1	0.00	0%
Total Officers including Lieutenant			5.33	5.83	0.50	9%
Officers per 1,000 based on Population of	6,799		0.78	0.86	0.07	9%
	FTEs					
Lieutenant/Chief (No Backfill)	0.33		60,653	64,096	3,443	6%
Sergeant/Swing (No Backfill)	0.5		-	73,000	73,000	#DIV/0!
Deputy Sheriff/Patrol (Backfill)	5		443,609	495,220	51,611	12%
Deputy Sheriff/Swing (4/10 schedule)	1		118,612	118,495	(117)	0%
Legal Clerk III (No Backfill)	1		75,835	75,006	(829)	-1%
Total Salary and Benefits			**698,709**	**825,817**	**127,108**	**18%**
Overtime and Extra Help (Backfill, Grants, School, Security events)			**173,090**	**82,582**	(90,508)	-52%
Service, Supplies and Other Charges			**62,370**	**63,514**	1,144	2%
SR911 Dispatch Services			**112,761**	**104,120**	(8,641)	-8%
Patrol Vehicle Charges (Rates below)		**Estimated:**	**45,300**	**45,300**	-	0%
Admin Fee			**-**	**-**	-	
Total Cost of City Contract			**1,092,230**	**1,121,333**	**29,103**	**(0.4)**
Revenues:						
City payment to County			846,713	1,004,715	158,002	19%
Grants, School. Security contractual events			21,299	16,923	(4,376)	-21%
SLESF			190,000	99,695	(90,305)	-48%
County Paid Lieutenant 11%			20,218	-	(20,218)	-100%
County Paid Backfill			14,000	-	(14,000)	-100%
Total Revenue			**1,092,230**	**1,121,333**	**29,103**	3%

Type of Vehicle	Fuel, Repairs & Maint per mile	Replace-ment per mile	Toal
Patrol Car	$ 0.63	$ 0.26	$ 0.89
Intermediate Sedan	$ 0.29	$ 0.18	$ 0.47
Full Size Sedan	$ 0.45	$ 0.22	$ 0.67
SUV Patrol	$ 1.04	$ 0.34	$ 1.38

CITY OF HUGHSON AGENDA ITEM NO. 6.3
SECTION 6: NEW BUSINESS

Meeting Date: October 28, 2013
Subject: Consideration of Resolution No. 2013-32, a Resolution of the City Council of the City of Hughson Adopting an Urban Forest Plan and Resource Guide
Presented By: Thom Clark, Director of Community Development

Approved By: _____

Staff Recommendation:

Adopt Resolution No. 2013-32, A Resolution of the City Council of the City of Hughson Adopting an Urban Forest Plan and Resource Guide.

Background and Overview:

At its regularly scheduled meeting of October 15, 2013, the Hughson Planning Commission recommended to the City Council adoption of the Urban Forest Plan and Resource Guide (Plan). The Planning Commission had previously studied the Plan at its regularly scheduled meeting in August.

An urban forest has many benefits to a city and its residents. Proper management of the forest is important to ensure the long term benefits and increase in value of this important asset. This Plan provides the framework to plan, maintain, and regulate the urban forest in Hughson. The Resource Guide provides detailed information on many trees appropriate to plant in this area and climate, as well as discussing tree management issues tailored to individual species. It is envisioned as a resource guide for residents to use, as well as the City of Hughson.

Additionally, certain grant opportunities require that an Urban Forest Plan is adopted by the jurisdiction before a funding application will be accepted.

The City of Hughson Urban Forest Plan and Resource Guide was developed from a model made available by the City of Waterford. The model was one of many funded by a $900,000 planning grant that the combined planning directors in the County were awarded for a Stanislaus County Planners Toolbox project. Each city and the County are to make a model planning tool of their choosing. Hughson's model is a Climate Action Plan, which is near completion as of this writing.

This Plan was a joint effort between the Community Development Director and Planning Intern, Monet Sheikhali, who is studying architectural engineering and city and regional planning at Cal Poly, San Luis Obispo and provided assistance during the summer months. This Plan would not have been possible to prepare without Ms. Sheikhali’s expertise in mapping.

Fiscal Impact:

There is no fiscal impact associated with this item but adoption of the City of Hughson's Urban Forest Plan and Resources Guide is expected to open up grant writing opportunities for the City in the future.

CITY OF HUGHSON
CITY COUNCIL
RESOLUTION NO. 2013-32

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUGHSON ADOPTING AN URBAN FOREST PLAN AND RESOURCE GUIDE

WHEREAS, an urban forest plan is an important asset and provides many long term benefits to the City and its residents; and

WHEREAS, adopting an Urban Forest Plan and Resource Guide can open other grant opportunities to the City; and

WHEREAS, on October 15, 2013, the Hughson Planning Commission reviewed the Urban Forest Plan and Resource Guide and approved a recommendation that the City Council adopt the plan; and

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Hughson hereby approves the adoption of the City of Hughson's Urban Forest Plan and Resource Guide, attached to this resolution as "Exhibit A".

PASSED AND ADOPTED by the City Council of the City of Hughson at its regular meeting held on this 28th day of October, 2013 by the following roll call votes:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

_____
MATT BEEKMAN, Mayor

ATTEST:

_____
DOMINIQUE SPINALE, Deputy City Clerk

EXHIBIT A

City of Hughson
Urban Forest Plan
and Resource Guide

September 2013

Table of Contents

City of Hughson Urban Forest Plan

Executive Summary

The City of Hughson, along with all nine other jurisdictions within Stanislaus County, was a co-recipient of Proposition 84 funds to prepare plans for the Stanislaus Planners' Toolbox. The City of Waterford initially prepared the Model Urban Forest Plan and Resource Guide. The City of Hughson has taken the model and customized it for our needs as was intended with the Toolbox concept. The resultant City of Hughson Urban Forest Plan consists of several chapters that describe the purpose of the Plan, Plan Goails, Setting, and overall management principles for a city's urban forest program.

This document provides an overall framework for managing City of Hughson's urban and natural forest resources. It is based on the condition of the forest in 2013 and an analysis of trends that have shaped City of Hughson's urban forest to date and will continue to influence it in the future.

A view from the Arboretum

Chapter 1: Introduction

Background and purpose-City of Hughson's Urban Forest

The range of benefits trees provide to an urban environment extend (but not limited) to energy conservation, improving air quality, benefits to social outlook on the city, as well as providing direct economic benefits and urban services.

San Joaquin Valley communities have been among the fastest growing areas in the State of California. The role of urban forests — trees in parks, yards, public spaces, and along streets — in the improvement of environmental quality, increased economic, physical and social health, and fostering of civic pride has taken on greater significance as these communities strived to preserve and improve their quality of life.

Trees make cities more livable in a variety of ways. Some of these are difficult to quantify in economic terms. For example, trees and shrubs can help muffle urban noise, and trees provide important foraging and nesting opportunities for birds and other wildlife. However, it is possible to assign a dollar value to some of the benefits that trees provide, which emphasizes the importance of the urban forest as a key element of urban infrastructure. Researchers at various institutions have been working to quantify some of the benefits provided by the urban forest. In particular, scientists at the Center for Urban Forest Research (http://cufr.ucdavis.edu/) at the University of California, Davis, have been studying the economic benefits of trees in California communities since 1992. Their results are available online as both technical reports and short summary handouts.

Expectation of Trees

Street trees serve many purposes in an urban area. The most obvious contribution trees make is the general improvement in a city's appearance and quality of living. Tree lined streets are attractive to existing and prospective residents. Tourists are also attracted to a well-landscaped city. Visitors form first impressions of a city primarily on its outward appearance. A city's outward visible aspect expresses the caliber and pride of its residents. One of the least expensive ways to improve a community's appearance is through a conscientious street tree planting and maintenance program.

Trees not only beautify the urban landscape but are also functional. In addition, trees improve the environment by screening undesirable views, reducing noise and wind, and providing food and shelter for wildlife. Above all, trees convert carbon dioxide into life-giving oxygen, while filtering dust and other harmful pollutants from the air. Trees give a community a feeling of permanence and dignity. They also play an important role in enhancing buildings and other structures by softening architectural lines and features.

Trees can add a monetary value to real property. Homes and building sites with trees usually sell more quickly and at higher prices than properties with no trees. Realty authorities have attributed increased valuation per home to neighborhoods beautified by a sound street tree program.

Street trees are an asset to any community, even though they require allocations for replacement, care, and maintenance. It should be noted that while many public expenditures involve capital investments in projects which deteriorate in value, investment in tree planting and maintenance an investment in the community which increases in value.

Along with the benefits trees provide, some negative aspects are to be expected. Certain qualities of trees can lead to conflicts with people. Tree roots, leaves,

insects, and low limbs can all impact residents and can sometimes cause a situation wherein the benefits of the trees are overlooked.

Trees help save energy

In hot climates, one of the principal economic benefits provided by trees is due to shade.

- Trees in residential yards that shade western and eastern facing windows, roofs, and walls can reduce energy needed for cooling by as much as 34% (Simpson and McPherson 1996).
- On hot summer days, temperatures within urbanized areas can be up to 10°F hotter than the surrounding countryside, known as the urban heat island effect (http://www.epa.gov/heatisland/). Buildings and pavement made of dark materials absorb the sun's rays, leading to an increase in the temperature of the surfaces and the air around them. Trees and other vegetation reduce summer temperatures through direct shading of surfaces and through the process of evapotranspiration. Evapotranspiration refers to the way that water is evaporated from within plant leaves, exiting through tiny pores in the leaf. As the water evaporates, it cools the leaf and the air around it in much the same way that swamp coolers function. By combating the urban heat island effect, trees reduce the overall summer temperature within urban areas, helping to reduce energy use.
- Trees serve as windbreaks, which helps save energy by reducing the amount of outside air that infiltrates into heated or cooled building interiors (Heisler 1986).

Trees improve air quality

- Trees improve ambient air quality by removing gaseous air pollutants and particulates from the air (Scott et al, 1998).
- Although the majority of human-caused smog precursors come from moving vehicles, parked cars also emit volatile hydrocarbons and nitrogen oxides into the atmosphere that react to form smog. Cars parked in shade are much cooler and release fewer volatile hydrocarbons and nitrogen oxides into the atmosphere (Scott et al, 1999).
- As trees reduce the urban heat island effect, they also reduce the formation of photochemical smog because the chemical reactions that form smog are favored by higher temperatures (http://eetd.lbl.gov/HeatIsland/AirQuality/).

Trees provide other important urban services

- Tree canopies intercept rainfall, moderating stormwater runoff and reducing the amount of pollutants that wash off buildings and paved surfaces into creeks and storm drains (Xiao et al, 1998, Xiao and McPherson 2003, Geiger 2003).
- Tree shade over pavement slows down pavement deterioration (McPherson etal 1999).
- Trees planted along roadways can have a traffic calming effect which reduces driving speeds by visually narrowing the road (Otak, Inc. 2002)
- Tree roots help to hold soil in place, and tree canopies shield soil from the impact of rain drops, resulting in decreased soil erosion during storms, which improves stream water quality and reduces silt deposits in reservoirs and flood control basins.

Trees provide direct economic benefits

- A variety of studies show that trees increase residential property values. People pay more for homes with attractive trees, that are in neighborhoods with attractive trees, or that are near open space areas with trees. (Anderson and Cordell 1988, Wolf 1998b).
- A study by researchers in the State of Washington found that consumers perceive business districts with trees to be higher quality than those without trees. Consumers

were willing to pay up to 10% more for goods bought in tree-lined business districts (Wolf 2003a,b).

Social benefits related to trees

A growing body of research has shown that the presence of trees in neighborhoods and views of trees and nature contribute to both physical and mental health of urban residents.

- Trees are associated with lower crime rates, and improved mental health, stronger ties between neighbors, and greater feelings of safety and well-being of City residents (Kuo 2003).
- Researchers have shown that office workers who can see nature from their desks have 23% less time off sick and report greater job satisfaction than those who cannot see any nature (Wolf 1998)
- Hospital patients with views of trees have been shown to recover significantly faster than those who cannot see any natural features (Ulrich 1985).

Other Social Benefits from urban trees are:

- Abatement of noise, by absorbing high frequency noises which are most distressing to people,
- Creation of wildlife habitat, by providing homes for many types of wildlife,
- Reduction of exposure to ultraviolet light, thereby lowering the risk of harmful health effects from skin cancer and cataracts,
- Providing pleasure, whether it be feelings of relaxation, or a connection to nature,
- Providing important settings for recreation,
- Improving individual health by creating spaces that encourage walking,
- Creating new bonds between people involved in tree planting activities,
- Providing jobs for both skilled and unskilled labor for planting and maintaining community trees,
- Providing educational opportunities for residents who want to learn about nature trough first-hand experience, and
- Increasing residential property values (studies indicate people are willing to pay 3-7% more for a house in a well-treed neighborhood versus in an area with few or no trees).

Studies by Dr. Greg McPherson and colleagues at the Center for Urban Forest Research have consistently

Figure 1.1. Corner of Chantilly Way and Dinard Court in Hughson

shown that the economically quantifiable benefits of urban trees are several times greater than their associated costs. Furthermore, their studies show that the benefit-to-cost ratio is higher for large trees than small trees (McPherson 2003). An urban forest composed primarily of trees that are small-statured at maturity provides a much lower total economic benefit to the community and has a lower benefit-to-cost ratio than an urban forest with a preponderance of large-canopied trees (Geiger et al 2004)

Specific Environmental Benefits of Urban Trees:

Energy Impacts
Rapid urbanization of cities during the past 50-years has been associated with a steady increase in downtown temperatures of about 1° F per decade. As temperature increases, energy demand for cooling increases as do carbon dioxide emissions from fossil fuel power plants, municipal water demand, unhealthy ozone levels, and human discomfort and disease.

Urban forests improve climate and conserve building energy use by:
- Shading, which reduces the amount of radiant energy absorbed and stored by built surfaces,
- Evapo-transpiration, which converts liquid water in leaves to vapor, thereby cooling the air, and
- Wind speed reduction, which reduces the infiltration of outside air into interior spaces.
- Sequestering Carbon in the atmosphere

Trees and other green-space may lower air temperatures 5-10° F. Because of the San Joaquin Valley's hot, dry summer weather, potential cooling savings from trees are among the highest in the nation. Computer simulations for an energy-efficient home in Fresno indicate that shade from two 25-foot tall trees on the west side and one on the east side are estimated to save $75 each year. Evapo-transpirational cooling from these three trees is estimated to increase savings by another $28.

Air Quality Impacts
Urban forests can reduce atmospheric carbon dioxide (CO2) in two ways. Trees directly temporarily store CO2 as woody and leafy biomass while they grow. Trees around buildings can also reduce the demand for heating and air conditioning, thereby reducing emissions associated with electric power production.

Urban trees provide direct air quality benefits by:
- Absorbing gaseous pollutants (ozone, nitrogen

Figure 1.2. Rhapsody Lane in Hughson

oxides) through leaf surfaces,
- Intercepting particulate matter (e.g., dust, ash, pollen, smoke),
- Releasing oxygen through photosynthesis, and
- Transpiring water and shading surfaces which lower local air temperatures, thereby reducing ozone levels.

By shading asphalt surfaces and parked vehicles trees reduce emission of hydrocarbons that come from leaky fuel tanks and worn hoses as gasoline evaporates. These evaporative emissions are a principal component of smog and parked vehicles are a primary source.

Water Quality Impacts

Urban stormwater runoff is a major source of pollution entering San Joaquin Valley rivers and lakes. Trees improve water quality by:
- Intercepting and storing rainfall on leaves and branch surfaces, thereby reducing runoff volumes and delaying the onset of peak flows,
- Increasing the capacity of soils to infiltrate rainfall and reduce overland flow, and
- Reducing soil erosion by diminishing the impact of raindrops on barren surfaces.

Urban forests can provide other water benefits. Irrigated tree plantations can be a safe and productive means of wastewater disposal. Reused wastewater can recharge aquifers, reduce stormwater treatment loads, and create income through sales of wood products.

Benefits vs. Costs

Urban trees clearly provide a wide variety of benefits, although it is only possible to calculate an economic

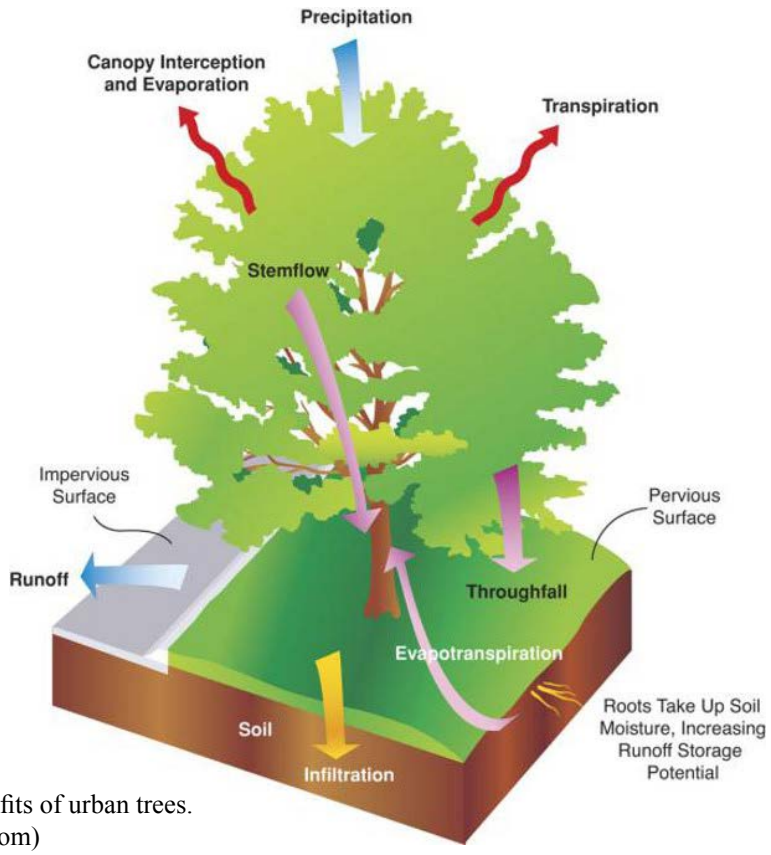

Figure 1.3. Environmental benefits of urban trees. (Source: http://www.deeproot.com)

value for some of these. There are also obvious costs associated with planting, maintaining, and removing trees in cities. In addition, indirect costs associated with trees include the costs of clearing away fallen leaves, repairing damage to nearby structures that may be damaged by tree roots in certain planting situations (e.g., large trees planted too close to curbs and sidewalks), and the administrative costs associated with maintaining a community urban forest program. Do the economic benefits of urban trees exceed their cost?

Urban Forest Costs

Of course, there area costs associated with urban trees. Costs for planting and maintaining trees vary depending on the nature of tree programs and their participants. Generally, the single largest expenditure is for tree trimming, followed by tree removal/ disposal, and tree planting. An initial analysis of data for Sacramento and other cities suggests that households typically spend about $5-10 annually per tree for pruning, removal, pest/disease control, irrigation, and other tree care costs.

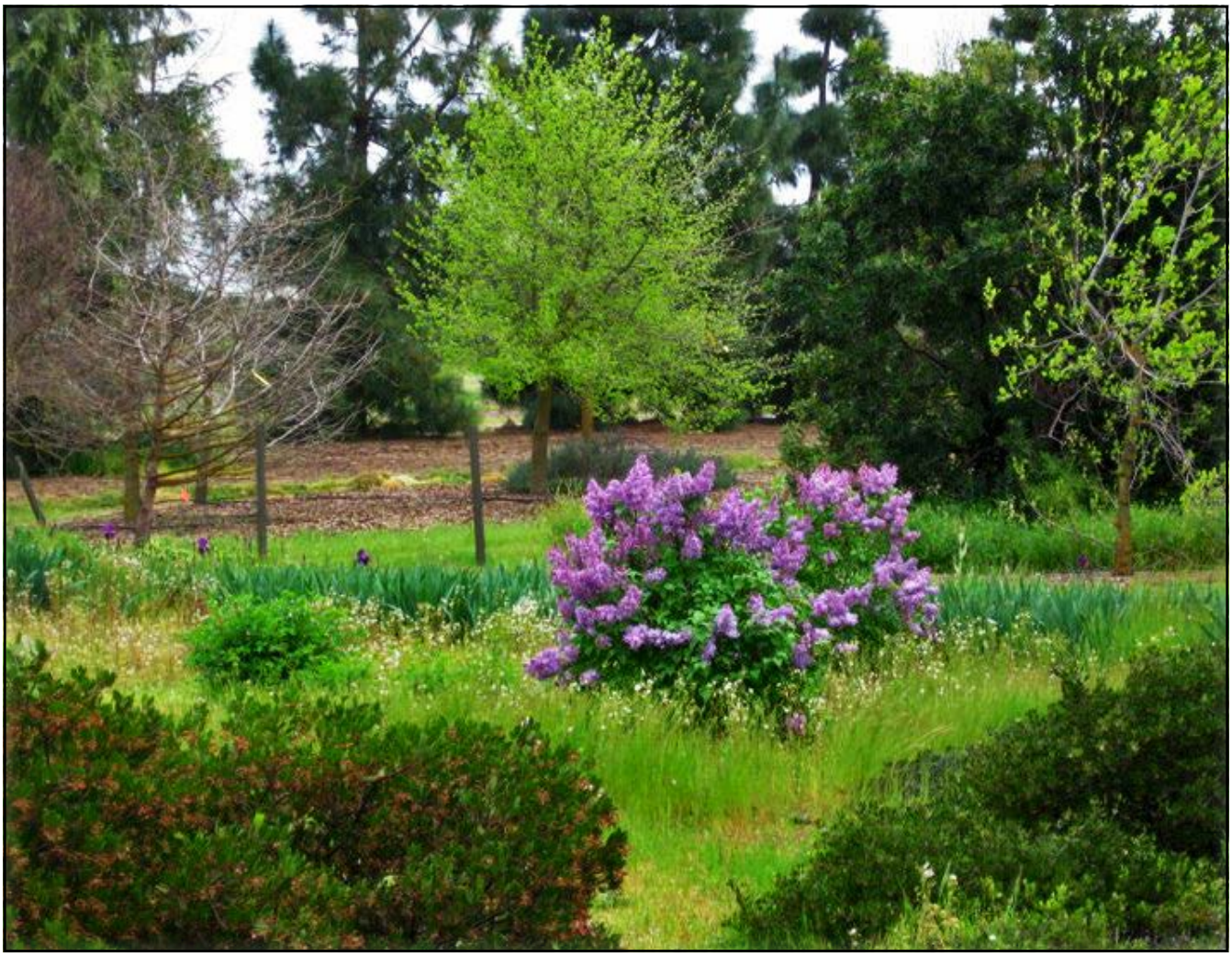

Figure 1.4. A view from the Arboretum

Other costs associated with urban trees include:

- Pavement damage caused by roots,
- Flooding caused by leaf litter clogging storm sewers,
- Green waste disposal and recycling (can be offset by avoiding dumping fees and purchases of mulch), and
- Irrigation costs.

Cost effective strategies to retain benefits from large street trees while reducing costs associated with root-sidewalk conflicts are needed.

Securing tree-related benefits

Many different city planning and management actions, especially those that occur during development, have a large impact on the character and condition of the urban forest. City of Hughson has expanded rapidly over the past decade. Urban forest planning and management actions taken over the past decade, as well as those made in the next decade, will shape the future of City of Hughson's urban forest for the next half century or more. To ensure the development of a thriving urban forest that will benefit the community, the city needs to develop a long term plan that accounts for the needs of trees in the urban environment. Both tree growth and tree decline are typically slow processes, so management actions related to these processes need to be initiated far in advance of the desired outcomes. This urban forest plan provides an overall strategy that will help the city maximize the benefits the urban forest will provide in the years to come.

Figure 1.5. Urban street with trees. (Source: http://www.city-data.com)

Chapter 2: Urban Forest Policy Setting

Existing Regulations and Plans
The City of Hughson currently has some city regulations and plans that specifically address landscaping and urban trees. The basic guidance for the development of the City of Hughson's Urban Forest Plan and Resource Guide in grounded in the Conservation and Open Space Element of the City of Hughson's 2025 General Plan. This element contains the following specific goals, policies, and actions that support the development of this Plan.

Conservation and Open Space Element
The purpose of the Conservation and Open Space Element is to ensure the comprehensive and long-range preservation and management of open space and agricultural land in and around Hughson, as well as work to improve air quality within the San Joaquin Valley Air Basin. The Conservation and Open Space Element seeks to maintain the small-town character and farming heritage of the community while providing a high quality of life for residents. This can be achieved by preserving open space and viable agricultural resource lands, protecting natural habitats for endangered and threatened species and providing recreational opportunities for city residents.

GOAL COS-1: Preserve and Protect agricultural lands in and around Hughson

POLICIES

COS-1.1 Property owners within the Sphere of Influence will be encouraged to maintain their land in agricultural production until the land is converted to urban uses.

COS-1.2 The City should endeavor to direct new growth away from areas established as Prime Farmland and/or under Williamson Act contracts, and discourage the premature conversion of agricultural land to urban uses.

COS-1.3 The City will support Stanislaus County in its efforts to maintain agricultural lands in viable farming units for those areas not currently designated for urban uses.

COS-1-4 Any County proposals within the Hughson Planning Area that involve the development of urban uses on land designated as Agriculture outside of the City's Sphere of Influence will be discouraged by the City.

COS-1.5 The City will support the application and renewal of Williamson Act contracts or other conservation easements for areas outside of the City's Sphere of Influence.

COS-1.6 The City will work cooperatively with land trusts and other non-profit organizations to preserve agricultural land in the Planning Area.

COS-1.7 The City will minimize conflicts between agriculture and urban uses.

ACTIONS

COS-1.1 Work with the County and surrounding jurisdictions to create a county-wide policy to limit urban growth to areas adjacent to existing development and preserve permanent agricultural separators between urbanized areas.

COS-1-2 Require that development projects include sufficient buffer zones within site designs, such as roads, setbacks and other physical boundaries, between agricultural uses and urban development.

Consider adopting a Right-to-Farm Ordinance to require new development adjacent to agricultural land to include deed restrictions recognizing the right to farm on neighboring parcels currently under agricultural prodwuction.

COS-1-3 Consider adopting a Right-to-Farm Ordinance to require new development adjacent to agricultural land to include deed restrictions recognizing the right to farm on neighboring parcels currently under agricultural production.

GOAL COS-2: Provide parks, open space and recreation facilities to maintain and improve the quality of life for Hughson residents.

POLICIES

COS-2-1 New development will be required to provide adequate parkland at a ratio of five acres per 1,000 residents in accordance with the Quimby Act (California Code 66477). Golf course development shall not be counted towards park acreage requirements.

COS-2-2 The City will guide park development to include a diversity of passive and active recreational amenities that are geographically distributed throughout the City and easily accessible by pedestrians and bicyclists.

COS-2-3 Where feasible, drainage basins should be built with a contoured or tiered design to optimize the potential for the dual purpose of providing additional recreational opportunities.

COS-2-4 The City will support the development of the Hughson Botanical Garden as a natural resource/habitat improvement opportunity, and as a City and regional asset.

COS-2-5 The City will support County, State and other efforts to develop and expand park and open space opportunities along the Tuolumne River, including the potential re-use of the City's waste water plant's northern ponding areas, for recreational and habitat uses.

COS-2-6 All park and recreation developments shall be designed and maintained to minimize water, energy and chemical (e.g. pesticides and fertilizer) use, preserve wildlife habitat where appropriate, and incorporate native plants and drought-resistant turf.

ACTIONS

COS-2-1 Implement the City's Parks Master Plan and update it on a regular basis.

COS -2-2 Establish a joint use agreement with the Hughson Unified School District to allow for the shared design and operation of recreation facilities to maximize use and reduce cost.

Goal Area OS-C: Open Space for Outdoor Recreation

GOALS

- High Quality Recreational Open Space
- Adequate Public Recreation Facilities
- Comprehensive Urban Trail and Bike Path System

POLICIES

C.1 Provide high-quality park and open space facilities to serve the needs of a growing population.

C.2 Maintain and expand the City's Bikeway and Trail System.

Goal Area OS-D: Open Space for Public Health and Safety

GOALS

- Safe Environment for City of Hughson's Citizens.

POLICIES

D.1 Preserve open space areas which are necessary to maintaining public health and safety.

Goal Area OS-E: Conservation of Resources

GOALS

- Conserve Water Resources
- Preserve and Protect Soil Resources

E.1 Promote water conservation throughout the planning area.

E.2 Protect soil resources from the erosive forces of wind and water.

Chapter

2

General Plan Implementation

The City of Hughson General Plan sets forth goals, policies, and actions that have been implemented by means of various adopted municipal codes, policies and standards.

Various municipal code provisions have been adopted to implement and enforce these broad General Plan goals and policies including, but not limited to, the following:

1. Title 12 Streets, Sidewalks and Public Places, Chapters:
    - 12.20 Street Trees
    - 12.30 Tree and Sidewalk Maintenance
        - 05. Parks and Recreation Facilities
        - 06. Formation of Assessment or Maintenance District for Parks and Recreation Facilities
        - 07. Improvements-L Street Trees
        - 08. Establishment of Other Special Benefit Assessment, Improvement and Maintenance Districts

2. Title 15 Buildings and Construction, Chapter 15.46 Water Efficient Landscaping Standards.

3. Title 16 Subdivision, Chapters:
    - 16.11 Required and Supplemental Improvements
    - 16.13 Dedication, Site Reservation, Districts:

4. Title 17, Zoning, Chapters:
    - 17.14 "OS" Open Space District
    - 17.18 "PS" Public and Semi-Public District
    - 17.40 General Regulations
    - 17.52 Architectural and Design Review Procedures
    - 17.54 Off-Street Parking
    - 17.62 Fencing, Walls and Hedges

Figure 2.1. Downtown Hughson

Chapter 3: Goals, Objectives and Implementation

Objectives for the management of City of Hughson's urban and natural tree forest

This section summarizes some of the important issues and trends that are likely to affect City of Hughson's urban and natural tree forest over the next 25 to 50 years and beyond. Based on these issues, local concerns and priorities, and general urban forest management principles, based on the overall City of Hughson General Plan, the city has developed goals that could be used to help guide the overall management of City of Hughson's Urban and Natural Tree Forests. The objectives associated with these goals and recommendations for attaining these objectives constitute an overall framework for the sustainable management of City of Hughson's Urban Forest resources.

These issues and related goals have been organized into three general topic areas. **Tree canopy cover** includes issues that are related to the overall amount of tree canopy in City of Hughson and its distribution within the city. **Tree and forest health** addresses the long-term health and sustainability of both individual trees and the forest as a whole. **Management of the urban forest** addresses issues that are specific to the care and maintenance of the urban forest by both the public and private sectors. These main topic areas, as well as the goals and objectives listed under them are highly interrelated. Hence, objectives listed under one goal may in fact support several other goals as well.

Figure 3.1. A view from the Arboretum

Tree canopy cover

- Mean summer temperatures will tend to rise due to the urban heat island effect and overall global warming trends. Increased tree canopy cover can help moderate these impacts.
- Regional air quality will continue to be an issue of concern. The Central Valley air basin in the vicinity of Modesto has historically exceeded national ambient air quality standards for ozone and, to a lesser degree, airborne particulates matter. Tree canopy intercepts and reduces both ozone and particulate pollutants.
- Many of City of Hughson's existing trees are young, and with proper care will continue to grow in size, increasing overall canopy cover.
- Many large commercial parking lots may never obtain even moderate levels of tree shading. Most parking lots achieve only low levels of tree shade within about 10 years and then begin to lose canopy as the result of both poor growth and trees loss.
- Due to tree placement and species selection, most existing residential tree plantings in front yards on private property are unlikely to provide significant shading of streets when trees mature.
- Native oak woodlands on City of Hughson are generally in fair to poor condition, but low levels of natural regeneration in some areas may affect long-term sustainability of some stands. Many of these trees have sustained high levels of root damage due to both construction-related activities and subsequent alteration of the root zone and are likely to decline and be removed over the next few decades.

Tree and forest health

- Greater genetic diversity within the urban forest reduces the risk of serious pest and disease epidemics. Genetic diversity can be increased by using multiple tree species and by using trees that are of seedling origin. Trees grown from seed are more genetically diverse than trees that are propagated clonally (grafted or grown from cuttings) and are consequently genetically identical. Most named tree varieties are genetically identical clones.
- A few tree species and varieties, such as flowering pear varieties, constitute a higher than optimal percentage of all publicly

Figure 3.2. Tree canopy cover.
(source: http://ordinancewatch.wordpress.com)

managed trees, but efforts are now being made to increase genetic diversity in both new and replacement public right-of-way streetscape plantings.

- Because much of City of Hughson has been developed recently over a fairly short time period, even-aged stands of trees make up large portions of City of Hughson's urban forest. Within these stands, trees with similar life spans will reach the end of their useful life as a group.
- Water conservation will continue to be a regional issue, especially during periods of drought. Currently, some of city maintained trees along parkways are drought tolerant.
- Some publicly-owned woodlands along the Tuolumne River have been invaded to varying degrees by aggressive non-native species that may displace native riparian vegetation.
- Native oak woodland stands are subject to genetic pollution from non-local oaks planted nearby. This may reduce the fitness of seedlings in the native stands and interfere with natural regeneration.
- Water management policies of the Modesto Irrigation District, along the MID main canal and City of Hughson main canals create vast strips of land without tree cover.

Management of the urban forest

- Most publicly-managed trees in City of Hughson are young and in relatively good condition. Tree care costs are likely to rise somewhat as trees become larger. The Department of Public Works maintains city owned trees.
- Currently, city goals for tree planting is addressed primarily through the actions of the Planning Department as part of the development review process. Through the city's development review process, the Planning Department implements City of Hughson's General Plan goals and policies that affect the urban forest.
- Once development is completed, responsibility for care and maintenance of planted trees and conserved oak woodlands shifts to other departments (Public Works Department), or to private individuals. Maintenance of additional public trees will require additional maintenance staff (Public Works) and/or more contracted tree care services.

Within the context of the urban setting of City of Hughson, its organizational capacity and structure and the overall guidance and direction of the City of Hughson General Plan, the following Goals, Objectives and Implementation Actions have been developed.

City of Hughson Urban Forest

GOAL 1. Establish and maintain target levels of tree canopy throughout the City.

OBJECTIVES

1-a. Establish target levels of tree canopy cover citywide and for specific land use categories.

1.b Maximize levels of successful tree establishment in new construction areas. Actions

1-c Maintain or increase tree canopy cover levels in existing developed areas.

Objective 1-a Establish target levels of tree canopy cover citywide and for specific land use categories.

Implementing Actions:

Adopt an appropriate goal and timetable for increasing overall canopy cover within the City of Hughson.

Establish canopy cover goals for open space lands, residential areas, commercial parking lots, public facilities (including parks and schools), city-maintained parkways, and other major land use categories that will contribute to attainment of the overall canopy cover goal.

Objective 1-b Maximize levels of successful tree establishment in new construction areas.

Implementing Actions:

Continue and expand policies and programs that require or encourage tree planting in new developments.

Update existing planting standards to improve tree establishment and performance. Revisions should address improving planting site preparation (including modification of the planting hole standard), staking, tree species selection, and nursery stock quality.

Increase levels of parking lot shading by adopting and implementing standards that improve design, site preparation, and short-and long-term maintenance practices.

Objective 1-c Maintain or increase tree canopy cover levels in existing developed areas.

Implementing Actions:

Continue efforts to replant trees in publicly-maintained streetscapes and developed parks as needed to maintain appropriate levels of tree canopy.

Promote appropriate tree planting on privately-owned properties by City of Hughson businesses and residents.

City of Hughson Urban Forest

GOAL 2. Promote conservation of existing tree resources.

POLICIES

2-a. Increase the level of protection provided to oaks before and during construction.

2-b Improve the management of retained oaks.

2-c Develope City of Hughson oak tree protection guidelines as needed to reduce tree damage during development and improve long term survival of retained trees.

Policy 2-a Increase the level of protection provided to oaks before and during construction.

Implementing Actions:

Promote good tree care practices by private tree owners by continuing to provide recommendations on oak tree care to interested citizens.

Continue and expand tree care training / education opportunities for City staff involved in oak tree maintenance and landscape planning.

Objective 2-b Improve the management of retained oaks.

Implementing Action:

Increase tree cover in historically-forested open space lands by planting with locally native tree species where appropriate.

Objective 2-c Review and update City of Hughson's oak tree protection guidelines as needed to reduce tree damage during development and improve long term survival of retained trees.

Implementing Actions:

Continue to implement tree protection measures and monitoring of trees designated to remain during development activities.

Continue City policies that attempt to maximize conservation of tree cover when developing in areas that contain existing tree resources. Use site planning to protect groups of trees and minimize the amount of disturbance to the roots of existing trees by expanding the protected area for root growth.

City of Hughson Urban Forest
GOAL 3. Choose and locate new trees to maximize tree-related benefits
POLICIES 3-a. Match species to sites to the greatest degree possible. 3-b Increase the use of large-canopy trees where practical to maximize tree benefits relative to costs. 3-c. Locate new tree plantings in areas that will maximize energy conservation in buildings and shading of pavement.
Policy 3-a Match species to sites to the greatest degree possible.
Implementing Actions: Provide guidelines on tree selection and placement to residents to promote planting the right tree in the right place and avoid tree/site combinations that will result in shortened tree life or excessive maintenance costs (e.g., redwoods on thin soils, big trees planted in small places, tall trees under electric distribution lines, etc.) Continue to select suitable species and place trees appropriately to minimize conflicts with infrastructure along streets (e.g., signs, traffic signals, streetlights).
Objective 3-b Increase the use of large-canopy trees where practical to maximize tree benefits relative to costs.
Implementing Actions: Include large-statured trees in planting plans for parks, streets, and other public lands where practical.
Objective 3-c . Locate new tree plantings in areas that will maximize energy conservation in buildings and shading of pavement.
Implementing Actions: Provide homeowners with information on how to place trees to maximize energy conservation. Use the planning and design review processes to encourage the use of parking lot and streetscape designs that provide greater amounts of pavement shading.

City of Hughson Urban Forest
GOAL4. Maintain trees in a healthy and safe condition.
OBJECTIVES

4-a. Follow best management practices for tree planting and care for trees on public land.

4-b Institute a program for identifying and correcting tree-related hazards on public properties.

4-c Encourage the use of best management practices (BMP) for tree planting and maintenance for trees planted on private lands.

Objective 4-a Follow best management practices for tree planting and care for trees on public land.

Implementing Actions:

Monitor tree health on public lands (parks, streets, open space areas, and public buildings) to identify developing pest and disease problems.

Develop a program for locating and evaluating potentially hazardous trees on public lands and public rights-of-way.

Objective 4-b Institute a program for identifying and correcting tree-related hazards on public properties.

Implementing Actions:

As needed, update the list of tree species potentially suitable for landscape uses in City of Hughson to reflect new pest problems that may render a tree unsuitable for continued planting.

Plant good-quality, preferably locally-grown, disease-free nursery stock to increase long-term survival. Implement the use of updated tree nursery stock standards to ensure the use of good quality stock. Continue existing pre-and post-planting inspections conducted by City staff, and implement new inspections where necessary for trees planted on public lands.

Continue use of current ANSI or other nationally-recognized pruning standards for pruning conducted by City staff and tree care contractors.

Develop and implement standards for assessing and improving (if necessary) soil conditions prior to planting to improve long term tree health and survival.

Assess and remediate site conditions prior to replanting trees which have died. Do not replant sites that are determined to be unsuitable for tree planting.

Objective 4-c Encourage the use of best management practices (BMP) for tree planting and maintenance for trees planted on private lands.

Implementing Actions:

Continue existing pre-and post-planting inspections conducted by City staff, and implement new inspections where necessary for trees planted on private lands as a condition of project approval.

Continue current City practice of accepting calls from private property owners about unusual tree pest or disease problems and, if warranted, inspecting affected trees as a way to identify new problems.

Make BMP guidelines for tree planting and maintenance available to permit applicants and the general public to encourage better tree selection, planting and care.

City of Hughson Urban Forests

GOAL 5. Develop an urban forest canopy that is stable over the long term.

OBJECTIVES

5-a. Avoid excessive use of individual tree species or varieties within large plantings and within the urban forest as a whole.

5-b Increase the percentage of drought-tolerant trees in City of Hughson's urban forest.

5-c Protect the long-term viability of conserved native oak woodlands in City of Hughson.

5-d Maximize the effective age diversity of plantings to avoid even-aged stand problems.

Objective5-a Avoid excessive use of individual tree species or varieties within large plantings and within the urban forest as a whole.

Implementing Actions:

Establish upper limits for the percentage of the tree population that a single variety or species should comprise within planning areas or citywide. This will minimize the exposure of the urban forest to damage by new diseases, pests, or problems that affect only a single species or variety. Use these percentages to aid in species selection for new and replacement tree plantings.

Reduce or eliminate the use of trees with high water use requirements in harsh sites such as street tree plantings and parking lots.

Increase the use of locally-native oaks, especially blue oak, in new landscape plantings.

Increase compliance with existing policies that emphasize the use of drought tolerant trees in new plantings.

Increase the overall percentage of drought tolerant trees in City street tree plantings and in parks and private development by using more drought tolerant species in new and replacement plantings when feasible.
Objective 5-b Increase the percentage of drought-tolerant trees in City of Hughson's urban forest.
Implementing Actions: Use only trees of local genetic stock in and near native oak stands to conserve the genetic integrity of local oak populations.
Objective 5-c Protect the long-term viability of conserved native oak woodlands in City of Hughson.
Implementing Actions: Where possible, substitute trees of different species or varieties for overused species/varieties when planting new or replacement trees. Reduce cover of invasive exotic plant species in riparian woodlands. Avoid using invasive exotic plant species in landscape situations to prevent escape of these plants into natural areas. Maintain a "do not plant" list for landscape plan review purposes.
Objective 5-d Maximize the effective age diversity of plantings to avoid even-aged stand problems.
Implementing Actions: When planting replacement trees, avoid using trees that will reach the end of their useful life at the same time as existing trees in the planting. In new plantings where even age plantings cannot be avoided, use a mix of species with different useful life spans. For example, oaks may live for well over 100-150 years whereas flowering pears may have a maximum useful life closer to 30-50 years.

City of Hughson Urban Forests
GOAL 6. Promote efficient and cost-effective management of publicly-owned urban and natural forest resources.
POLICIES

6-a. Develop a systematic approach to inspect and prune City-maintained trees in an efficient manner.

6-b Increase coordination and communication between City departments/divisions whose activities affect the urban forest.

6-c Develop basic budget information on costs associated with maintaining and caring for the community forest.

Policy 6-a Develop a systematic approach to inspect and prune City-maintained trees in an efficient manner.

Implementing Actions:

Develop appropriate criteria for inspecting and pruning trees of various species and size classes present in City-maintained landscapes.

Inspect and, as needed, prune young trees that will become medium to large-statured as needed (generally no more frequently than every 2 to 3 years) to establish good structure and avoid later remedial pruning.

Inspect and, as needed, prune mature trees on an appropriate schedule to maximize cost-efficiency (generally no more frequently than every 5 to 7 years).

When financially feasible, develop a tree inventory system to track tree care.

Objective 6-b Increase coordination and communication between City departments/ divisions whose activities affect the urban forest.

Implementing Actions:

Foster communication and feedback between Planning, Public Works, and Parks and Recreation staff who deal with tree-related planning and maintenance issues.

Formally review the City tree list at least every two years and update as necessary.

Review the management plan, tree planting and maintenance guidelines, and public information brochure portions of this document every five years and update as necessary.

Develop management plans for maintaining specific sectors of the City's urban forest (e.g., parks, street segments, riparian corridors, open space areas). Formally review these management plans every 5 years and update as needed.

Continue and expand tree care training / education opportunities for City staff involved in tree maintenance and landscape planning.

Objective 6-c Develop basic budget information on costs associated with maintaining and caring for the community forest.

Implementing Actions:

Track costs associated with maintaining parkway and park trees to ensure assessment districts will provide adequate funding as trees mature.

As part of the City's annual budget process, prioritize necessary maintenance and preservation activities to be funded through other sources (public or private). Where possible, apply for external grants to leverage City funding.

City of Hughson Urban Forests
GOAL 7. Foster community support for the local urban forestry program and encourage good tree management on privately-owned properties.
OBJECTIVE
7-a. Institute an ongoing program to educate the public about tree selection, placement and care.
Implementing Actions:
Periodically compare relative cost-efficiency of in-house versus contracted tree care for planting, young tree care, and mature tree care. Use these data to ensure that tree care tasks are allocated to contractors or City staff in a cost-efficient manner.
Provide locally-appropriate technical tree care information to residents through a variety of media to emphasize good tree selection and placement, optimal planting techniques, proper pruning of young and mature trees, and care of conserved native oaks.
Disseminate information about appropriate management of the residential/open space interface to landowners that are adjacent to public open space lands.
Encourage participation of local groups in public tree planting and tree care projects.
If local support exists, assist in the development of a tree-related non-profit / volunteer organization that can obtain grant funding for tree planting, tree care, and public education.
Provide funding, as feasible, for additional City staff time needed to carry out this objective. Alternatively, contract with a local tree non-profit to provide public outreach and volunteer coordination services.

Chapter 4: Plan Physical Setting

Setting
Like any planning effort, the location, setting and natural resources of the within, and around, the City of Hughson shape the parameters of the plan approach. City of Hughson, with climate, and soils is an excellent position to reap maximum benefit from an Urban Forest program effort.

This chapter will examine two critical setting issues that significantly impact the shape or approach of the City of Hughson Urban Forest Plan, soil resources and biological setting.

The soils of the City of Hughson area are of excellent quality and provide very few limitations to tree growth and management. At the same time, the natural biological setting of the City creates constrains to Urban Forest management practices. While the biological resources of the area create unique constrains, to the City of Hughson Urban Forest program, they also create unique opportunities and benefits that contribute to the unique quality of life enjoyed by City of Hughson residents.

Location
The City of Hughson is located in Stanislaus County, approximately 10 miles southeast of Modesto, 90 miles south of Sacramento and 100 miles southeast of San Francisco. There are no major highways through or adjacent to Hughson. State Highway 99 (SR-99) is the closest freeway, running north to south through Modesto with a linkage via Interstate-205 (I-205) to I-5, the State's major north-south interstate corridor, and I-580. Figure I-1 depicts the City's regional location. The existing incorporated area of the City of Hughson is approximately 1.5 square miles.

Soils
Soil mapping is used to help identify potential geotechnical concerns, such as erosion and expansion, that are more common with certain soils types. Identifying local soil types and understanding the associated characteristics helps cities establish appropriate engineering and construction standards for new building and remodeling. As shown in Figure 4.1, Hughson and its Sphere of Influence are underlain by Hanford and Tujunga series soils, with a little area of Greenfield series found at the intersection of Hatch and Geer Roads. Table 4.1 identifies other soil types encountered in the Hughson area. The table also summarizes each soil type's potential for erosion and expansion.

Since Hughson is relatively flat, there is a limited potential for erosion. The greatest potential for erosion is due to wind, since the Tujunga series has a moderate to high potential for wind erosion and none of the soils have a high erosion potential for water erosion. The Hanford series has a moderate potential for erosion, but only once slopes exceed eight percent, which is not common in the city. The Greenfield series only has a slight potential for erosion.

Expansive soils contain higher levels of clay and present hazards for development since expansive soils expand and shrink depending on water content, damaging structures that were not appropriately engineered. Since all of the soils in the Hughson area are mainly comprised of sand, they pose a very low risk of expansion. The Greenfield series has the highest clay content, and therefore, would pose the greatest risk to structures. However, even the Greenfield series is considered to have a low expansion potential.

Basin Lands
The soils in Hughson are fairly stable and flat, with low potentials for landslides, erosion and expansion. Liquefaction is mainly a risk along the Tuolumne

River, where no development, other than the existing wastewater treatment plant, is proposed in the 2005 General Plan.

Past and Current Biological Context:
The City of Hughson is relatively flat, far from fault lines and outside the floodplain. The majority of the area, surrounding the City of Hughson, consists of agricultural lands that support non-native annual grasses and forbes when they are not being cultivated for annual crops, orchard or irrigated pasture. The biological communities and special-status species located in the project area are described below.

Biological Communities
Six biological communities were documented in the project area; non-native annual grassland, drainage, mixed riparian woodland, agricultural field, orchard and vineyard, irrigated pasture, and developed.

Non-native Annual Grassland.
Ruderal (weedy) and non-native grassland occurs along roadway and field margins, and in the understory of orchards and vineyards. In some locations, vegetative cover has been completely stripped by equipment operation and herbicide application. The ruderal and grassland cover is composed of nonnative grasses and forbs, such as wild oat (Avena fatua), soft chess (Bromus mollis), dove weed (Eremocarpus setigerus), bindweed (Convolvulus arvensis), bur clover (Medicago polymorpha), yellow-star thistle (Centaurea solstitialis) and other non-native annuals.

The ruderal cover supports smaller mammals and reptiles, and is occasionally used by several species of birds as seed becomes available. The field margins often serve as retreat cover for smaller wildlife as crops are harvested and fields disked. Species associated with the ruderal grasslands include those found in the agricultural fields, as well as occasional use by graniverous birds such as American gold finch and several species of sparrow.

Agricultural Field
The City of Hughson is surrounded by agricultural lands. Agricultural lands provide a source of identity and employment for residents. Working and non-working agricultural lands used for row crops, orchards, grazing, dairy farms, singlefamily homes on large agricultural parcels, and agriculturally-related commercial and industrial uses are included in this category. Approximately 978 acres of agricultural lands exist in the Hughson area, 97 acres are within the city limits and 881 acres lie outside the city limits in the sphere of influence. Agricultural lands within the city limits and some in the sphere of influence are targeted for future residential, commercial and industrial development; however, the community recognizes the need to preserve agricultural lands not targeted for urban uses.

Orchard
Orchards, mostly walnut, including cherry, persimmon, and other fruits, are found on much of the land immediately adjacent to the city. The orchards include mature trees that provide nearly complete canopy cover and minimal undergrowth is present between the rows of trees. Non-native annual grassland form the under-story of the orchard habitat. The orchard trees are generally unsuitable as nesting locations for raptors because of routine disturbance as part of maintenance and harvesting.

Irrigated Pasture
Irrigated pasture is typically grazed intensively and is low in species diversity and has low potential for the occurrence of special status species. Common plant species of pasture includes, primarily, annual and perennial grasses and forbes such as tall fescue, Italian ryegrass, soft chess, and curly dock.

Developed Areas
Most of the project area components extend through

City of Hughson Area Soils Map

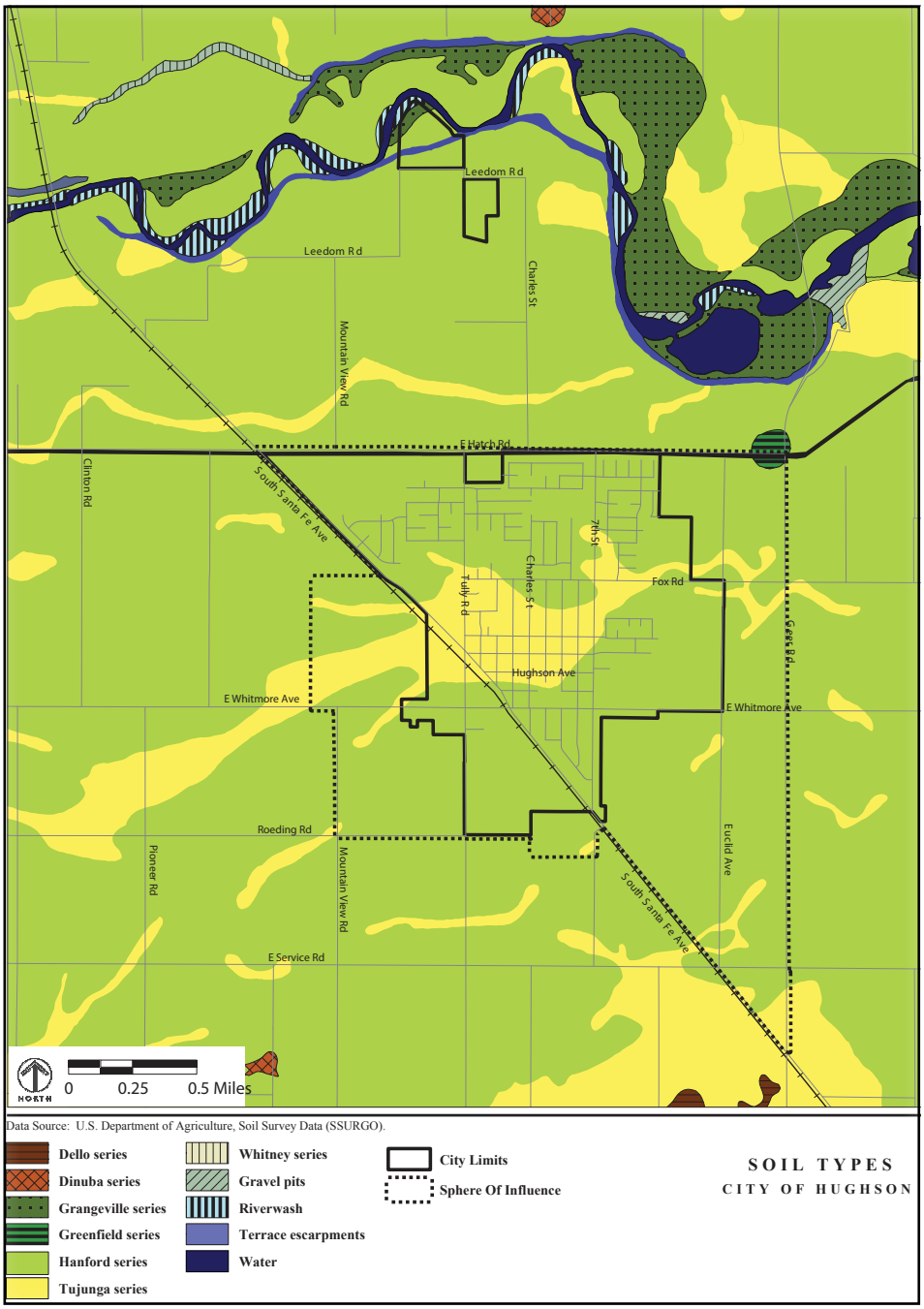

Figure 4.1. City of Hughson Area Soils Map

developed areas and do not support sensitive biological resources. These areas include roads, residential neighborhoods, commercial and industrial development and public facilities. They provide minimal habitat values for local wildlife species except where urban tree (forests) have been developed along city streets, parklands and within portions of the Tuolumne River pass through the City.

Natural Waterways and Canals

The Tuolumne River, a natural drainage channel, along with several irrigation canals, occur in the project area. The Tuolumne River is a perennial drainage corridor and contains mixed riparian woodland vegetation along their banks. The canal system is artificially created and constructed dirt and, some cases, concrete-lined to reduce seepage. These irrigation canals are typically groomed to reduce vegetation and, as a result, do not contain any wetland or riparian value.

Major Soil Types in the City of Hughson Area

Soil Series	Erosion Potential	Expansion Potential	Drainage	Permeability	Runoff	Fertility
Dello	None	None to low	Very poor	Rapid	Slow	Moderate to High
Dinuba	Slight	None to low	Poor	Moderately Rapid	Slow	Moderate to High
Grangeville Slight	Slight	None to low	Moderately good	Moderately to moderately rapid	Slow	Moderate to High
Greenfield	Slight	Low	Good	Moderately Rapid	Very slow	Moderate to High
Hanford	None to moderate	None to low	Good	Moderately rapid	Very slow	Moderate to High
Tujunga	Slight to moderate for water erosion Moderate to high for wind erosion	None to low	Excessively drained	Rapid	Very low	Moderate to High
Whitney Slight	Slight	None to low	Good	Moderate	Slow	Moderate

Table 4.1. City of Hughson Soil Data

The Tuolumne River provides important habitat for a variety of wildlife. Vegetation growing along the edges of the water course provides nesting habitat for several bird species and foraging and refuge habitat for amphibians, reptiles and mammals occupying the open water and adjacent grassland habitats.

Riparian Woodland
The banks and margin of the historic terraces along the Tuolumne River form dense stands of riparian and woodland scrub near the northern ponding areas at the City's wastewater treatment plant site, north of Hatch Road. Dominant tree and shrub species along the river banks include: valley oak, live oak (Quercus agrifolia), Fremont cottonwood (Populus fremontii), willow (Salix spp.) and elderberry (Sambucus mexicana). While most of the margins of the northern ponding area currently support a cover of ruderal grasslands, a few native oaks and elderberry occur on the site. and dense woodland and scrub occurs along the active channel bank of the river.

Although the riparian habitat associated with the Tuolumne River is technically outside the city limits and SOI, it is in proximity to the northern wastewater treatment plant ponding area. The Tuolumne River supports the last remnant of native vegetation and sensitive natural community in the Hughson vicinity, serves as an important movement corridor for fish and wildlife, and is considered to be of regional and State-wide significance both hydrologically and biologically. Species associated with the aquatic and riparian habitat of the river corridor include the anadromous chinook salmon (Oncorhynchus tshawytsha), the federally-threatened valley elderberry longhorn beetle (Desmocerus californicus dimorphus), and the State-threatened Swainson's hawk (Buteo swansoni). Areas of dense vegetation along the orridor provide important cover for numerous resident and migratory wildlife, including raccoon, grey fox, brush rabbit and numerous species of birds.

Special-Status Species

Special-Status Plants
Based on a review of existing information, species list obtained from the USFWS, and species distribution and habitat requirements data, there is a low potential for special-status plans in the City's proposed Sphere of Influence. Most of the project area is developed or heavily disturbed and does not support suitable habitat conditions for special-status plans known to occur in the region.

Special-Status Wildlife
Based on a review of existing information, species lists and species distribution and habitat requirements, 14 special-status wildlife species were determined to have potential to occur in the project region, mostly along the riparian corridors surrounding the Tuolumne River.

Public Land and Urban Forests
Public land holdings within, the City of Hughson, contain a significant part of the City's urban forest tree inventory.

Schools
The City of Hughson Unified School District is comprised of the Fox Road Elementary School, the Hughson Elementary School, the Emilie J Ross Middle School, Hughson High School, and Dickens High School. Fox Road Elementary School is located at 7668 Fox Road. Hughson Elementary School is located at 7201 Whitmore Ave. City of Hughson High School is located at 7419 E. Whitmore Ave. in the city. Dickens High School is located at 6937 Fox Road. Due to the nature of how these school lands are used, tree densities are very low in these open areas dedicated to school use.

Parks and Recreational Facilities
This section focuses on existing parks and recreational facilities in Hughson, as well as an analysis of the

potential project-related impacts to the future demand for these facilities.

Existing Setting
A discussion of the City's current efforts to plan for parkland, as well as an inventory of existing recreational facilities are provided below.

City of Hughson Parks Master Plan
The City is in the process of developing and adopting a Parks Master Plan. To address the growth pressures experienced by Hughson, the Parks Master Plan would work to implement the community's established priorities regarding the provision of parks and open space, and provide direction as to how to meet the future needs for parkland. As part of the Parks Master Plan process, the City has calculated that it currently has at least 5 acres of parkland for every 1,000 residents. The Parks Master Plan outlines the type and location of parks and open space allocations the City wishes to secure to meet its parkland goal. For each park category, the Plan provides guidelines for size, service area, location, site characteristics, design elements, lighting, restrooms, recreation facilities, utilities, site furnishings and landscaping. The Plan also identifies a planning and design process to ensure proper site selection and cost-efficient implementation. The Parks Master Plan also analyses the cost of developing and maintaining the various types of parks, and provides direction for utilizing accrued park and open space funds efficiently, without placing an undue tax burden on residents. The Plan will inform the establishment of appropriate development impact fees in order that the City might pass along land acquisition and construction costs to project proponents. However, the Parks Master Plan also recognizes that no matter how park development is initially funded, the City must consider and plan for future maintenance costs.

Existing Recreational Facilities
The City of Hughson currently provides active and passive recreational opportunities to its residents through a variety of mini, neighborhood and community parks. Additional recreational opportunities are also provided through public schools sites, which have historically been used by the community for a range of recreational activities and organized sports leagues. The privately-owned Hughson Arboretum and Gardens, located on Whitmore Avenue, is also planning for expansion and will provide additional recreational opportunities for the community. Finally, several regional parks and reservoirs also provide recreational opportunities for Hughson residents. Stanislaus County's park system includes 16 parks, ranging in size from ½ acre to 96 acres. Nearby reservoirs include the Modesto and Woodward Reservoirs in Waterford and Oakdale, respectively.

Parks
The City of Hughson park system consists of both active and passive recreational areas, including a variety of park types. As of January 2005, there is one mini-park, one neighborhood park and two community parks in Hughson, totaling approximately 17 acres. In addition, there are two turfed drainage retention basins, several public school recreation facilities and a botanical garden. The following provides a description of Hughson's tiered park system:

Mini-Parks
Small parks, typically ½ to 5 acres in size, that provide recreational activities generally used by the local neighborhood or subdivision. Although these parks are often privately-owned and maintained by the related Homeowners Association, they are usually available for use by the general public. In Hughson, the Rhapsody neighborhood includes a mini-park with a tot lot.

Neighborhood Parks
Generally, 3- to 7-acre sites that host basic

recreational activities for 1,000 to 3,000 people within a ¼- to ½-mile radius. These parks have street frontage on at least one public street, are convenient to pedestrians, are linked with bicycle routes and trail corridors
when possible, and are located adjacent to schools or other municipal facilities. Carrie Shrader Park is currently the only neighborhood park in Hughson, although there are two turfed drainage basins that could be considered in this category. Because Carrie Shrader Park contains the City's main swimming pool, it tends to draw residents from a further radius than typical to a neighborhood park.

Community Parks
Generally, 10- to 25-acre sites that provide a mix of active and passive recreational activities for 10,000 to 50,000 people within up to a 50-mile radius. These larger parks have street frontage on at least two public streets, off-street parking and convenient access for pedestrians and bicycle traffic. They should be located within close proximity to neighborhoods and adjacent to schools, or other municipal facilities if possible, while consciously preventing negative impacts from higher activity levels on surrounding communities. Starn Park and LeBright School are the two community parks in Hughson.

Dual-Use Drainage Basins
There are two dual-use neighborhood drainage basins that are turfed to provide passive recreational opportunities for Hughson residents. Although other

Figure 4.2. Andrew Fontana Memorial Park

Chapter

4

EXISTING RECREATIONAL FACILITIES IN HUGHSON

Name	Facility Type	Acres	Amenities	Owner
Starn Park	Community Park	8.2	Lighted baseball field with dugouts, jogging trail, play structures, concession/ restroom building, picnic area, BBQ grills, paved off- street parking for 50 cars, ADA accessible	City
LeBright School (former school site)	Community Park	6.32	5 baseball diamonds, bleachers, field for football and soccer practice, snack bar, portable restrooms, gravel off-street parking for 100 cars	HUSD
Hughson High School	Public School	8.52	2 baseball diamonds, 8 tennis courts, football and track venue, stadium seating, basketball courts, restrooms, concession stand, offstreet parking	HUSD
Ross Middle School and Fox Road Elementary	Public School	6.05	2 soccer fields, 2 baseball diamonds, 1 volleyball court, benches, grass areas, vending, restrooms, offstreet parking	HUSD
Hughson Elementry School	Public School	3.68	Basketball courts, tetherball, play equipment, small baseball diamond, small grass field, off-street parking	HUSD
Santa Fe Drainage Basin	Open Space	1.15	Open space grassed area that serves as drainage for heavy rains but is designed to also provide park space and dry within 1 day	City
Rhapsody Drainage Basin and Tot Lot	Open Space/ Playground	1.28	Open space as described above, with an additional playground geared towards younger children	Private
Hughson Arboretum	Arboretum	13	Undeveloped open space with established tree collection	Private
Andrew Fontana Memorial Park	Community park	2	Covered picnic areas, horseshoe, pits, web climber, and open space	City

Table 4.2. City of Hughson Existing Recreational Facilities

drainage basins exist in Hughson at this time, these two are the only ones that have been designed with recreational access in mind.

Hughson Arboretum and Gardens

In 1994, a longtime Hughson resident began to develop a small ornamental tree collection. In 2000, after visualizing the community benefit that could be provided, this citizen expanded the tree collection onto13 acres of land and established the Hughson Arboretum & Gardens non-profit organization and appointed a Board of Directors.

An interpretive planning process for the Hughson Arboretum and Gardens, geared to be a regional horticultural and educational institution, began in earnest in 2003. The Arboretum's mission was solidified during these activities: to "…plant, maintain and make available to the public, native tree and plant species, trees of historic value, or other types of plant material to promote education about and appreciation of our natural environment, to encourage the preservation of native plant species, and to provide the public with a place of peace and quiet contemplation." As part of the planning process, a master plan for the botanical garden has been prepared and the non-profit organization is working to implement the vision of the master plan.

The Board of Directors works with various community groups to improve the Arboretum. Several Eagle Scout projects have improved the signage and self-guided trail system and other improvement projects are currently in progress. This educationally oriented facility is a great asset to the City of Hughson's urban forest.

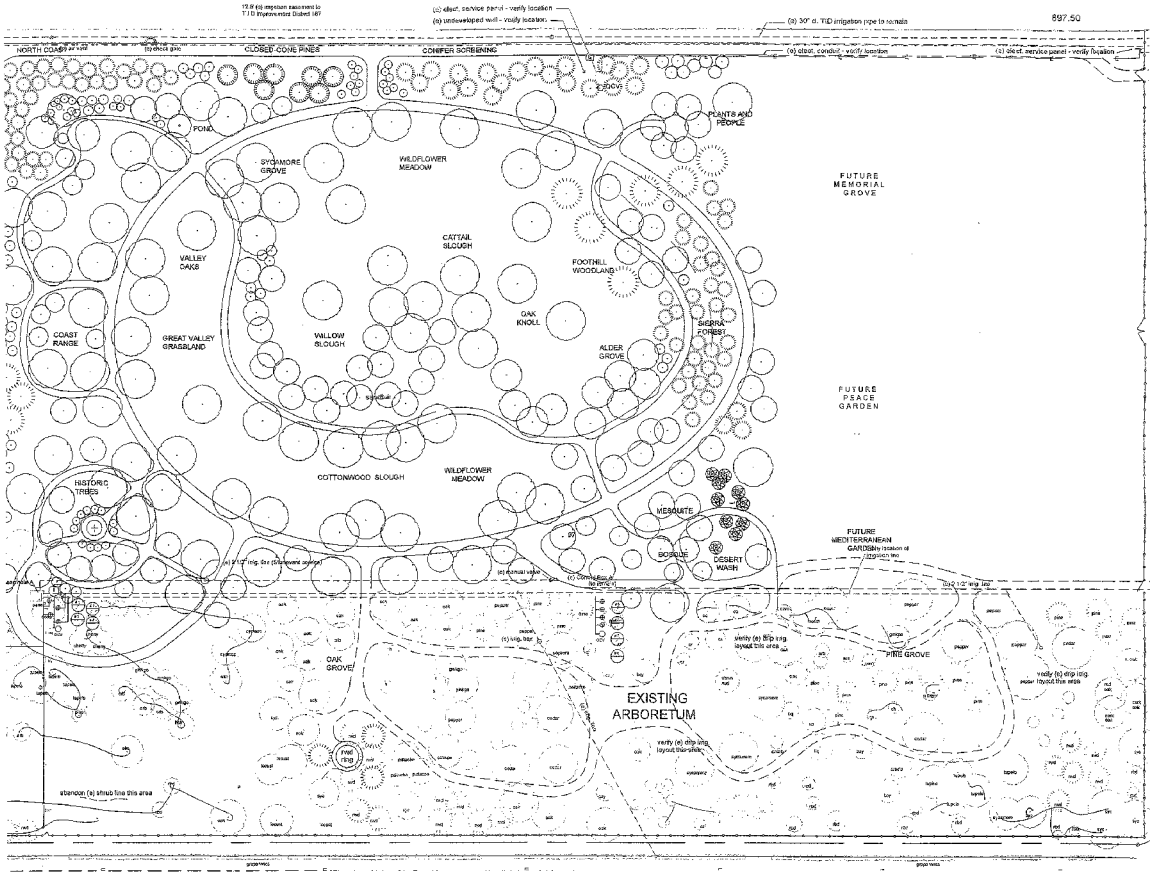

Figure 4.3. Map of the Hughson Arboretum and Gardens

Chapter 5: Urban Forest Management Principals

Introduction
Efforts to encourage tree planting in new developments is central to the City's development regulations. Other efforts, especially in areas lacking significant tree cover, should be continued and bolstered to promote expansion of City of Hughson's Urban Forests. Commercial developments, in particular, tend to have very low tree cover. Additional strategies to allow for tree planting in these areas could be considered. This situation is not unique to City of Hughson.

McPherson and Simpson (2003) found that only 6% of the trees in 21 California cities were found on commercial/industrial land uses. In contrast, 77% of the trees in these cities occurred in residential land uses. Furthermore, average tree cover in commercial/industrial areas averaged 7% compared with 24% tree cover in residential areas among cities in previously forested areas (Western Center for Urban Forest Research and Education 1997). Although the percentage of land area covered by pavement and structures in commercial sites tends to be high, increased use of trees with moderate to wide canopy spread (a minimum of 30 to 35 feet) could increase the canopy cover.

The following discussion focuses on the unique Tree Management approaches that might be applied in the development and expansion of City of Hughson's Urban Forests.

General Management Concepts
In many California cities, established trees are often subjected to poor pruning practices, particularly topping (cutting back large limbs to stubs). Topping can destroy tree structure and make trees more hazardous. In some areas of City of Hughson, that have overhead utility lines along streets, some trees have been topped to maintain utility line clearance. Although Turlock Irrigation District, the electrical utility provider in Hughson, as well as, other utilities are changing from topping to directional pruning (also known as "V" trimming) to maintain clearance, the best solution for planting under utility lines is to use species that will not grow tall enough to require clearance pruning.

Because most front yards contain at least some irrigated turf, the wide use of trees that tolerate lawn irrigation schedules, such as coast redwood and birch, is understandable. However, these and other high water use species tend to fare badly during drought periods, especially when they become large. Given City of Hughson's soil and climate, and the increasingly tight water supplies in the state, greater use of drought tolerant species should be encouraged.

In order to develop good branch structure that will reduce later maintenance needs, most young trees should be inspected, and pruned as needed, on a two to three year cycle until the permanent branch structure is developed. This is most important for hardwood trees (i.e., trees other than conifers) that will be medium to large-statured at maturity. Early training of conifers that have a typical excurrent growth pattern (like a Christmas tree) is much less critical and mainly consists of eventually removing low branches to develop clearance.

Irrigation is also a critical maintenance issue. As noted above, street tree plantings tend to be especially stressful because soil conditions are typically poor (high compaction, restricted soil volume) and summer water demand is high due to heat radiated off paved surfaces. In these sites, trees with moderate to high moisture requirements can easily become critically stressed if irrigation is inadequate. Improperly adjusted timers or malfunctioning equipment can result in water deficits that can severely damage

established trees and can kill young trees.

Maintenance needs in street tree plantings could be reduced by phasing out high water-use species in favor more drought tolerant species. In many sites, drought tolerant tree species, including locally native oaks, may be able to grow with little or no irrigation. For example, in relatively wide beds that have adequate amounts of soil that is suitable for root growth, species such as blue oak should be capable of surviving without irrigation once established. Because blue oak would grow relatively slowly in these sites, its pruning requirements would also be low. In many sites, it may be possible to establish locally native oaks from seed among existing plantings. Eventually, such oaks could replace shorter-lived, higher maintenance species that were originally present in the plantings.

A moderate percentage of the tree species in the current plantings will be small-statured at maturity. Small tree size is necessary and desirable in tight planting situations, including plantings under utility lines. However, a number of relatively large beds with dense plantings of small-statured trees such as purple leaf plum could alternatively accommodate a smaller number of large-statured trees. One consequence of the small-statured tree planting pattern is that little or no tree canopy is actually directly over pavement, so street surfaces will not receive substantial amounts of shade during the hottest periods. Many of the benefits that street trees provide are directly related to canopy size, and researchers have shown that the benefit-to-cost ratio generally increases with tree size (McPherson 2003). Overuse of small-statured trees greatly reduces many of the benefits that are associated with street tree plantings.

Age diversity within plantings is also an important factor that affects the long-term sustainability of the street tree population (Maco and McPherson 2003). Especially when genetically uniform clonal varieties are used, trees of a given species planted at a site at one time will also tend to reach the end of their useful life at the same time. In plantings that have a diversity of species and tree ages represented, only a small percentage of the trees will need to be replaced in any given year. Phased replacement of dead trees in the existing plantings following the replacement protocol outlined above will help produce a more stable mix of species and tree ages. This will also allow the city to gradually replace short lived species used in the original plantings with longer-lived, better adapted species.

Trees in parks

The City of Hughson maintains many improved parks with many acres of developed parkland to serve its resident population and visitors alike. These parkland include both planted trees and conserved native trees. These parks are a key contributor to the quality of life in City of Hughson. The trees in these parks increase the desirability and usability of the parks by providing critical shading and visual interest. They also provide habitat for wildlife species and enhance opportunities for wildlife viewing within the city. Trees in parks also provide a variety of other benefits, such as controlling soil erosion, intercepting particulate and gaseous air pollution (carbon sequestering), and reducing urban noise. Trees are a long-term asset of City parks that need to be managed in a way that maintains their utility and safety for as long as possible. Heavy human use of park lands and maintenance of turf and other park assets can also impact tree health.

Management issues

- If native oaks are planted in parks adjacent to natural oak stands, seed sources of planted material should be from the City of Hughson area.
- Site assessments should be conducted before replanting empty planting spaces so that corrective actions can be taken if necessary to

improve the planting site and/or species selection.

- City of Hughson parks contain many young trees which need to be inspected and pruned to develop good structure. Timely pruning of young trees reduces later maintenance needs.
- Many older trees are developing problems associated with poor structure or decline that will require more expensive pruning of large branches to mitigate hazardous conditions.

Trees per acre

The overall density goal of trees in city parks should range from about 15 to 50 trees per acre depending on park size and purpose. For example, parks used for active recreation purposes (ball fields, swimming, court games, etc.) would typically have lower density of tree plantings.

Tree condition and management concerns

Although tree structure and pruning concerns were common in all types of parks older parks generally have older trees, which are prone to certain problems not seen in young trees. In addition, some older parks have problems associated with certain design elements (e.g., inadequate rootzone protection and irrigation near conserved oaks) and plant materials that are no longer used.

Parks typically represent sites with sufficient space to grow trees that have large canopies at maturity. Researchers at the Forest Service Center for Urban Forest Research at UC Davis have shown that a mature large-statured tree provides an annual net benefit two to six times that of a mature small-statured tree. (http://cufr.ucdavis.edu/products/cufr_419.pdf).

Management approaches

In recently-constructed parks with uniformly young trees, the major tree maintenance issue is early structural pruning to develop good permanent branch structure. Other issues include avoiding wounding trees and replacing young trees that have died. Older parks are more likely to have trees of mature size, including both fast-growing non-native species and conserved oaks. These older and larger trees tend to have more problems related to pests and diseases and potential hazards related to poor structure and dead or declining branches.

City-maintained trees along streets and parkways

The City of Hughson Public Works Department maintains some trees in its right-of-way along City streets and parkways throughout the City. These include plantings in street medians and along street shoulders. Well-designed and properly maintained street tree plantings not only enhance the aesthetics of City streets and the community as a whole, but can provide a variety of other benefits. Shading and evaporative cooling provided by trees are obvious benefits, but street trees can also help intercept particulate and gaseous air pollutants; moderate stormwater runoff; increase traffic safety through traffic calming effects that tend to reduce vehicle speed; extend the life of asphalt paving through shading; and have positive economic impacts on businesses located along streets.

Management issues and approaches

- Irrigation is critical for maintaining the condition of most of City of Hughson's street trees. Increased use of more drought tolerant species would reduce street tree maintenance costs.
- Phased replanting of empty sites could be used to increase the percentage of drought tolerant species among city street trees and increase age diversity within the plantings.
- Soil problems have been a common cause of poor tree performance (compaction/limited surface area exposure) in street tree plantings. When dead trees are removed, the planting site should be assessed to determine whether adverse conditions need to be corrected before

the site is replanted.
- If street shading and other benefits of tree canopy are a goal of street tree plantings, greater use of large-statured trees will be needed in future plantings.
- By monitoring species composition of new plantings, the City can avoid overuse of the most common tree species.
- Because soil conditions and planter arrangements can vary widely between different roadway segments, long term management plans should be developed for specific street segments to guide tree replacement.

Canopy cover along residential streets should be an important goal along residential streets as opposed to tree plantings along commercial and industrial street and major roadways that accommodate high traffic volumes.

Much of the variation must be considered in the number of trees per street mile depending of type of street section, street level of service and neighborhood. Density can range from one (e.g., center median only) to three (median plus both shoulders). If the number of planting beds is taken into account, the average number of trees per street mile per planting bed is 160, with a range of 58 to 264. This corresponds to an average of one tree for every 40 feet of roadway per landscaped bed.

Many of the species in these city maintained street tree plantings do not have a very wide canopy spread at maturity. Assuming an overall average canopy spread of 25 to 30 feet at maturity for each tree, an average of one tree per 40 feet of roadway will generally not provide a continuous tree canopy if all trees reach mature size. Canopy spread in residential neighborhoods is of greater importance in residential neighborhoods than in some commercial and industrial districts.

Tree canopy cover over streets

The shading of paved surfaces by trees provides several important benefits. The amount of shading over streets can be quantified by evaluating Canopy Cover at the Edge of Pavement (CCEP). CCEP is reported as the percentage of pavement edge (the line defined by the junction of the street and curb) that has tree canopy directly over it. (http://www.isa-arbor.com/publications/tree-ord/ccep.aspx). Trees that provide any substantial shading at the pavement edge typically extend over the street as well.

The low level of CCEP was due to three factors:
- Trees are commonly placed well back from the sidewalk, and commonly well beyond the public utility easement along the street;
- Relatively few large-canopied trees are planted in residential front yards
- Most trees are still far below their mature canopy spread.

To account for the effect of the third factor (tree maturity), Based on these data, the number of trees with CCEP could triple to about 16% if all trees currently present attain their typical mature spread. When expressed on the basis of trees per street mile (counting both sides of the street), the number of trees providing CCEP is expected to increase from 19 trees/street mile to 62 trees/street mile as the current tree population grows to mature size. Most of these trees will only provide a few feet of CCEP at maturity. Assuming an optimistic average 8 feet of CCEP per tree on average, the 62 trees per mile will provide about 500 feet of CCEP, or about 5% CCEP on each side of the street. By comparison, a well-canopied street would typically have at least 50% CCEP.

Species composition

In general, a high level of tree species diversity is desirable to reduce the chance that a major problem that develops in one species will impact a high percentage of the total tree population. A commonly-

used guideline is that a single cultivated species should not make up more than 10% of the urban street tree population.

The number of tree species present within a given street segment tends to increase as the age of the development increases. Some of the most recently constructed neighborhoods had as few as six frontyard species, whereas older neighborhoods typically had 15 or more species. The increased diversity is the result of both tree replacement and additional plantings by homeowners. High species diversity is generally desirable for reducing risks associated with pests and diseases.

Privately-maintained trees along residential streets
These and most of the other trees in City of Hughson's urban forest are owned and maintained by City of Hughson residents. Hence, it is important to consider the status of this resource, which provides a wide variety of benefits to the City as a whole. In particular, the traffic calming effect produced by having rows of trees along roads can reduce vehicle speeds and make residential neighborhoods safer. Studies also show that trees in neighborhoods are associated with stronger ties between neighbors and lower crime rates (Kuo 2003).

Overview
- Most City of Hughson neighborhoods have at least a moderate numbers of trees in front yards.
- Most residential front yard trees are relatively young and well below mature size.

Management issues and approaches
- A few commonly used tree species may not be sustainable over the long term. Providing more information on tree species to tree planters (both homeowners and developers who plant trees in new residential developments) may help them make better species selections.
- Increased use of drought-tolerant tree species, including locally native oak species, should be encouraged where appropriate.
- Residents with conserved native oaks may need more guidance on how to effectively maintain these trees in residential landscapes.
- Educational efforts should be undertaken to ensure that residents are aware of proper tree pruning practices to keep topping and other destructive practices from gaining a foothold in City of Hughson.

Trees in commercial parking lots
Parking lots can occupy a substantial amount of a city's land area. In Sacramento for instance, 5.6% of the land area is occupied by parking lots (McPherson 2001). Trees in parking lots help mitigate some of the negative environmental impacts of parking lots while improving their appearance. Adequate numbers of appropriately placed trees can mitigate stormwater runoff and reduce the temperatures of both pavement and vehicles, thereby improving both water quality and air quality. However, parking lots can be harsh sites for tree growth, so good site design and proper tree maintenance are needed to achieve the benefits that parking lot trees can provide.

Management issues and approaches
- Changes in parking lot planning and tree maintenance practices have been made to increase levels of parking lot shading in City of Hughson.
- Lower ratios of parking spaces per tree can help increase shading, but only if coupled with proper tree placement and tree size.
- Soil conditions need to be improved in many existing parking lot tree planting sites to improve tree growth, condition, and survival. Soil problems should be avoided or corrected before the original planting and corrected as needed before replanting empty sites.

- Tree species used in parking lots should only include those that are adapted to the relatively harsh site conditions.
- Native oaks retained in parking lots can sometimes provide many years of substantial canopy cover even if the root-zone has been excessively encroached upon by construction activity. Greater levels of root-zone protection would improve the long-term health and survival prospects of most retained trees.
- Follow-up monitoring of parking lots is needed to ensure that trees are properly maintained and replacements are planted as needed.

Shading of parking spaces

Tree size, planter size, and the placement of trees in planters all influence whether trees actually shade parking spaces. Small-statured and young trees are less likely to extend over parking spaces, especially if they are in large planters, such as those that border parking lots. As a result of forecasted changes in summer temperatures, due to climate change, some older City of Hughson parking lots will become uninhabitable during mid-day summer months. This will have an adverse impact on retail and service activity for businesses that rely on these customer parking areas. The city should work with the owners of these parking facilities to improve long-term tree shading patterns and improve the parking environment.

Tree health and maintenance are factors that influence levels of shade that develop in parking lots. If growing conditions are poor, both new and older trees will remain stunted and will not attain the size anticipated in the approved landscape plan. Tree canopy size can also be restricted by improper pruning practices, such as topping.

Parking lot canopy cover is also adversely affected by premature tree decline and death. This is particularly critical along south (mid-day) and west (afternoon) facing street parameters. Tree death and removal causes an immediate loss of tree canopy. If trees are not replaced, the ratio of parking spaces per tree is increased over the long term. Even if trees are replaced, the new trees are small and typically do not provide significant shade for a number of years. Any program to develop better-shaded parking lots has to include provisions to replace lost trees and monitor the health and maintenance of existing trees.

As currently designed and constructed, parking lots are typically not good sites for tree growth. This is a recognized problem throughout the United States and ameliorating these harsh growing conditions is the focus of much urban forest research. Soils under pavement are normally compacted to levels that inhibit root growth. Compacted soils may also drain poorly, leading to long periods of soil flooding in the winter or after irrigation. Impervious pavement reduces the amount of water and oxygen in the soil, further restricting root growth. Un-shaded pavement absorbs and re-radiates heat, making summer growing conditions especially hot. Due to all of these factors, small cut outs in paved areas are very difficult environments for tree growth. Berms, mounds, and slopes, which are common in planters around the edges of parking lots, can be excessively dry sites because much of the applied irrigation runs off from the sloped areas.

These negative features can be mitigated to some degree through design and construction techniques. Increasing planter size and using linear planters can provide greater amounts of rootable soil, but only if the soil is deeply tilled to reduce soil compaction and improve drainage. Irrigation systems must be designed and operated to ensure that applied water does not simply run off. Some areas of impervious pavement can be replaced by pavers or other pervious materials within the root-zone. Structural soil mixes, which provide adequate levels of aeration and pore space

Chapter

5

when compacted to engineering specifications, can be also be used to increase the root-able area beneath pavement. Tree species that are more tolerant of heat and drought can be used in preference to species that do not perform well under such conditions. Some of these improvements, such as de-compacting planting beds and making use of permeable paving materials may require some additional costs at the construction phase, but these modest investments will pay off in terms of reduced maintenance, superior tree performance, and more shade-related benefits over the long term. In older lots, efforts to ensure that missing trees are replaced will be more successful if they include soil modifications to improve growing conditions.

Figure 5.1. Mexiacan Fan Palms in The Hughson Arboretum and Garden

Chapter 6: Planting Guidelines

General Qualities Desired for Trees

How an urban forest prospers, and the impact it has on a community, depends on the types and location of the trees being planted. Over the years a variety of trees have been planted in City of Hughson. Most of the trees present have done as well as can be expected in an urban setting. Certain trees have undesirable traits in an urban setting, which can overshadow their benefits. While each tree has limitations and there is no completely ideal tree, certain characteristics are important in the selection of trees, particularly trees to be planted in public spaces. Trees with the following characteristics are preferred:

- Trees that adapted to this area.
- Trees that have a longer life span than 25 years.
- Trees that do not have a history of brittleness or anchorage problems.
- Trees that are not known to have serious pest, disease, or fruiting problems.
- Trees that will not require a high level of maintenance.
- Trees that have an attractive appearance, especially with some fall color.
- Trees with root systems that are not overly aggressive.

While efforts are made to find trees with these characteristics, at times unknown problems later develop. Therefore, it is important to anticipate any possible problems that may occur later when determining the selection and placement of trees and all other issues related to planting. A list of trees found to be most compatible in the urban environment of City of Hughson is found in the City's Master Tree

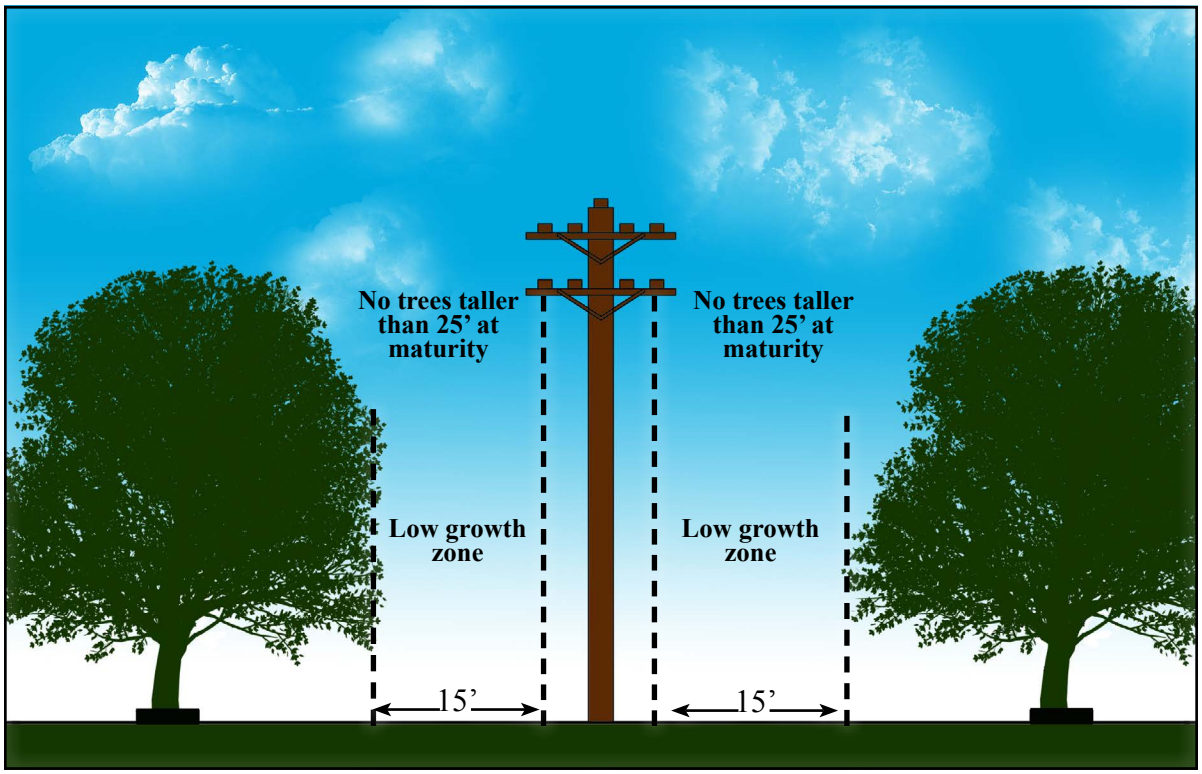

Figure 6.1. General placement of trees

List found in Appendix A. Other trees may be added to this list from time to tome as they are found to meet the objectives of the City's Urban Forest Program.

General Placement of Trees

The local utility company should contact, before planting, to locate underground water, sewer, gas, and telecommunication lines. Note the location of power lines, streetlights, and traffic signs, and select tree species that will not conflict with these aspects of the city's infrastructure. Keep trees at least 30 feet (10 m) away from street intersections to ensure visibility. Avoid planting shallow rooting species near sidewalks, curbs, and paving.

General guidelines for placement of tree in and around overhead utility lines, particularly with respect to overhead power lines, are as follows:

- Establish a 15-foot low-growth zone on both sides of all electric lines. The zone under the electric power lines should be a low growth tree planting zone as well as a shrub and flower planting zone on public and private landscape plans.
- Keep in mind that when planting under power service drops; a flower and shrub-planting zone is best.
- Do not plant tall trees (trees that are or will exceed 25-feet at maturity) under or within 15-feet of the side of overhead electric lines. In general, do not plant trees near power poles.
- Do not plant trees and shrubs near power poles. Consider safety and access for repairs.
- Do not plant trees within 10 feet of underground electrical utility lines. If you are unsure of the location of the underground electrical utility lines call Underground Service Alert (USA) at 811.

Tree roots can heave pavement if planted too close to sidewalks and patios. Generally, avoid planting within 3 feet (1 m) of pavement, use root barriers and remember that trunk flare at the base of large trees can displace soil and paving for a considerable distance. Select only small growing trees (<25 feet tall) for locations under overhead power lines, and do not plant directly above underground water and sewer lines. Avoid locating trees where they will block illumination from streetlights or views of street signs in parking lots, commercial areas, and along streets.

Maintenance requirements and public safety issues influence the type of trees selected for public places. The ideal public tree is not susceptible to wind damage and branch drop, does not require frequent pruning, produces little litter, is deep-rooted, has few serious pest and disease problems, and tolerates

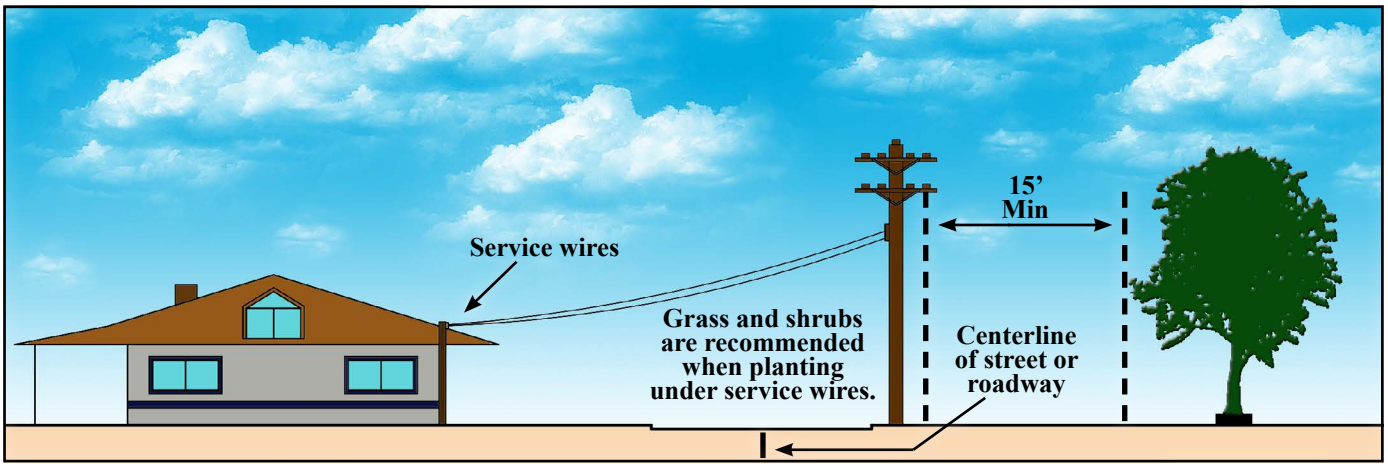

Figure 6.2. General placement of trees

a wide range of soil conditions, irrigation regimes, and air pollutants. Because relatively few trees have all these traits, it is important to match the tree species to planting site by determining what issues are most important on a case-by-case basis. For example, parking lot trees should be tolerant of hot, dry conditions, have strong branch attachments, and be resistant to attacks by pests that leave vehicles covered with sticky exudate. Consult the City's Master Tree List in Appendix "A", the Descriptions and Management information in Appendixes "B" and "C" and a local landscape professional for more horticultural information on tree traits.

Locating and Selecting Trees to Maximize Climate Benefits

Locate trees in common areas, along streets, in parking lots, and commercial areas to maximize shade on paving and parked vehicles. Shade trees reduce heat that is stored or reflected by paved surfaces. By cooling streets and parking areas, they reduce emissions of evaporative hydrocarbons from parked cars that are involved in smog formation. Large trees can shade more area than smaller trees, but should be used only where space permits.

Because trees in common areas and other public places may not shelter buildings from sun and wind, CO2 reductions are primarily due to sequestration. Fast-growing trees sequester more CO2 initially than slow-growing trees, but this advantage can be lost if the fast-growing trees die at younger ages. Large growing trees have the capacity to store more CO 2 than do smaller growing trees. To maximize CO2 sequestration, select tree species that are well suited to the site where they will be planted. Use information in Appendix "B" and "C" and consult with your local landscape professional to select the right tree for your site. Trees that are not well adapted will grow slowly, show symptoms of stress, or die at an early age. Unhealthy trees do little to reduce atmospheric CO2, and can be unsightly liabilities in the landscape.

Some of the following guidelines may help you maximize their ability to serve as CO2 sinks:

- Provide as much pervious surface as possible because soil and woody plants store CO2.
- Maximize use of woody plants, especially trees, as they store more CO2 than do herbaceous plants and grass.
- Increase tree-stocking levels where feasible, and immediately replace dead trees to compensate for CO2 lost through tree and stump removal.
- Create a diverse assemblage of habitats, with trees of different ages and species, to promote a continuous canopy cover.
- Select species that are adapted to local climate, soils, and other growing conditions. Adapted plants should thrive in the long
- Group species with similar landscape maintenance requirements together and consider how irrigation, pruning, fertilization, weed, pest, and disease control can be minimized.
- Compost litter fall, and apply it as mulch to reduce CO2 release associated with irrigation and fertilization.
- Where feasible, reduce CO2 released through landscape management by using push mowers (not gas or electric), hand saws (not chain saws), pruners (not gas/electric shears), rakes (not leaf blowers), and employing local landscape professionals who do not have to travel far to your site.
- Consider the project's life span when making species selection. Fast-growing species will sequester more CO2 initially than slow growing species, but may not live as long.
- Provide a suitable soil environment for the trees in plazas, parking lots, and other difficult sites to maximize initial CO2 sequestration and longevity.

Chapter

6

Street Trees
Street trees are planted on public rights of way or easements. This portion of the property extends inward from the street curb. Except in locations where cut outs in the concrete are present, or where planter strips exist, trees have historically been planted to within 10'' to 12'' of the edge of the right of way and/ or easement that extends into the property. Today a more practical approach to planting trees is practiced. The following are standards for tree placement.

Planting Patterns for Street Trees.
There are several ways to arrange trees in an urban area. Trees can be planted in:

a. Diverse species plantings.
b. Uniform species plantings (monoculture).
c. Semi uniform plantings.

All of the methods have been used within the city. However, this plan goal is to eliminate the uniform species plantings (monoculture).

Diverse Planting Culture
Planting a variety of species in an urban area is very beneficial from a disease prevention standpoint. Having many different kinds of trees assures that if a disease is introduced, only portions of the urban forest will be affected. Diverse species planting also prevents the problem of a general decline of all trees if only a single species is used. It is generally agreed that a city should not have more than 10% of its tree population planted to a single species. A shortcoming of this type of planting is that additional maintenance is required compared to uniform grouping because each tree species can differ greatly. In addition, diverse population does not provide the harmony that uniform planting does. However, there is some assurance that no single disease will wipe out your urban forest, and this is the recommended strategy for planting street trees in City of Hughson.

Uniform Planting Culture
At the other extreme, a uniform or mono-culture planting allows for easier maintenance, unifies the neighborhood with a common species, and provides consistency to a planting program. For example, in older portions of the City, mono-culture plantings have resulted in trees reaching maturity at the same time and may need to be replaced all at once or over a short period of time. As an another example, the Modesto Ash is susceptible to a disease called Anthracnose, which can kill the tree. In a mono-culture one disease species can kill all of the street trees in a neighborhood.

Semi-Uniform Planting Culture
The Semi-uniform planting programs are a viable option for larger cities. The City of Hughson has implemented a small version of this type of planting program by establishing uniform standards within blocks, streets and some neighborhoods.

In Residential Areas.
a. One tree per lot or two trees per corner lot, unless an extremely large lot exists.
b. Trees are to be placed where they will have the most energy benefit to residents. This usually means centering them according to the living portions of the structure.
c. Trees are not planted within 6' of driveways or sewer lines.
d. Trees are not planted within the clear vision triangle on corner lots (usually 25' to 30' from corners).
e. Trees are planted no closer than 35', nor further than 90', to one another.
f. In some situations, such as streets that end in cul-de-sac (court), trees may not be planted at every residence due to the lack of space. Trees may not be placed at each residence in subdivisions with small lots where two lots jointly have a landscaped area of less than 60'.

At these locations only one tree may be planted in a location which will provide the greatest benefit for both residents.

g. Trees are not normally planted within 12’ of street light poles. In some cases this will not allow the planting of trees at a residence.

h. Trees should not be planted within 6’ of a fire hydrant.

In Commercial/Industrial Areas and Along Walls

The planting standards are:

a. Trees are spread 35’ to 40’ on center unless obstacles exist, such as power poles.

b. Trees are kept out of clear vision zone at corner intersections and near driveways.

c. Watering systems must be provided to the area by the developer.

d. Trees should not be located within 5’ of business signs or within 6’ of sewer lines.

e. Trees should not be planted within 6’ of a fire hydrant.

Trees for Parks and Other Public Places

Trees are used in parks as design elements. These elements are complex, living, growing things, changing with each season. They’re used for their esthetic and functional qualities. Trees used in parks fall into five general categories. The categories are

Figure 6.3. Hughson Arboretum and Gardens

perimeter, accent, transitional, specimen, and screen trees.

Perimeter trees match the physical characteristics of the city street trees adjacent to the park site. These characteristics would include size, texture, density, form, and color. Perimeter trees signal the user that he/she is entering a new environment. Accent trees are those which have an outstanding showy feature. Accent trees will typically have a seasonal show, be it flowers or a bright fall leaf color. This tree will draw the user's attention to entry points or a special park feature.Transitional trees are larger in scale than both perimeter or accent trees. Transitional trees are used to define the park as a large public open space. They are literally and physically the ceiling of the park space.

Specimen trees are unique or unusual trees not commonly seen in residential landscapes. Specimen trees introduce the park user to a broader spectrum of trees that grow in our climate zone.
Screen trees are evergreen, fine textured, and medium in size. Screen trees are used to conceal objectionable views, block nuisance lighting from playing fields and game courts, and at times, focus a park users eyes on a particular vista or park feature. While the transitional trees are the ceiling of the park, screen trees represent the wall of a park.

Tree placement in a park doesn't always fit into one of the five categories defined. Sometimes overlap occurs because of existing physical conditions that exist at the park site. These conditions would include wind direction, sun angles, soil conditions, topography, adjacent property uses, building types, and types of parks (active or passive).

General Guidelines for locating and Selecting

Figure 6.4. Street tree planting in the City of Hughson

Trees

Residential Yard Trees

Maximizing energy savings from shading the right tree in the right spot saves energy. In midsummer, the sun shines on the northeast and east sides of buildings in the morning, passes over the roof near midday, then shines on the west and northwest sides in the afternoon. Air conditioners work hardest during the afternoon when temperatures are highest and incoming sunshine is greatest. Therefore, the west and northwest sides of a home are the most important sides to shade. Sun shining through windows heats the home quickly. Locate trees to shade windows so that they block incoming solar radiation, but do not block views. In San Joaquin Valley communities, the East Side is the second most important side to shade.

Trees located to shade south walls can block winter sunshine and increase heating costs, because during winter the sun is lower in the sky and shines on the south side of homes. The warmth the sun provides is an asset, so do not plant evergreen trees that will block southern exposures and solar collectors.

Use solar friendly trees to the south because the bare branches of these deciduous trees allow most sunlight to strike the building (some solar unfriendly deciduous trees can reduce sunlight striking the south side of buildings by 50%). To maximize summer shade and minimize winter shade, locate trees about 10-20 feet (3-6 m) south of the home. As trees grow taller, prune lower branches to allow more sun to reach the building if this will not weaken the tree's structure.

Although the closer a tree is to the home the more shade it provides, the roots of trees that are too close can damage the foundation. Branches that impinge on the building can make it difficult to maintain exterior walls and windows. Keep trees at least 5-10 feet (1.5-3 m) from the home to avoid these conflicts but within 30-50 feet (9-15 m) to effectively shade windows and walls. Paved patios and driveways can become heat sinks that warm the home during the day. Shade trees can make them cooler and more comfortable spaces.

Shading your air conditioner can reduce its energy use, but do not plant vegetation so close that it will obstruct the flow of air around the unit. Keep trees away from overhead power lines and do not plant directly above underground water and sewer lines. Contact your local utility company before planting to determine where underground lines are located and which tree species will not grow into power lines.

Locating Windbreaks for Heating Savings

The winter heating season is not too long in the San Joaquin Valley, but heating costs can still be several hundred dollars per year. Because of their size and porosity, trees are ideal wind filters. Even leafless trees in the city can reduce wind speeds and heating costs. In situations where lot sizes are large enough to plant windbreaks, additional savings can be obtained. Locate rows of trees perpendicular to the primary wind direction — usually along the north and west sides of the property in the San Joaquin Valley. Design the windbreak row to be longer than the building being sheltered because the wind speed increases at the edge of the windbreak. Ideally, the windbreak is planted upwind about 25-50 feet (7-15 m) from the building and consists of dense evergreens that will grow to twice the height of the building they shelter (Heisler 1986, Sand 1991).

Avoid locating windbreaks that will block sunlight to south and east walls. Trees should be spaced close enough to form a dense screen, but not so close that they will block sunlight to each other, causing lower branches to self-prune. Most conifers can be spaced about 6 feet (2 m) on center. If there is room for two or more rows, then space rows 10-12 feet (3-4 m) apart.

Selecting Yard Trees

Chapter

6

The ideal shade tree has a fairly dense, round crown with limbs broad enough to partially shade the roof. Given the same placement, a large tree will provide more building shade than a small tree. Deciduous trees allow sun to shine through leafless branches in winter. Plant small trees where nearby buildings or power lines limit aboveground space. Columnar or upright trees are appropriate in narrow side yards. Because the best location for shade trees is relatively close to the west and east sides of buildings, the most suitable trees will be strong, resisting storm damage, disease, and pests (Sand 1994). Examples of trees not to select for placement near buildings include cottonwood (Populus fremontii) because of their invasive roots, weak wood, and large size, ginkgo (Ginkgo biloba) because of their narrow form, sparse shade, and slow growth, and pine trees (Pinus spp.) because of their evergreen foliage.

When selecting trees, match the tree's water requirements with those of surrounding plants. For instance, select low water-use species for planting in areas that receive little irrigation. Also, match the tree's maintenance requirements with the amount of care different areas in the landscape receive. Tree species that drop leaves and fruit may be more easily maintained in areas where litter disappears in coarse groundcovers or in a lawn where it can be easily raked up than in areas that are more difficult to clean. Check with your local landscape professional before selecting trees, to make sure that they are well suited to the site's soil and climatic conditions.

Conifers are preferred over deciduous trees for windbreaks because they provide better wind protection. The ideal windbreak tree is fast growing, visually dense, and has stiff branches that do not self-prune. Species in the pine (Pinus spp.), cypress (Cupressus spp.) genera, and evergreen oak species (Quercus spp.) are among the best windbreak trees for San Joaquin Valley communities.

Figure 6.5. Street tree planting in the City of Hughson

Chapter 7: Tree Maintenance Guide

Introduction
The general purpose of the City of City of Hughson's tree maintenance program is to:

- To keep trees in a safe condition.
- To care for the horticultural needs of the trees.
- To preserve the trees so that maximum benefits can be realized during their life cycle.

The City of City of Hughson has been responsible for routine and emergency public tree maintenance. Full-time City employees have performed such tree maintenance activities as pruning, spraying, staking and cabling. If the City cannot meet these duties on routine or emergency tree maintenance, then private contractors can be utilized.

Responsibilities, Duties and Authority of the Public Works Director
The Public Works Director, under the general supervision of the City Manager, has the authority and responsibility to maintain City of Hughson's public (street and park) trees in accordance with City of Hughson Municipal Code.

Service Area Maintenance
Private citizens can call to report street trees needing service. If the request is compelling, needed, and approved either by the street tree service personnel, or from a member of the Public Works Department, then the tree shall be maintained to the best of the service personnel's ability. At times when requests are high due to storm damage, the public should be made aware of possible lengthy delays in storm damage repair to trees.

Mistletoe
Uncontrolled mistletoe can become a serious threat to many of our shade trees in City of Hughson. Control of this parasite can be difficult due to the fact that primarily birds spread mistletoe. Birds eat the seeds of the mistletoe plant, whereupon the seed is passed through the bird's digestive tract. The parasite is then spread by the bird's excrement onto other trees.

The only way to control mistletoe is to interrupt its life cycle and remove the plant before seeds are produced. Since seeds are produced three to four years after the mistletoe plants emerge, effective control through plant removal must occur more often than three years.

Inspections
To determine the conditions of public trees and their future needs, inspections are an ongoing part of tree maintenance. All personnel working on trees are trained to look for potential or immediate problems. In addition, certain portions of the City are targeted for special inspections annually. These inspections are usually where older trees exist, where unusual problems have occurred, such as a particular disease, or at the request of individual residents. Based on these inspections, changes in schedule maintenance may be necessary.

Tree Inventory
The City has been seeking funding to pursue an inventory of the City's street and parkland trees. This inventory is expected to lead to the development of an accurate record keeping system of maintenance for the City's street and parkland trees. The inventory program can also provide the capability of monitoring the urban forest composition an estimate the carbon sequestering characteristics of the City's urban forest. This information allows the tracking of trees for liability and planning purposes and calculating the "carbon off-set value of the City's trees in meeting state standards for reducing greenhouse gases. Maintaining current public site tree inventory records is critical in assessing the needs of the entire urban

forest.

Pests and Disease
In an urban area, pest and disease have a more direct impact on trees than in a natural environment. Pests and disease cannot only harm or alter the appearance of trees, but can become a nuisance to nearby residents. This being said, in the search for new street trees the Public Works Department and the Planning Department took this factor into account. One of the characteristics of street trees chosen was the resistance, or pest free characteristics of the tree. While no tree is completely immune to pests, fungi or disease, none of the trees on our improved list is overly susceptible to pests or disease. In the event of an oversight on our part, we will address any pests or disease associated with the new trees when the problem arises.

Tree Roots
To have a healthy tree, a root system is necessary to provide support, water, and nutrients. While necessary, tree roots in an urban area are the source of many conflicts. This places roots in areas where lawns, sidewalks, curbs, sewers, and driveways are also present. As most of a tree's root system is not visible, prevention of conflicts and monitoring of root growth is not an easy task.

Citizens frequently contact the City about tree root conflicts. Under certain conditions, tree roots can be removed or severed without seriously damaging the tree. On a request basis, a representative from the Public Works Department will respond to these situations. If tree roots can be safely severed or removed, some recommendations are given. In some cases, however, tree roots cannot be safely cut, and an explanation is given to the citizen.

If roots can be safely cut, several options exist. An authorization can be given for a private party to cut or hire someone to do the cutting. Actual removal of tree roots is left up to the individual residents. A final alternative to severe root problems is tree removal. However, this alternative is not considered until all other alternatives mentioned above have been either tried or considered.

Upon discovery of the issue, action may be taken to repair public walks or curbs damaged by tree roots by the property owner. The action could include removal and replacement of the damaged walks or curbs, patching the sidewalks, or planning of the curbs. The property owner coordinates these efforts with the Public Works Department; certain criteria for repair are used, and are available through the Public Works Department.

A common root problem that occurs often is between tree roots and sewer lines. While the City maintains the main lines, the lateral lines are the responsibility of the property owner. Tree roots can enter these lines through small cracks or openings caused by normal deterioration. Once inside, the line blockage can quickly occur. Some root cutting may be possible to minimize sewer problems; however, replacement of the damaged sections is often necessary by the property owner. Trees planted near sidewalks, driveways or other non-pervious surfaces shall be installed with root barriers.

Overhead Wires
There are trees throughout the City that grow into electrical or communication lines. The City personnel can work low voltage lines such as house type and communication lines around when proper training is given. Trees will be pruned according to good horticultural practices. The City cannot perform work on City trees within 10-feet of high-voltage electrical wires unless approved by the City Manager or Director of Public Works. If approved, only employees who have been trained in the clearance of high-voltage overhead wires may do the necessary work.

Street and Public Space Tree Protection
The following provisions will be enforced with respect to the protection of trees located on public sites including street trees:

a. No person shall remove, trim, prune, spray, or cut any above or below ground portions of any street tree in right-of-way or easement without first obtaining permission from the Public Works Director.

b. No person shall interfere or cause any person to interfere with any work being done under the provisions of this plan and the provisions of City of Hughson Municipal Code or by any employee of the city, or by any person or firm doing work for the city.

c. No person shall interfere or cause anyone to interfere with or damage any overhead wires or underground pipes or conduits while removing, trimming, pruning, spraying, or cutting any street trees in a right-of-way or easement. The owner of such facilities shall be notified when such work may interfere with or cause damage to the facilities. The cost of repair of the damage to overhead wires, round pipes or conduits shall be the responsibility of the person, firm or corporation doing or causing the work to be done. The City of Hughson and it officers and employees shall be exempt from the provisions of this subsection.

d. In accordance with this plan and City of Hughson Municipal Code it is unlawful for any person to injure or destroy by any means any tree planted or maintained by the city in rights-of-way or easements, including, but not limited to, the following:

1. Constructing a concrete sidewalk or driveway or otherwise filling up the ground around any street tree so as to shut off air or water from its roots.
2. Piling building materials, equipment, or other substances around any tree.
3. Pouring any deleterious material on any tree or on the ground near any tree.
4. Posting any sign, poster, notice, or other object on any tree, tree stake or guard, or fastening any guide wire, cable, rope, nails, screws, or other device to any tree, tree stake or guard, except as carried out or recommended by a registered arborist.
5. Causing or encouraging any fire or burning near of around any tree.
6. Using any mechanical weeding device against a tree.
7. Constructing retaining walls, fences, or other similar improvements, which prohibit the planting or maintaining of street trees or otherwise affect their growth.
8. Operating construction equipment in such a manner to cause it to contact the tree or the root system of any tree.
9. Disrupt the anchorage of the tree or change the grade around the tree.

e. No person shall plant a tree or other plant material in a planting strip or easement other than lawn or other similar planting materials, unless approved by the Public Works Director.

Planting and Maintenance

a. In new subdivisions the City will require that the subdivider supply, replace or plant approximately one tree per lot, excepting corner lots, where 2-3 trees will be planted.

b. The property owner or occupant, as the case may be, shall be responsible for watering street trees located in planting strips or easements abutting their property.

c. This section shall not prevent any person, firm or public utility from installing and maintaining any overhead wires or underground pipes or conduits lawfully on,

over or under public streets or public rights-of-way subject to the provisions and requirements of this plan and City of Hughson Municipal Code. The Public Works Director, when reviewing plans for planting, maintenance or removal of street trees shall consider the effect upon existing overhead wires or underground pipes or conduits and shall avoid unnecessary disturbance to or relocation of said facilities.

Removal and Replacement

a. The Public Works Director shall be responsible for inspection, maintenance, removal and replacement of street trees planted within rights-of-ways or easements. The Public Works Director may cause street trees or other plant material planted in a right-of-way or easement to be removed by the city if they are deemed by the Public Works Director to be unhealthy, hazardous, undesirable or causing excessive damage to existing public improvements, or street trees.

b. The Public Works Director shall have the authority to require property owners to take

Figure 7.1. Tree Maintenance in the City of Hughson

such action as is necessary to control insects, scales, parasites, fungus, and other injurious pests or plant material that would cause serious injury to street trees and other plant material within the city. The city shall notify the property owner in writing, describing the conditions and stating the control necessary to correct the condition, and establishing a reasonable time within which the corrective steps shall be taken.

c. The Public Works Director shall have the authority to require property owners to remove or prune any privately planted tree, shrub, vine, or other plant material if it is determined by the Public Works Director to be seriously interfering with the growth and health of any street tree.

d. In the event a property owner desires to remove a tree from the right-of-way or easement abutting his/her property, his/her authorized agent shall make application to the Public Works Department. The Public Works Director shall determine whether or not such tree is required to be retained in order to preserve the intent and purpose of the Street Tree Plan. In making his/her determination, the Public Works Director shall consider the inconvenience or hardship which retention of the tree would cause the property owner, and consider also the condition, age, and

Figure 7.2. Street tree planting in the City of Hughson

desirability of variety and location of the tree. If the Director finds that the tree may be moved without violating the intent and spirit of the Street Tree Plan, he/she may authorize the property owner to remove such tree at his/her own expense and liability. If a permit is granted for removal of a street tree, all removal work shall be completed within sixty (60) days from the date of issuance of the permit, and shall be under general supervision of, and in accordance with, rules established by the Public Works Director. All tree stumps shall be removed to a depth specified by the Public Works Director. All removal permits shall be void after the expiration of sixty (60) days from the date of issuance, unless extended by the Public Works Director.

Tree Trimming

Notwithstanding other provisions of this plan, it is the duty of every person owning or occupying any land or lots of land within the city to keep all private trees extending over any street or alley trimmed up to a height of not less than twelve feet (12') except that a height or not less than eight feet (8') shall be permitted over the sidewalk area, and also to keep said space clear of debris.

Cooperation with other Departments and Agencies

a. The Public Works Department shall review and approve all applications for new curb, gutter, sidewalk or driveway installation, or other improvement which might require the removal of or cause injury to any street tree.

b. Any public utility maintaining any overhead wires or underground pipes or conduits shall obtain permission from the Public Works Director before performing any maintenance to said wires, pipes, or conduits, which would cause injury to street trees. Said public utility shall in no way injure, deface, prune, or scar any street tree until the Public Works Director has approved their plans and procedures.

c. The Public Works Director shall be permitted to inspect any and all maintenance or operational work performed by public utilities, which might affect a street tree or street trees. During the performance of said work, if in the opinion of the Director, it would cause excessive or unnecessary injury to any street tree, the Director shall have the authority to stop said maintenance and operational work and arrange with said public utility another method of maintenance or operational work satisfactory to the city.

d. The provisions of subsection (b) and (c) of this section shall not apply to emergency public utility maintenance work, which is performed during non-working hours for city personnel.

Chapter 8: Tree Removal

Reasons for Tree Removal
Trees continually move through their life cycle in an urban area, just as they do in a natural forest. If the life cycle were allowed to go to completion in an urban area, ending in tree collapse and decomposition, numerous problems would arise. At some point in the life cycle, a decision must be made to remove a tree. A preservation approach exists in the City so those trees are not removed unnecessarily. When trees are removed, replacement generally occurs. Certain criteria are used to make the judgment of when a tree is removed. Five general categories are used:

A. Tree is dead, dying, or diseased
B. Tree poses a potential safety problem.
C. Tree is an undesirable species.
D. Tree is creating a hardship
E. Construction necessitates removal.
F. Tree is Dead, Dying, or Diseased
G. Conflicts with Utilities

Being a living organism, trees at some point die or become diseased, unless their life cycle is interrupted at an earlier stage.

When this occurs, the trees must be removed before the final decay processes set in and a safety problem occurs. Inspections will usually identify these trees on an annual basis.

Tree Poses a Potential Safety Problem
Trees can pose a potential safety problem, even with a good maintenance program. Growth habits and strengths of limbs and trunks are variable. It is also difficult to know what is occurring below the ground. Certain signs of decay or weakening can be detected during inspections. These signs can be such things as fungal growth, included bark, split trunks, cavities, or a poor general appearance. Even though the tree may still be functioning and producing benefits, inspections could show that a potential problem is present which poses a high risk to public safety.

If corrective steps are not feasible, removal of the tree is necessary. At times certain work, which is necessary around the root system of trees, could leave the tree with poor anchorage. Assessments are made of whether the tree must be removed. For example, if a tree is located near a sewer line and the property owner must gain access to repair the line, the tree may have to be removed because of severe root loss necessary to clear the area of roots for repair. Some trees can produce a fruit that could cause slipping problems for pedestrians, or other traffic, near it. If the fruiting habits cannot be stopped, removal of the tree may be necessary.

Tree is an Undesirable Species
Certain trees which have undesirable traits are present on rights of way or easements. Thorns, brittleness, heavy fruiting and extremely invasive root systems are some of the reasons a tree may be undesirable. Birds or citizens plant most of these trees. Occasionally a major problem may occur with an established street tree, which would make it undesirable. Some examples of undesirable trees are Willows, Poplars, and Mulberry. When an undesirable species is found, its condition and value are reviewed and removal may be necessary.

Tree is Creating a Hardship
Conflicts of some type occur with every tree. What is considered by some to be a hardship may not be to most people. For example, certain people consider leaf raking a hardship; others may feel that insect damage creates a hardship. Certain criteria have been developed to allow for consistent interpretation of a hardship.
Hardship is interpreted to mean structural problems, such as cracking or raising of a garage floor, which

could possibly be associated to tree roots. When alternatives have been attempted and the problem reappears or continues, removal may be considered.

Hardship is not extended to situations in the landscape, or with other non-structural improvements. Removal of trees due to hardship has been considered in the case of a handicapped person under special circumstances involving vehicle access.

Construction Necessitates Removal
Use of property can change, with the interest in new development. When existing trees are in conflict with improvements such as new building construction, removal is considered under permit procedures. However, if at all possible, the tree(s) will be preserved in new construction projects. If removal is the only alternative, the property owner is responsible for removal and replacement of trees. Replacement trees must be of a size as near to the size of the tree removed as possible, within practical limits, and in accordance to the Street Tree Plan.

Occasionally, in residential areas a property owner will want to widen a driveway where a tree exists. If the tree is less than six-inches (6") in diameter at a distance of four and a half feet (4 ½') above the ground, removal may be allowed under permit procedures. The property owner is again responsible for all costs and tasks necessary for removal and replacement of the tree. If a replacement is not possible, a charge equivalent to the current planting cost of a 24-inch boxed tree is assessed to the property owner.

Tree is Dead, Dying or Diseased
Where a tree is dead, dying or diseased removal is the only solution. A dead or dying tree poses a hazard with respect to fallen branches, etc. A diseased tree may infect adjacent trees and permit the spread of disease among other trees in the area.

Tree Conflicts with Utility Service
In instances where tree growth creates a conflict or potential hazard for overhead power or communication utility lines, removal of a tree may be the only solution. Preferably, trimming of the tree, in conflict, with utility service, is an adequate solution.

Figure 8.1. Street tree planting in the City of Hughson

Chapter 9: Reforestation

Introduction
A visitor driving through City of Hughson cannot help but noticing our beautiful tree lined streets and forested parkland. These trees did not spring up overnight. It was the vision of City officials many years ago to line our streets with a variety of trees and it is the aim of this document to continue that tradition well into the 21st century to keep our streets lined with beautiful trees. This will promote unity and community, as well as attracting visitors and prospective residents.

Replacement
When a tree is removed, a gap in our forest occurs. To replace these trees, a plan consistent with the total affected area must be considered. To do this, a map indicating what trees will be planted in existing neighborhoods should be developed by the Planning Department. This map will designate in general the species to be replanted on each street. Some deviation may be necessary based on how the specific site fits into the standard categories.

It is the City's practice to replace trees when they are removed, or to require homeowners to replace removed trees if they are in private property but in the Street Tree Area. Municipal Code Section 12.30.020 defines the Street Tree Area as…the street right-of-way, and five feet either side thereof. However, in some cases the trees removed may not be replaced. This occurs when there is not adequate room for replacement due to poor site selection originally or because adjacent trees exist which will fill the void quickly.

The older areas of the city that were constructed in the 1950's or 1960's have a high number of trees that have reached maturity or are declining. These neighborhoods have become accustomed to tree lined streets. In most cases, these older trees are removed on a gradual basis so that a minimal impact in the neighborhood can be felt.

Occasionally, a high number of trees may be declining at the same time in a limited area. This could result from years of severe drought, pest/disease infestation, damage caused by storms, or failure of the tree due to age. When this occurs special attention is given to minimize the impact on the neighborhood. This generally occurs when more than 50% of the trees in a neighborhood have been, or will be, removed within a five-year period. In this situation, a reforestation plan is drawn up which indicates:

1. Which trees will be removed
2. Over what time period the removal will be necessary
3. What impact the removals will have on the neighborhood
4. What type of tree will be used as a replacement, what size tree will be planted, and when planting will occur
5. What type of citizen contact will be necessary
6. The objective of this special attention is to minimize the transition problems associated with converting a tree lined street to a street with a mixed age population.

Reforestation plans may also be developed when a certain tree species develops multiple or specific problems and no practical solution to the problems are available.

Determination of Public Trees
The care of all trees on City owned properties such as parks and recreational areas are the responsibility of the City. Trees along the street that have at least the centerline of the tree at ground level within the right of way or easements are also considered to be a City responsibility.

Chapter 10: Other Considerations

New Development or Subdivision Street Tree Plans
In accordance with the development regulations of the City of Hughson, subdivision proposals and other types of new develop are, or may be, required to prepare a street tree plan. These plans are considered an amendment to the City of City of Hughson's Street Tree Plan and must be submitted to the Public Works Department and the Planning Department for review, and comment.

Damage to Trees by People
At times people damage trees intentionally or unintentionally. When the Public Works Department or Planning Department becomes aware of these situations, an evaluation is made and billing for damages is prepared if the responsible party can be located. Should damage be intentional, police action may be necessary.
The most common cause of tree damage is from vehicle accidents. Cars occasionally strike trees and other public property. Public trees are considered to have a value and an accurate assessment of tree value and/or damages to the trees can be determined.

Business Signs
Trees can cause visibility conflicts with the business signs. It is our practice not to prune trees for better visibility of signs. Some pruning may be done when scheduled maintenance is required on the tree. However, special arrangements are not made to alter the normal growth habit.

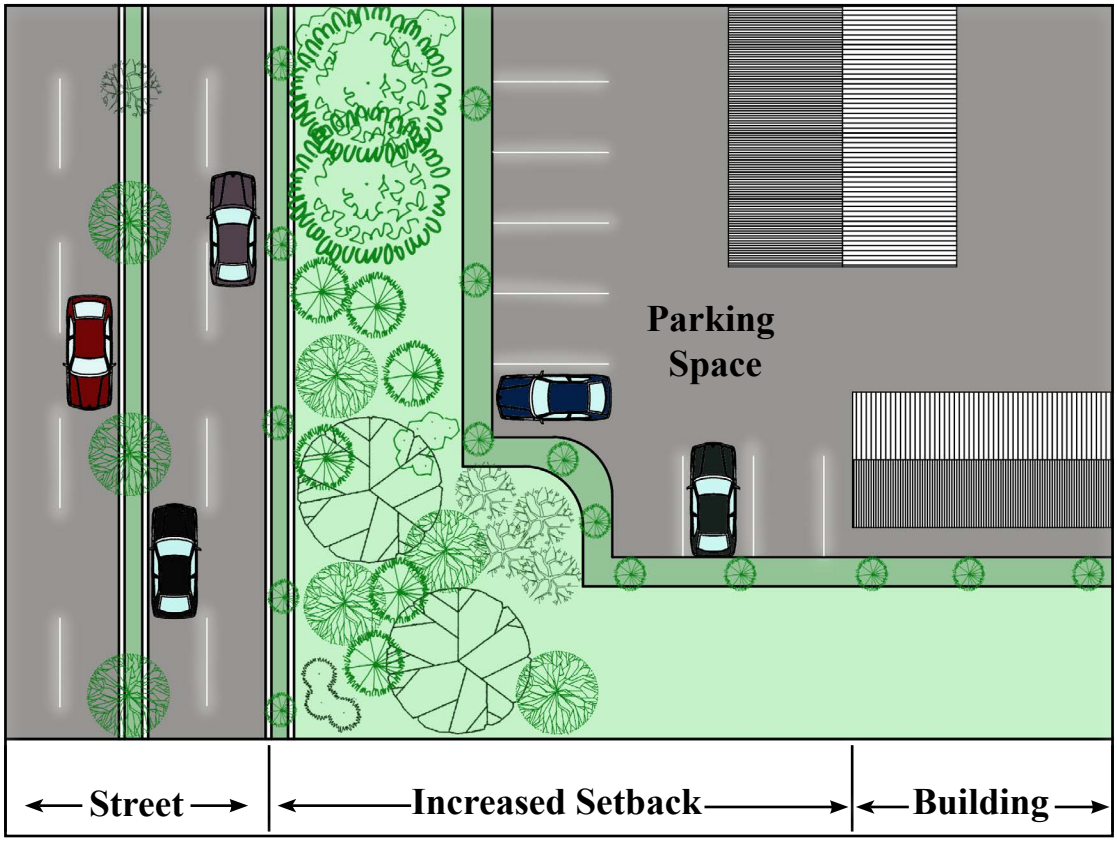

Figure 10.1. New development or subdivision street tree plan

Landscaped Sound Barriers

As part of the urban development process, large public and private landscape areas are typically set aside to buffer traffic and other noise sources from residential and commercial use areas. These buffer areas are ideal open areas for planting trees and adding other landscape elements.

Cars and trucks, and trains are the most pervasive outdoor noise sources. Several approaches can be taken to lower the impact of noise. Barriers are typically used to provide some noise attenuation. The amount of noise reduction depends upon the material and design of the barrier. Solid structures provide the most attenuation; vegetation will only abate noise a little, but psychologically can provide a more relaxed environment.

Site planning can also be used as a tool for noise reduction. Many site-planning techniques can be employed to protect sensitive uses from excessive noise. These are among others:

(1) Increasing the distance between the noise source and the receiver;

(2) Placing noise compatible land uses (parking, utility rooms, maintenance buildings, etc.) between the source and the receiver;

(3) Locating the barrier-type facility or building parallel to the noise source; and,

(4) Orienting the noise-sensitive use away from the source of noise.

All these techniques can be used to attenuate the actual noise reaching a noise-sensitive land use, without adding an excessive burden or cost to a specific proposal. At the same time, landscape, landscaped berm, and sound walls have varying degrees of effectiveness with respect to noise attenuation. Landscaping, however, is an important element in any noise attenuation plan. Trees, vines and bushes add texture to sound walls and help reduce graffiti and other vandalism.

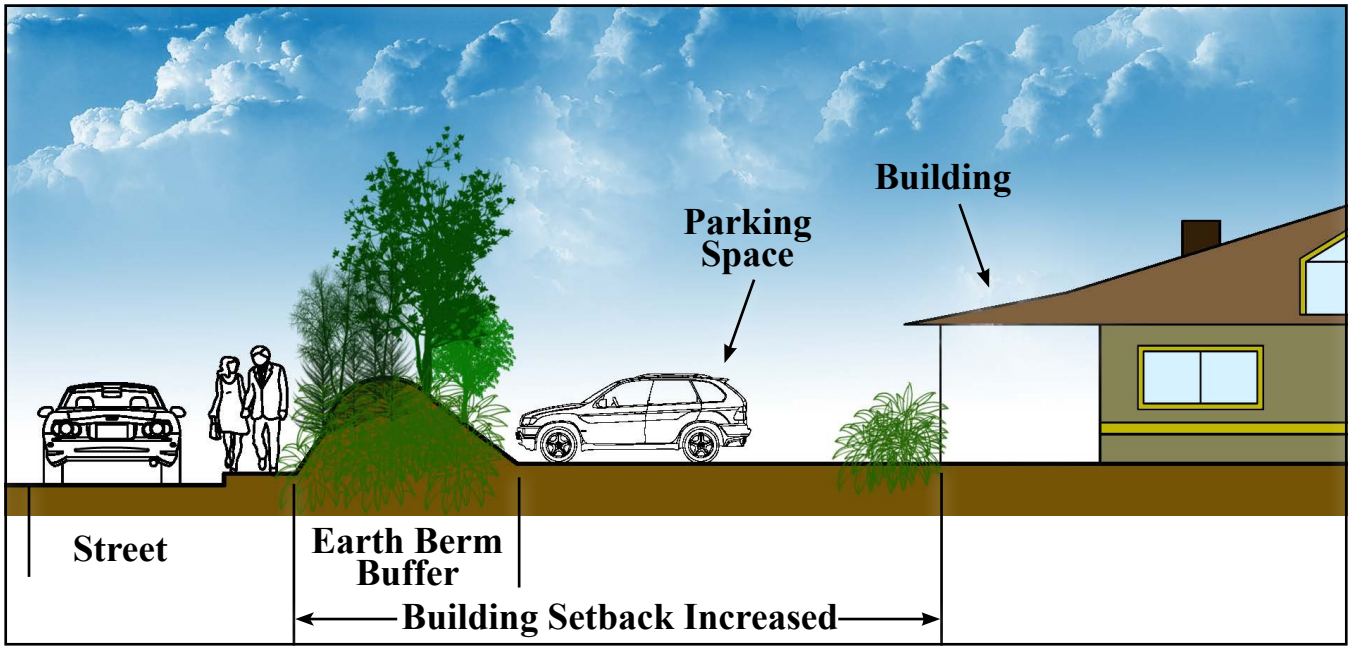

Figure 10.2. Landscape sound barriers

Chapter 11: Public Involvement

People play a major role in urban forest ecology
In City of Hughson, as in most urban areas, people are essential to the functioning of the urban forest. Urban environments can severely limit the ability of trees to become established and grow. Soil compaction, paved surfaces, buildings, and utilities can limit both below-ground rooting space and above-ground space for canopy spread. If people did not make space available, plant trees, and maintain them, trees would simply not exist in many urban areas.

Planting, maintenance, and removal
Unlike the natural forest setting, trees in urban forests require human management to be successful. In a natural forest, trees replace themselves and eventually die, fail, and decay, recycling their nutrients into the soil. These processes generally aren't allowed to proceed in the urban forest for obvious reasons.

Tree seedlings can sometimes establish in urban areas naturally from seeds dropped from existing trees or buried by animals in favorable sites such as landscape beds. However, generally trees must be planted if they are going to become established in sites where they can grow to maturity. To obtain a healthy, long-lived tree, people need to select the appropriate species for the site, adequately prepare the planting site, and select good quality planting material. Most trees in urban areas need some irrigation, at least during the establishment phase, applied in the right place, at the right times, in the right amounts. Inadequate and excessive irrigation are two common causes of tree death in urban areas, especially in new plantings

As trees become established, pruning is typically needed to ensure that trees develop a strong structure that will minimize later problems. Large, established trees need to be inspected and pruned as needed to ensure that dead or structurally weak branches do not pose a hazard to people or property within the tree's target zone. Large trees that are declining and hazardous trees typically need to be removed before they can fall, and the resulting waste typically must be disposed of actively, rather than passively decaying on the landscape.

Providers of tree care
A variety of people are necessarily involved in managing the various phases of trees' life cycles in the urban forest. Informed and trained residents can manage many of the basic aspects of tree care on their own, including planting, irrigation, and basic pruning of young trees. Even if these tasks are delegated to landscape maintenance contractors, property owners need to have enough basic knowledge about tree care to ensure the quality of tree care they are purchasing.

Because of the specialized skills and knowledge needed, trained tree care professionals are needed for most work on large mature trees. Again, property owners need to know enough to ensure that they hire a qualified professional that will protect their investment in their trees.

City of Hughson staff, manage the urban forest on city owned lands. In addition, city staff and their consultants can provide expertise needed to help manage the urban forest as a cohesive unit. The city can play a leadership role by looking at processes that extend beyond individual properties and providing strategies and technical information that will help further the community's urban forest goals. By providing locally appropriate information on tree planting and care, the city can help residents make good decisions on tree selection, planting, and care.

Partnerships between community residents and the City
The majority of City of Hughson's urban forest is, and will continue to be, managed by individual

landowners. If the city has an overall goal of maintaining and improving its urban forest, it will play a role in helping residents understand the importance of the urban forest and how to successfully manage trees on their properties. Because of limited resources, the city's support roles will be limited to providing information to individuals, groups and private land land-owners, on best management practices of preserving and maintaining the city's urban forests.

City-sponsored efforts

This document, the City of Hughson's Urban Forest Plan and Resource Guide contains many important Urban Forest management concepts that would be a valuable resource to private property owners and urban foresters in the city. Future efforts in public information will include the preparation and distribution of hand-outs and miscellaneous other available information on Urban Forestry to City of Hughson's residents.

City newsletters and utility bill inserts can also be used in the outreach effort. These avenues can be used to disseminate information directly (e.g., the handouts or excerpts from them, City tree regulations and guidelines, tree pest updates, etc.) or can be used to point residents to where the information can be accessed.

Community tree groups and volunteer projects

In the absence of a dedicated community tree group, the city can continue to partner with existing community organizations to coordinate tree planting and care projects by community volunteers. In addition to local schools, including Modesto Junior College, CSU-Stanislaus, local members of the UC Master Gardeners Program, the local California Native Plant Society chapter, the Hughson Arboretum and Gardens, the Hughson Garden Club, and similar groups could be approached to help in projects that may involve longer-term involvement than the typical one-day planting event.

A significant amount of effort is needed to establish and run a community tree group either on a fully volunteer basis or as a registered nonprofit organization. At least one highly motivated leader/organizer is needed as well as a contingent of active volunteers. Such groups also benefit from in-house expertise, such as from local tree professionals. Although the city can promote and facilitate the establishment of a community tree group, the availability and interest of community members is ultimately needed to develop a successful group.

Careful planning and concerted efforts are necessary to coordinate successful community volunteer projects. Projects need to be well-organized so that participants can feel like their time is being put to good use. Planting projects need to be followed up by necessary tree care, either by the city or by additional volunteer work, so that volunteers can see that their efforts are valued and result in a lasting legacy. Despite the effort required, successful volunteer projects provide a wide variety of long-lasting benefits. Besides the trees that are planted and cared for, community volunteer tree projects provide opportunities for residents to work together for the betterment of City of Hughson, as a community.

Chapter 12: Urban Forests Funding Resources

Internal funding sources
Currently, funding for the planting and care of trees comes from several sources. Developers are required to plant landscaping, including trees, in new city parks and public parkways constructed as part of a development plan. Subsequent maintenance of trees in these new public landscaping areas is funded through local assessment districts. In older areas that do not have assessment districts, the ongoing maintenance and eventual replacement of public trees along streets and in parks is derived from the City's General Fund, as part of the overall budget for the public works department and the parks department.

Grants provided by other agencies and organizations can serve to augment the city's existing sources of funding. However, many grant programs require that some matching funding be provided by the applicant.

External funding sources
Various grant programs administered by state and federal agencies or private foundations and organizations provide funding for a variety of projects related to urban forestry. Some grants are available directly to local governments, whereas others are only available to other entities, such as schools or non-profit community tree groups. By partnering with other groups, the city can expand its options for obtaining urban forestry grant funding.

External funding programs may change over time. Due to the current fiscal limitations experienced by the Federal and State agencies, funding for Urban Forest program efforts is extremely limited and highly competitive. Some state programs are funded by specific ballot propositions and have a limited lifespan. New programs also become available over time. The listing below includes grant programs that were in existence as of Spring 2012. Individual granting agencies and organizations should be checked for the current availability, guidelines, and deadlines for the grants listed. In addition, the website (http://www.grants.gov/) provides information on competitive grant opportunities from all Federal grant-making agencies and should be monitored for new federal grant programs. The Foundation Center website (http://www.fdncenter.org/) provides a variety of information related to grants provided by private foundations.

State and federally-funded grants

Environmental Protection Agency and Environmental Education Grants
The Grant Program sponsored by EPA's Office of Environmental Education supports environmental education projects that enhance the public's awareness, knowledge, and skills to help people make informed decisions that affect environmental quality. EPA awards grants each year based on funding appropriated by Congress. Annual funding for the program ranges between $2 and $3 million. More than 75% of the grants awarded by this program are for less than $15,000.
(http://www.epa.gov/enviroed/grants.html)

The California Resources Agency Environmental Enhancement and Mitigation Program
The Environmental Enhancement and Mitigation Program (EEMP) was established by the Legislature in 1989. It offers a total of $10 million each year for grants to local, state, and federal governmental agencies and to nonprofit organizations for projects to mitigate the environmental impacts caused by new or modified state transportation facilities. State gasoline tax monies fund the EEMP. Grants are awarded in three categories:

Highway Landscape and Urban Forestry--Projects designed to improve air quality through the planting of trees and other suitable

plants.

Resource Lands -- Projects for the acquisition, restoration, or enhancement of watersheds, wildlife habitat, wetlands, forests, or other natural areas.

Roadside Recreational -- Projects for the acquisition and/or development of roadside recreational opportunities.

(http://resources.ca.gov/eem/)

California Department of Water Resources

The Department's Urban Streams Restoration Program (USRP) provides grants for local projects that reduce flooding and erosion of urban streams, improve environmental values and promote community stewardship. Past grants have funded a variety of activities: creek cleanups; eradication of exotic or invasive plants; re-vegetation and bioengineering bank stabilization projects; channel reconfiguration to improve stream geomorphology and aquatic habitat functions; and acquisition of property critical for flood management.

A project may be eligible for a USRP grant if most of the questions below can be answered with "yes":

1. Does the proposed project address a stream-related problem?
2. Is flooding and/or erosion from the stream affecting an urban area?

(http://www.watershedrestoration.water.ca.gov/urbanstreams/)

Green Trees for the Golden State

These grants provide funds to help cities, counties, districts and non-profit 501c(3) organizations plant trees in public urban settings and provide three years of care for those trees. The goals of the grant program are to improve urban environments and to promote increased awareness in the proper planting and care needed to foster healthy community forests while incorporating community involvement, participation, education and stewardship. The original grant funding was provided by Proposition 12 in the year 2000. (http://www.ufei.org/grantinfo.lasso)

Non-governmental grants

American Forests/Global ReLeaf Urban Forests Program

American Forests is looking for quality tree-planting projects to be funded by their ReLeaf Forests. (http://www.americanforests.org/what-we-do/what-we-do-urban-forests/)

The Great Valley Center

The Great Valley Center serves the Central Valley's 19 counties by supporting innovative proposals for nonprofit work in the areas of Land Use, Economic Development, Growth, Agriculture, and Community Investment. During the past six years, grant sizes have ranged from $500 to more than $20,000, the average being $10,000. To date, about one in three applicants have received awards. (http://www.greatvalley.org/legaci/index.aspx)

The Conservation Fund/Kodak American Greenways Awards Program

The Conservation Fund supports an ecosystem restoration program. They are particularly interested in partnering with private and public sector organizations and agencies to plant trees and improve the environment in projects that would otherwise not be feasible. They support projects that plant the right trees in the right places for the right reasons. (http://www.conservationfund.org/?article=2106)

National Fish and Wildlife Foundation

The National Fish and Wildlife Foundation provides funding on a competitive basis to projects that sustain, restore, and enhance our Nation's fish, wildlife, and plants and their habitats. Their strategic plan organizes grant-making efforts into three broad areas: Keystones and Charters. All Foundation grants are awarded through one of these three areas.

(http://www.nfwf.org/programs.cfm)

ESRI-Sponsored Grants
ESRI, a leading geographic information systems (GIS) software developer, continues to seek relationships with organizations by partnering in common task initiatives. ESRI has found the best way to forge relationships is through education and grant programs. Free software, hardware, and training bundles are available under several ESRI-sponsored grant programs.
(http://www.esri.com/grants/esri/conservation.html)
(http://www.aiacc.org)

WalMart/Sam's Club Community Matching Grant Program
The Community Matching Grant Program is the largest program funded by Wal-Mart and Sam's Club. The Matching Grant program allows local nonprofit organizations to hold fundraisers at their local Wal-Mart or Sam's Club. Wal-Mart and Sam's can elect to match a portion of the funds raised up to $1,000. Events held off the premises of a Wal-Mart store or Sam's Club are also eligible for funding when a Wal-Mart or Sam's Club associate is actively involved in the event. Additionally, once the Wal-Mart or Sam's Club has met certain criteria in the Matching Grant Program each year, a second source of funding is awarded to the store / club to use in the community. These funds do not require a fundraiser to be held, instead the funds can be awarded directly to a deserving organization general matching grant and small grant programs, the Foundation administers a number of special grant programs with specific guidelines and time-lines.
(http://www.walmartfoundation.org/)

National Tree Trust Roots and Seeds Programs
The National Tree Trust believes strong organizations are key to healthy urban and community forests. Through the Seeds Program grant, established urban and community forestry organizations use funding for organizational needs, which include rent, staff salary and purchase of upgraded technology.
(http://www.nationaltreetrust.org)

The Home Depot Grants for the Environment
The Home Depot Foundation considers requests for grants to: 1) conserve forestlands and/or promote responsible forestry management, 2) encourage green building and sustainable design in affordable housing, 3) identify and help alleviate the causes of lead poisoning in children in at-risk communities, and 4) promote community recycling and clean-up.
(http://www.homedepotfoundation.org)

William Turnbull Jr. Environmental Education Grant
Ten years ago, after the passing of renowned architect William Turnbull Jr., FAIA, the Foundation Regents initiated a special environmental education grant, as a tribute to his legacy. The William Turnbull, Jr., FAIA Environmental Education Grant program, fosters the public's awareness of the relationship between the built and natural environments. This program has supported a number of community programs including the San Diego Zoological Society, the California Preservation Foundation, and the Greenspace Cambria Land Trust. In addition, they supported the Great Valley Center's efforts to help our communities think about building a livable future by sponsoring publication of Our Valley…Our Choice.
(http://aiacc.org/environmental-grants-program/)

Appendix A: Tree Descriptions

City of Hughson Urban Forest Tree Species Resource Guide
Sunset Western Garden Book
Climate Zone 8

Pistache Pistacia anacardiaceae
Deciduous or semi-evergreen trees. Divided leaves on all species. Flowers are now showy. Female trees bear fruit after several years if male trees are nearby. O species described, only P. vera bears edible fruit (nuts). Others are ornamental trees. Verticillium wilt may strike established trees. Minimize susceptibility by planting in well-drained soil, watering deeply and infrequently.

Chinese Pistache Pistacia chinensis
Moderate growth to 60 feet tall, 50 feet wide. Young trees often gawky and lopsided, but older trees become dense and shapely with reasonable care. Leaves with 10-16 paired leaflets 2-4 inches long by ¾ inches wide. Foliage colors beautifully in fall-scarlet, crimson, orange, sometimes yellow tones. Fruit on female trees bright red, turning dark blue. Not fussy as to soil or water; accepts moderately alkaline conditions, lawn watering though verticillium wilt is a danger or no summer watering at all (this only in deep soils). Resistant to oak root fungus. Stake young trees and prune for first few years to develop head high enough to walk under. Reliable tree for street or lawn, patio or garden corner planting.

Ash Fraxinus oleaceae
Deciduous trees, one almost evergreen. Trees grow fairly fast and most tolerate hot summers, cold winters and many kinds of soil (including alkaline soil). Chiefly used as street trees, shade trees, lawn trees, patio shelter trees. Fairly pest free.

In most cases leaves are divided into leaflets. Male and female flowers generally inconspicuous, in clusters) grow on separate trees in some species, on same tree in others. In latter case, flowers are often flowed by clusters of single-seeded, winged fruit, often in such abundance that they can be a litter problem. When flowers are on separate trees, you'll get fruit on female tree only if it grows near a male tree.

White Ash F. americana
Native to eastern U. S. and grows to 80-feet in height with straight trunk and oval-shaped crown. Leaves 8-15 inches long with 5-9 dark green, oval leaflets, paler beneath; turn purplish in fall. Needs some watering. Edges show burning in hot, windy areas. Male and female flowers on separate trees, but plants sold are generally seedlings, so you don't know what you're getting. With both male and female trees, you will get a heavy crop of seed; letter and seedlings a problem. Seedless selections include "Autumn Applause" and Autumn Purple", both with exceptionally good, long-lasting purple fall color; Champaign County" a dense upright oval with brown and purple fall color.

Green Ash, Red Ash F. Pennsylvania (F. lanceolata)
Deciduous, native to eastern U.S. Moderate grower to 30-40 feet in height forming compact oval crown. Gray brown bark; dense twiggy structure. Leaves 10-12 inches long, divided into 5-9 bright green, rather narrow, 4-6 inch long leaflets. Male and female flowers on separate trees. Takes wet soil and severe cold but foliage burns in hot dry winds. Seedless varieties include; Marshall, Summit, Bergeson, Emerald, Patmore, and Urbanite.

F. oxycarpa

Compact, small-leafed, fine-textured ash with delicate, lacy look. The species is not known in the West; the following selection from Australia is choice.

Raywood Ash, Claret Ash Fraxinus oxycarpa
Compact, round-headed, fast-growing tree to 25-35 feet. Produces no seeds. Purple red fall color.

F. holotricha
Deciduous tree. Native of eastern Balkan Peninsula. Upright, rather narrow tree to 40 feet in height. Leaves of 9-13 dull green, 2-3 inches long leaflets with toothed edges. Casts light, filtered shade. Leaves turn yellow in fall, dry up and sift down into lawn or ground cover, thus lessening litter problem.

F.h. Moraine Ash
Selected variety; more round headed than species, produces few seeds. Good lawn tree-neat, symmetrical, uniform bright yellow in fall.

F. velutina (Arizona Ash)
Deciduous tree. Native to Arizona. Tree withstands hot, dry conditions and cold to about –10 F. Pyramidal when young; spreading, more open when mature. Leaves divided into 3-5 narrow to oval, 3 inch long leaflets. Male and female flowers on separate streets.

F.v. Modesto Ash
Selection from tree in Westside Park, Modesto, California. Vigorous form of Arizona ash. Grows to about 50 feet, with a 30-foot spread. Medium green leaflets, glossier than those of the species, turns bright yellow in fall. In many area, Modesto Ash leaves get scorched look following a wet spring. This is caused by fungus disease called anthracnose. Control by spraying with benomyl. Prune out and dispose of infected wood; it can re-infect. Veticillium wilt is prevalent in agricultural areas; there is no control once it's started in young trees, but established trees often survive. Keep trees vigorous; if any are lost, replace with Raywood Ash. Control aphids, psyllids, and spier mites with contact spray. Resistant to oak root fungus.

Tulip Tree Liriodendron tulipifera
Deciduous tree. Fast Growth to 60-80 ft., with eventual spread to 40 ft. Straight columnar trunk, with spreading, rising branches that form tall pyramidal crown. Lyre-shaped leaves, 5-6 inches long and wide, Turn from bright yellow green to bright yellow (or yellow brown) in fall. Tulip-shaped flowers in late spring are 2 inches wide, greenish yellow, orange at base. Handsome at close range, thy are not showing on the tree being high up and well-concealed by leaves. They are not usually produced until tree is 10-12 years old.

Tree needs room, deep, rich, swell-drained neutral or slightly acid soil; plenty of summer water. Best where constant wind from one direction won't strike it. Control scale insects and aphids as necessary. Not bothered by oak rot fungus.

Good large shade, lawn, or roadside tree. Spreading root system makes it hard to garden under. Columnar variety 'Arnold' is useful in narrow planting areas; it will bloom 2-3 years after planing. 'Majestic Beauty' (L. t. 'Aureo-marginatum') has leaves edged with yellow. Moderate growth rate, size.

Autumn Gold (Maidenhair Tree) Ginkgo biloba
Deciduous tree. Graceful, hardy tree, attractive in any season, especially in fall when leathery, light green leaves of spring and summer suddenly turn gold. Fall leaves linger, then drop quickly and cleanly to make golden carpet where they fall. Related to conifers but differs in having broad (1-4 inch wide), fan-shaped leaves rather than needlelike foliage. In shape and veining, leaves resemble leaflets of maidenhair fern, hence name. Can grow to 70-80 feet, but most mature trees are 35-50 feet . May be gawky in youth, but becomes well-proportioned with age. Narrow to spreading or even umbrella shaped at maturity. Usually grows slowly, about 1-foot per year but under

ideal conditions can grow up to 3-feet per year. Plant only male trees (grafted or grown from cuttings of male plants); female trees produce messy, fleshy, ill-smelling fruit in quantity. Named varieties listed below are reliably male. Use as street tree, lawn tree. Plant in deep, loose, well-drained soil. Be sure plant is not root-bound in can. Stake young trees to keep them straight; young growth may be brittle, but wood becomes strong with age. Water through dry seasons until 10-20 feet high, then let tree become self-sufficient. In general, ginkgos are not bothered by insects or diseases. They are resistant to oak root fungus.

G. b. Autumn Gold
Upright, eventually rather broad.

G. b. Fairmount
Fast-growing, pyramidal form. Straighter main stem than; Autumn Gold', requires less staking and tying.

Oak Quercus fagceae
Deciduous or evergreen trees. Western homeowners acquire oak trees in either of 2 ways. They may plant the trees themselves, starting from a nursery plant or an acorn or they may simply have a native oak tree, left from the days when the land was wild, on their property.

The method of acquisition is quite significant. An oak tree planted in a garden will vigorously and fast (1 ½ - 4 feet per year). It probably will not experience poor health or any unusual pest attacks, whether it's a western native or not. Old wild tree, on the other hand, quite frequently cannot handle the surfeit of water and nutrients that they receive in a garden and must be given special treatment.

Special treatment for existing native oaks. If possible, do not raise or lower grade level between trunk and drip line. If you must alter grade, put a well around the base of trunk so that grade level there is not changed. Never water within 4-feet of trunk or allow water to stand within that area. Any of a number of sucking and chewing insects and mites feed upon existing native oaks. Most of the time these creatures are kept in check by other insects and mites, birds, and by insect-and-mite troubles that we don't even know about.

Occasionally, though, an outbreak of some organism-usually oak moth larvae- gets bad enough to required artificial control. When that happens, call a commercial arborist or pest control firm to diagnose and treat the problems; oak trees are too big for home owners to reach with their limited spray equipment.

Oak root fungus (Armilliaria) is often present in many California neighborhoods that once were oak forests or walnut groves. Get an arborist's advise on how to sustain infected trees. All old oaks, infected or not, can benefit from feeding and deep watering (fertilize and irrigate only out near drip line).

Old native oaks also benefit from periodic grooming to remove dead wood. However, arborists should not cut thick branches unless they have good reasons for doing so, since excessive pruning may stimulate succulent new growth that will be subject to mildew.

Q. rubra, Q. rubra maxima, Q. Borealis Red Oak, Northern Red Oak
Deciduous. Fast growth to 90 feet. Broad, spreading branches and round-topped crown. Leaves 5 – 8 inches long by 3 – 5 inches wide, with 3 – 7 pairs of sharp-pointed lobes. New leaves and leaf stalks are red in spring, turning to dark red, ruddy brown, or orange in fall. Needs fertile soil and plenty of water. Stake young plants. High-branching habit and reasonably open shade make it a good tree for big lawns, parks, broad avenues. It deep roots make it good to garden under.

Appendix

A

Q. agrifolia Coast Live Oak Evergreen Tree
Native to Coast Ranges. Round-headed, wide-spreading tree to 20 – 70 feet high, often with greater spread. Smooth, dark gray bark. Dense foliage of rounded, holly-like, 1 –3 inch long leaves, slightly glossy n upper surface. As planted tree from nursery or acorn, it can grow as high as 25 feet in ten years, 50 feet in 25-years. Attractive green all year unless hit by oak moth larvae. Has greedy roots and drops almost all its old leaves in early spring just when gardening time is most malleable. Regardless of these faults, it's a handsome and quite worthwhile shade tree or street tree. Can be sheared into a handsome 10-20 foot hedge.

Q. ilex Holly Oak Holm Oak
Evergreen. Native to Mediterranean region. Grows at a moderate rate to 40-70 feet high, with equal spread. Leaves vary in shape and size, but are usually 1 ½ - 3 inches long ½ -1 inches wide, either toothed or smooth edged, dark, rich green on upper surface, yellowish or silvery below. Tolerates wind and salt air; will grow in constant sea wind, but tends to be shrubby there. Inland, growth rate can be moderately fast but varies with soil and water conditions. Good evergreen street or lawn tree where coast live oak is difficult to maintain, but lacks open grace of coast live oak. Can take hard clipping into formal shapes or hedges.

Ornamental Pear Pyrus rosaceae
Deciduous or evergreen trees. Most ornamental species are subject to fireblight. All are best in full sun, will get along with no more than moderate summer watering once established.

P. calleryana Bradford Pear
Grows to 25-50 feet. Strong horizontal branching pattern. Leaves 1 ½ -3 inches long., broadly oval, scalloped, dark green, very glossy and leathery, Flowers clustered, pure white, ¾ -1 inch wide; very early bloom. In coldest areas, flower crop may be destroyed by late freezes in some years. Fruit very small, round, inedible. Fairly resistant to fireblight; rich purplish red fall color.

Bradford, original introduction, has strongly horizontal limbs, has reached 50-feet in height, 30-feet in width. Aristocrat is more pyramidal, with up-curving branches. Redspire is similar, with yellow to red fall color. Capital and Whitehouse are narrowly columnar. Chanticleer is narrow but not columnar, about 40 feet tall by 15 feet wide. Trinity is round-head form.

Chinese Tallow Sapium sebiferum Euphorbiaceae
Deciduous tree. To 35-feet with dense round or conical crown of equal width. Outstanding fall color. Tends toward shrubbiness, multiple trunks, suckering, but easily trained to single trunk. In colder areas, un-ripened branch tips freeze back each winter; new growth quickly covers damage, but may require thinning. Leaves are poplar-like, roundish, tapering to slender point, light green. Foliage is dense, but general effect is airy; leaves flutter in lightest breeze. If tree is in full sun and has moderate autumn chill, its foliage turns brilliant, translucent, neon red. Some trees color plum purple, yellow, orange, or mixture of colors. If possible, select your tree while it is in fall color; a few specimens have shown nondescript yellow instead of flaming red. Tiny yellowish flowers in spikes at branch tips; fruit small, clustered, grayish white; they are covered by a waxy coating.

Hardy to 10* - 15* F. Grows in most soils, but does somewhat better in mildly acid conditions. Give it ample water for fast growth and prune only to correct shape. Stake young plants securely. Good lawn or street tree, patio or terrace shade tree. Resistant to oak root fungus. Good screening against low summer sun or objectionable view. Gives light to moderate shade.

Privet Ligustrum. Oleaceae
Deciduous or evergreen shrubs or small trees. Most

widely used in hedges. Can also be clipped into formal shapes and featured n tubs or large pots. One type is a common street tree. All have abundant, showy clusters of white to creamy white flowers in late spring or early summer. (Clipped hedges bear fewer flowers because most of the flower-bearing branches get trimmed off.) Fragrance is described as "pleasant" to "unpleasant". Flowers draw bees. Small, blue black, berry-like fruit follows blossoms. Birds eat fruit, thus distributing seeds resulting in multitudes of seedlings.

Most privets are easily grown in sun or some shade, and in any soil. Give them lots of water. In some areas they are subject to lilac leaf miner, which disfigures leaves.

Confusion exists concerning identity of certain privets in nurseries. The plant sold as L. japonicum usually turns out to be the small tree L. lucidum. The true L. Japonicum is available in 2 (or more) forms. The tall, shrubby kind is the true species; the lower-growing, more densely foliaged form is typically sold as L. texanum, and probably should be called L. japonicum 'Texanum'. In a similar fashion, the smaller-leafed hardy privets used for hedging are often confused; L. amurense, L. ovalifolium, and L. vulgare look much alike and any is likely to be sold as common privet, a name that belongs to L vulgare.

L. japonicm Japanese Privet
Evergreen shrub, dense, compact growth habit to 20 – 12 feet, but can be kept lower by trimming. Roundish oval leaves 2 – 4 inches long, dark to medium green and glossy above, distinctly paler to almost whitish beneath; have thick, slightly spongy feeling. Excellent plants for hedges or screens, or for shaping into globes, pyramids, other shapes, or small standard trees. Sunburns in hot spells. In areas of caliche soil, or where Texas root rot prevails, grow it in containers.

Hackberry Celtis Ulmaceae

Deciduous trees. Related to elms and similar to them in most details, but smaller. All have virtue of deep rooting; old trees in narrow planting strips expand in trunk diameter and nearly fill strips; but without a surface rood or any sign of heaving the sidewalk or curb. Bare-root plants, especially in larger sizes, sometimes fail to leaf out. Safer to buy in containers. Or try for small bare-root trees with big root systems. Especially good in windy locations. Though young trees should be staked until well established. When established, trees will take wind, desert heat, much drought, and alkaline soil.

Street or lawn trees, even near buildings or paving; will take overhead shade. All have inconspicuous flowers. Only pest problems of note seems to be occasional aphid attack. Trees are attractive to birds.

C. occidentalis Common Hackberry Native to eastern U. S.
Grows to form rounded crown 50 feet high or more and nearly as wide. Branches are spreading and sometimes pendulous. Leaves oval, bright green, 2 – 5 inches long, finely toothed on edges. Tree does not leaf out until April or later. Resistant to oak root fungus. Tolerates high-plains heat, wind, alkaline soil, urban pollution.

C. sinesis Chinese Hackberry, Yunnan Hackberry
Similar in growth habit to common hackberry, but smaller. Leaves to 4 inches long, smoother and glossier than those of other hackberries, with scallop-toothed edges.

Australian Willow, Wilga Geijera parviflora. Rutaceae
Graceful, fine textured, to 25 30 feet high, 20 foot wide. Main branches sweep up and out, little branches hang down, Distant citrus relative; called Australian willow because its 3 – 6 inch long, narrow, medium green, drooping leaves give a kind of weeping willow effect. With age, produces loose clusters of

unimportant small, creamy white flowers in early spring, early fall. Well-drained soil and full sun; plant tolerates light shade but tends to be thin in foliage. Established three resists drought but responds to ample water with faster growth. Needs pruning only to correct from (much less pruning than willow). Quite pest free.

Has much of the willow's grace and the eucalyptus's toughness. Moderate growth rate; deep, noninvasive roots. Casts light shade. Plant singly as patio or street tree. Or in colonies for attractive grove effect.

Linden Tilia. Tiliaceae
Deciduous trees. Dense, compact crowns. Much used for street and park planting in Europe. All have small, quite fragrant, yellowish white flowers in drooping clusters. All respond well to deep rich soil and plenty of water. All grow at slow to moderate rate. Young trees need staking and shaping. Older trees need only corrective pruning. Under certain circumstances, aphids cause disagreeable drip of honeydew and accompanying sooty mildew.

T. americana American Linden
Growth to 40-60 feet with 20 – 25 foot spread. Straight trunk; dense, compact narrow crown Heart-shaped, dull dark green leaves to 4-6 inches long, 3-4 inches wide (some times longer). Lose clusters of fragrant, yellowish white flowers in June-July. "Redmond" is a pyramidal form with glossy foliage.

T. cordata Little-Leaf Linden
Growth to 30-50 feet with 15 – 30 foot spread. Form densely pyramidal. Leaves 1 ½ - 3 inches long, equally broad or broader, dark green above, silvery beneath. Flowers in July. Excellent medium-sized lawn or street tree. Given space to develop its symmetrical crown, it can be a fine patio shade tree (but expect bees in flowering season). It is the hardiest linden. Chancellor, Glenleven, Greenspire, June Bride, and Olympic are selected forms. June Bride has an especially heavy show of flowers.

Japanese or Sawleaf Zelkova Zelkova serrata Ulmaceae
Deciduous tree. A good shade tree, it grows at moderate to fast rate, eventually to 60 feet or higher and equally wide. Smooth, gray bark like that of beech. Leaves similar to those of elm (2 – 3 ½ inches long by 1 ½ inches wide) but rougher textured, with saw-tooth margins. Carefully train young trees to develop strong framework – head back excessively long pendulous branches to force side growth, thin competing branches to permit full development of the strongest. Water deeply to encourage deep rooting. Pest resistant, but elm leaf beetles are a problem in local elms died.

Fall foliage color varies from yellow to dark red to dull reddish brown. Three grafted selections are sold; Halka, the fastest growing , resembles American elm more than do Green Vase and Village Green. All are good substitutes for elm.

Locust Robinia Leguminosae
Deciduous trees or shrubs. Leaves divided like feathers into many roundish leaflets; clusters of sweet pea-shaped, white or pink flowers mid-spring to early summer. They are hardy everywhere, fairly fast growing, and sell adapted to dry hot regions. Will take poor soil, much drought when established. Drawbacks: wood is brittle, roots aggressive, plants often spread by suckers.

R. pseudoacacia Black or Sunburst Locust Tree
Fast growth to 75 feet, with rather open, sparse-branching habit. Deeply furrowed brown bark. Thorny branchlets. Leaves divided into 7 – 19 leaflets 1 – 2 inches long. Flowers are white, fragrant, ½ - ¾ inches long, in dense, hanging clusters 4 –8 inches long. Bean-like, 4-inch long pods turn brown and hang on tree all winter.

Emigrants brought seeds with tem from eastern U. S., and black locust is now common everywhere in West. In California's Gold Country it has gone native. Very drought tolerant. With pruning and training in its early years, it is a truly handsome flowering tree – but it is so common, and so commonly neglected, that it's often overlooked.

Has been used as street tree, but not good in narrow parking strips or under power lines. Wood is extremely hard, tough; trees difficult to prune out where not wanted. Varieties include:

Frisia
Leaves yellow; new growth nearly orange. Thorns; new wood red.

Pyramidalis (Fastigiata)
Very narrow, columnar tree.

Tortuosa
Slow growing, with twisted branches. Few-flowered blossom clusters.

Umbraculifera
Dense, round headed. Usually grafted 6 – 8 feet high on another locust. Very few flowers.

Redbud Cercis. Leguminosae
Deciduous shrubs or trees. Five redbuds are grown in the West; 2 western natives, one eastern native, one from Europe, one from China. Early spring flowers are sweet pea-shaped, small, in clusters; where tree is adapted, blossoms are borne in great profusion on bare twigs, branches, sometimes even on main trunk. Flowers are followed by clusters of flat pods. Attractive broad, rounded leaves are heart shaped at base. All give fall color with first frosts. Average water needs (except for drought-tolerant C. occidentalis)

C. canadensis Eastern Redbud Native of eastern U. S. Largest and fastest growing of available species where adapted. To 25 – 35 feet tall. Most apt to take tree form. Round headed but with horizontally tiered branches in age. Rich green, 3 – 6 inches long leaves have pointed tips. Small (1/2 inch long), rosy pink flowers clothe bare brown branches in early spring. Valuable for filling the gap between the early-flowering fruit trees (flowering peach, flowering plum), and the crabapples and late-flowering cherries. Varieties are Alba (white flowers), Forest Pansy (purple foliage, needs some shade in hot climates), Oklahoma (wine red flowers, thick, glossy, heat resistant leaves), Plena (double flowers), and Rubye Atkinson (pure pink flowers).

Plane Tree, Sycamore. Platanus. platanaceae
Deciduous trees. All grow large, have lobed, maple-like leaves. Older bark sheds in patches to reveal pale, smooth, new park beneath. Brown, ball-like seed clusters hang from branches on long stalks through winter; prized for winter arrangements. Somewhat drought tolerant but better with some deep watering in summer. Subject to blight (anthracnose) which causes early, continued leave fall; p. racemosa especially susceptible. Rake up and dispose of dead leaves, since fungus spores can over-winter on them.

P. acerifolia (P. orientalis) London Plane Tree
Fast growth to 40 – 80 feet, with 30 – 40 foot spread. Smooth, cream-colored upper trunk and limbs. Leaves are 3 – 5- lobed, 4- 5 inches wide. Tolerates most soils, stands up beautifully under city smog, soot, dust, reflected heat. Can be pollarded to create dense, low canopy.

Watch for spider mites and scale. Boot street, park, or lawn tree. Used on lines and blocks for formal plantings; avenues, screens masses. Powdery mildew can cause premature leave drop in some seasons. The scarce variety Yarwood is somewhat resistant. Bloodgood has some resistance to anthracnose.

Appendix

A

Sumac Rhus. Anacardiaceae
Evergreen or deciduous shrubs or trees. Of the ornamental sumacs, deciduous kinds are hardy anywhere and thrive in poor soils. They tend to produce suckers, especially if their roots are disturbed by soil cultivation. They need some water. Evergreen sumacs are not as hardy as the deciduous kinds, but they will grow in almost any soil as long as it is well drained (soggy soils may kill them). They are fire retardant if fairly well watered.

R. lancea African Sumac
Evergreen tree. Slow growing to 25-feet. Open, spreading habit; graceful weeping outer branchlets. Leaves divided into 3-willow-like, dark green leaflets 4-5 inches long. Pea-sized, berry-like, yellow or red fruit grows in clusters on female tree, can be messy on pavement.

African Sumac can tolerate high summer heat. Established plants are drought resistant, but will also thrive in lawns. Hardy to 12* F. Stake and prune to establish form you want. Makes attractive, airy tree with interesting branch pattern and effective dark red, rough bark. You can train it to a single trunk or let it grow as multi-trunked tree that looks somewhat like olive. Also useful as screens, clipped hedges, or background plantings. Old plants easy to transplant if grown under dry conditions.

Elm Ulmus Ulmaceae
Deciduous or partially evergreen trees. Easy to grow in any fairly good soil; will survive in most poor ones. Best with normal watering, but will tolerate low moisture conditions at expense of good growth, plant health. Root systems are aggressive and close to surface; you will have trouble growing other plants under these trees. Branch crotches often narrow, easily split. Many of the larger elms are tasty to leaf beetles, bark beetles, leafhoppers, aphids, and scale, making them either time-consuming to care for or messy (or both). Dutch elm disease, formerly a problem in the East and Midwest, has reached western states.

U. parvifolia (often sold a PU. p. Sempervirens) Chinese Elm, Chinese Evergreen Elm.
Evergreen or deciduous according to winter temperatures and tree's individual heredity. So-called evergreen elm usually sold as 'Sempervirens'; this may be evergreen most winters, lose its leaves in unusual cold snap (new leaves come on fast). Very fast growth to 40- 60 feet, with 50 – 70 foot spread. Often reaches 30 feet in 5 years. Extremely variable in form, but generally spreading, with long, arching, eventually weeping branchlets. Trunks of older trees have bark, which sheds in patches somewhat like sycamore. Leaves leathery, ¾ - 2 ½ inches long, 1/3 – 1 1/3 inches wide, oval, evenly toothed. Round fruit forms in fall while leaves are still on tree.

Stake young trees until trunks can carry weight of branches. Stake and head leading shoot higher than other shade trees to compensate for weeping. Rub or cut out small branches along trunk for first few years. Shorten overlong branches or strongly weeping branches to strengthen tree scaffolding. Older trees may need thinning to lessen chance of storm damage. Bothered very little by pests or diseases.

Good for patio shade in milder portions of West. Useful for sun screening. With careful pruning, useful as a street tree.

Varieties are Brea, with larger leaves, more upright habit; and Drake, with small leaves, weeping habit. Both are more or less evergreen. True Green has small deep green leaves, is round headed, more evergreen than others.

Sweet Gum

Liquidambar Hamamelidaceae
Deciduous trees. Valuable for form, foliage, and fall color, easy culture. Moderate growth rate; young and

middle-aged trees generally upright, somewhat cone shaped, spreading in age. Lobed, apple-like leaves. Flowers inconspicuous; fruits are spiny balls which ornament trees in winter, need raking in spring.

Requires neutral or slightly acid soils; cholorosis is strongly alkaline soils is hard to correct. Prune only to shape. Trees branch from ground up and look most natural that way; can be pruned high for easier foot traffic.

Good street trees. Form surface roots which can be nuisance in lawns or parking strips. Effective in tall screens or groves, planted 6-10 ft. apart. Brilliant fall foliage. Leaves color best when trees are in full sun and well-drained soil; fall color less effective in mildest climates or in mild, late autumns. For best appearance, should be watered deeply once a month in heavy soils, twice a month in sandy soils through dry season.

L. formosana (Chinese Sweet Gum)
To 40-60 ft. tall, 24ft. wide. Free-form outline; sometimes pyramidal, especially when young. Leaves 3-5 lobed, 3-4 ½ inches across, violet red when expanding, then deep green.

L. orientalis (Oriental Sweet Gum)
Native to Turkey. To 20-30 feet; spreading or round headed. Leaves 2-3 inches wide, deeply lobed, each lobe again lobed in lacy effect. Resistant to oak root fungus.

L. styraciflua (American Sweet Gum)
Growth to 6- feet. Narrow and erect in youth, with lower limbs eventually spreading to 20-25 feet. Tolerates damp soil; resistant to oak root fungus. In winter, branching pattern, furrowed bark, corky wings on twigs, and hanging fruit give interest; in spring and summer, leaves are deep green; in fall, leaves turn purple, yellow or red. Even seedling trees give good color (which may vary somewhat from year to year), but for uniformity, match trees while they are in fall color or buy budded trees of a named variety, which as the following:

Burgundy
Leaves turn deep purple red, hang late into winter or even early spring if storms are not heavy.

Festival
Narrow, columnar. Light green foliage turns to yellow, peach, pink, orange, and red.

Palo Alto
Turns orange red to bright red in fall.

Kentucky Coffee Tree Gymnocladus Dioica
Deciduous tree, native to eastern U. S. Saplings grow very fast, but slow down at 8-10 feet. Trees ultimately reach 50 feet in height. Narrowish habit in youth. Older trees broader, with fairly few heavy, contorted branches. These, together with stout winter twigs, make bare tree picturesque. Leaves (1 ½ - 3 feet long) come out late in spring; they are pinkish when expanding, deep green in summer, yellow in autumn. Inconspicuous flowers are followed by 6-10 inch long flat reddish brown pods containing hard black seeds. Average soil and routine watering. Established trees will take some drought, much heat and cold, poor soil. Effective for form in any cold-winter garden.

Lilac Syringa Oleaceae
Deciduous shrubs, rarely small trees. Best where winter brings pronounced chill, but some bloom well with light chilling. Sun, light shade in hottest areas. All like alkaline soil.

Japanese Tree Lilac. S. reticulata (s. japanica, S. amurensis japonica)
Large shrub easily trained as single-stemmed 30-ft. tree. Bark is smooth, something like cherry in its gloss. Large leaves (to 5 inches long). White flower clusters to 1 ft. appear in late spring, early summer. Flowers showy, but not fragrant; they smell like privet flowers. Useful small shade or street tree in difficult climates.

Appendix

A

Crape Myrtle Lagerstroemia indica Lythraceae
Deciduous shrub or tree. Root hardy and sometimes treated as perennial. Flower freely. Native of China. Dwarf shrubby forms and shrub-tree forms, 6-30 feet tall. Slow growing as shrub, spreads as wide as high; trained as tree, becomes vase shaped with very attractive trunk and branch pattern. Spring foliage is light green tinged bronze red; mature leaves 1-2 inches long, oval deep glossy green. Fall foliage is yellow, more rarely orange to red. Crinkled, crepe-like, 1 ½ inch flowers in rounded, slightly conical clusters, 6-12 inches long, at ends of branches. Colors in shapes of red, rose, deep or soft pink, rosy orchid, purple, white. Long flowering period from July to September.

Subject to mildew. Selections called Indian Tribes have heavy foliage with considerable resistance to mildew. (Catawba, Cherokee, Potomac, Seminole, Powhata). Hybrids between L. indica and the species L. fauriei have even greater resistance to mildew than Indian Tribes.

Maple Acer Aceraceae
Deciduous or evergreen trees or large shrubs. Larger maples have extensive fibrous root systems that take water and nutrients form the topsoil. The great canopy of leaves calls for a steady, constant supply of water not necessarily frequent watering, but constantly available water throughout the root zone. Ample deep watering and periodic feeding will help keep roots down.

Trident Maple A. buergeranum
Native of China and Japan. Grows 20-25 feet high. Lobed leaves that are pale beneath. Fall color usually red, varies to orange or yellow. Low, spreading growth; A decorative, useful patio tree and favorite bonsai subject.

Japanese Maple A. palmatum
Native to Japan and Korea. Slow rowing to 20-feet; normally many stemmed. Most airy and delicate of all maples. Leaves 2-4 inches long, deeply cut into 5-9 toothed lobes. All-year interest; young spring growth is flowing red; summer's leaves are soft green; fall foliage scarlet, orange, or yellow. Slender leafless branches in greens and reds provide winter pattern. Resistant to oak root fungus.

Date Palm Phoenix Palmae
Mostly large feather palms, but one a dwarf. Trunks patterned with bases of old leaf stalks. Small yellowish flowers in large, hanging sprays followed by clusters of often edible fruit (P. dactylifera bears dates of commerce). These palms hybridize freely, so buy from reliable nurseryman who knows his seed or plant source.

P. canariensis Canary Island Date Palm
Big, heavy-trunked plant to 60-feet tall with 50-foot spread composed of a great many gracefully arching fronds. Grows slowly until it forms trunk, then speeds up a little. Young plants do well in pots for many years, looking something like pineapples. Grow on slopes, in parks, big spaces along wide streets; not for small city lots. Hardy to 20* F. Slow to develop new head of foliage after hard-frost damage.

Appendix B: City of Hughson Tree Management Descriptions

Name	Habit	Positive	Negative	Best Application
Chinese Pistache ***Pistacia chinensis***	Moderate growth to 60 feet tall, 50 feet wide. Young trees often gawky and lopsided, but older trees become dense and shapely with reasonable care. Leaves with 10-16 paired leaflets 2-4 inches long by ¾ inches wide. Foliage colors beautifully in fall-scarlet, crimson, orange, sometimes yellow tones. Fruit on female trees bright red, turning dark blue. Not fussy as to soil or water; accepts moderately alkaline conditions, lawn watering though verticillium wilt is a danger or no summer watering at all (this only in deep soils). Resistant to oak root fungus. Stake young trees and prune for first few years to develop head high enough to walk under.	One of the best all-around street tree species; relatively pest free; excellent fall color; relatively drought-tolerant.	Spindly growth when young, so must be properly trained; sometimes attacked by Verticillium wilt, a soil-borne fungus disease; female trees bear large crops of nuisance fruits, so budded male sterile trees should be planted – these are not always easy to find in the trade.	Reliable tree for street or lawn, patio or garden corner planting
Raywood Ash ***Fraxinus oxycarpa***	Deciduous trees, one almost evergreen. Trees grow fairly fast and most tolerate hot summers, cold winters and many kinds of soil (including alkaline soil). Fairly pest free. In most cases leaves are divided into leaflets. Male and female flowers generally inconspicuous, in clusters) grow on separate trees in some species, on same tree in others. In latter case, flowers are often flowed by clusters of single-seeded, winged fruit, often in such abundance that they can be a litter problem. When flowers are on separate trees, you'll get fruit on female tree only if it grows near a male tree. Compact, round-headed, fast-growing tree to 25-35 feet. Produces no seeds. Purple red fall color.	Relatively good street tree; fast growing.	Attacked by woolly ash aphids which produce large amounts of honeydew; suffers from an unknown branch dieback disorder (examples of this problem can be found in City of Hughson).	Chiefly used as street trees, shade trees, lawn trees, patio shelter trees.

Appendix

B

Moraine Ash ***Fraxinus moranous***	Deciduous tree. Native of eastern Balkan Peninsula. Upright, rather narrow tree to 40 feet in height. Leaves of 9-13 dull green, 2-3 inches long leaflets with toothed edges. Casts light, filtered shade. Leaves turn yellow in fall, dry up and sift down into lawn or ground cover, thus lessening litter problem. More round headed than species, produces few seeds.	Fast growth; grows relatively well under lawn irrigation.	Becomes very seedy with age – large numbers of brown, winged seeds may become as numerous as the leaves; susceptible to mistletoe.	Good lawn tree-neat, symmetrical, uniform bright yellow in fall.
White Ash ***F. americana***.	Grows to 80-feet in height with straight trunk and oval-shaped crown. Leaves 8-15 inches long with 5-9 dark green, oval leaflets, paler beneath; turn purplish in fall. Needs some watering. Seedless selections include Autumn Applause and Autumn Purple, both with exceptionally good, long-lasting purple fall color; Champaign County a dense upright oval with brown and purple fall color.	Trees grow fairly fast and most tolerate hot summers, cold winters and many kinds of soil (including alkaline soil). Fairly pest free.	With both male and female trees, you will get a heavy crop of seed; letter and seedlings a problem. Leaf edges show burning in hot, windy areas.	Chiefly used as street trees, shade trees, lawn trees, patio shelter trees.
Green Ash, Red Ash *F. pennsylvanica (F. lanceolata)*.	Deciduous, native to eastern U.S. Moderate grower to 30-40 feet in height forming compact oval crown. Gray brown bark; dense twiggy structure. Leaves 10-12 inches long, divided into 5-9 bright green, rather narrow, 4-6 inch long leaflets.	Takes wet soil and severe cold but foliage burns in hot dry winds	Male and female flowers on separate trees. Seedless varieties include; Marshall, Summit, Bergeson, Emerald, Patmore, and Urbanite.	Chiefly used as shade trees, lawn trees, patio shelter trees. Little growth experience in City of Hughson

Tulip Tree ***Liriode-noron tulip-ifera***	Deciduous tree. Fast Growth to 60-80 ft., with eventual spread to 40 ft. Straight columnar trunk, with spreading, rising branches that form tall pyramidal crown. Lyre-shaped leaves, 5-6 inches long and wide, Turn from bright yellow green to bright yellow (or yellow brown) in fall. Tulip-shaped flowers in late spring are 2 inches wide, greenish yellow, orange at base. Handsome at close range, thy are not showing on the tree being high up and well-concealed by leaves. They are not usually produced until tree is 10-12 years old. Tree needs room, deep, rich, swell-drained neutral or slightly acid soil; plenty of summer water. Control scale insects and aphids as necessary. Not bothered by oak rot fungus.		Not recommend for City of Hughson. It develops iron chlorosis in alkaline soils, which City of Hughson has. It is also consistently and heavily attacked by the tulip tree aphid.	Good large shade, lawn, or roadside tree. Spreading root system makes it hard to garden under.
Autumn Gold (Maid-enhair Tree) ***Ginkgo biloba***	Deciduous tree. Graceful, hardy tree, attractive in any season, especially in fall when leathery, light green leaves of spring and summer suddenly turn gold. Fall leaves linger, then drop quickly and cleanly to make golden carpet where they fall. Related to conifers but differs in having broad (1-4 inch wide), fan-shaped leaves rather than needlelike foliage. In shape and veining, leaves resemble leaflets of maindenhair fern, hence name. Can grow to 70-80 feet, but most mature trees are 35-50 feet. May be gawky in youth, but becomes well-proportioned with age. Narrow to spreading or even umbrella shaped at maturity. Usually grows slowly, about 1-foot per year but under ideal conditions can grow up to 3-feet per year. Plant only male trees (grafted or grown from cuttings of male plants); female trees produce messy, fleshy, ill-smelling fruit in quantity. Named varieties listed below are reliably male. Plant in deep, loose, well-drained soil. Be sure plant is not root-bound in can. Stake young trees to keep tem straight; young growth may be brittle, but wood becomes strong with age. Water through dry seasons until 10-20 feet high, then let tree become self-sufficient. In general, ginkgos are not bothered by insects or diseases. They are resistant to oak root fungus.	A very good street tree; almost pest free; relatively easy to train; excellent fall color.	Very slow growing; female trees produce very objectionable nuisance fruits – only guaranteed male sterile trees should be planted.	Use as street tree, lawn tree.

Appendix

B

Red Oak ***Quercus rubra***	Deciduous. Fast growth to 90 feet. Broad, spreading branches and round-topped crown. Leaves 5 – 8 inches long by 3 – 5 inches wide, with 3 – 7 pairs of sharp-pointed lobes. New leaves and leaf stalks are red in spring, turning to dark red, ruddy brown, or orange in fall. Needs fertile soil and plenty of water. Stake young plants.	Good fall color.	Develops iron chlorosis in alkaline soil; has a serious aphid pest problem; probably best to keep the numbers of this species low in City of Hughson.	High-branching habit and reasonably open shade make it a good tree for big lawns, parks, broad avenues. It deep roots make it good to garden under.
Live Oak ***Quercus agriflia***	Evergreen tree. Native to Coast Ranges. Round-headed, wide-spreading tree to 20 – 70 feet high, often with greater spread. Smooth, dark gray bark. Dense foliage of rounded, holly-like, 1 –3 inch long leaves, slightly glossy n upper surface. As planted tree from nursery or acorn, it can grow as high as 25 feet in ten years, 50 feet in 25-years. Attractive green all year unless hit by oak moth larvae. Has greedy roots and drops almost all its old leaves in early spring just when gardening time is most malleable.	In time a very large tree; best in a park where there is plenty of room.	Because of its ultimate size, not a good choice for a street tree; produces acorns, which may become a nuisance and slipping hazard when they fall to the sidewalk.	A handsome and quite worthwhile shade tree or street tree. Can be sheared into a handsome 10-20 foot hedge.

Holly Oak ***Quercus ilex***	Evergreen. Native to Mediterranean region. Grows at a moderate rate to 40-70 feet high, with equal spread. Leaves vary in shape and size, but are usually 1 ½ - 3 inches long ½ -1 inches wide, either toothed or smooth edged, dark, rich green on upper surface, yellowish or silvery below. Tolerates wind and salt air; will grow in constant sea wind, but tends to be shrubby there. Inland, growth rate can be moderately fast but varies with soil and water conditions.	Medium size; naturally well-shaped.	Often produces large crops of acorns; evergreen, so winter sun is blocked.	Good evergreen street or lawn tree where coast live oak is difficult to maintain, but lacks open grace of coast live oak. Can take hard clipping into formal shapes or hedges.
Bradford Pear ***Pyrus calleryana***	Deciduous or evergreen trees. All are best in full sun, will get along with no more than moderate summer watering once established. Grows to 25-50 feet. Strong horizontal branching pattern. Leaves 1 ½ -3 inches long, broadly oval, scalloped, dark green, very glossy and leathery, Flowers clustered, pure white, ¾ -1 inch wide; very early bloom. In coldest areas, flower crop may be destroyed by late freezes in some years. Fruit very small, round, inedible. Fairly resistant to fireblight; rich purplish red fall color. Bradford, original introduction, has strongly horizontal limbs, has reached 50-feet in height, 30-feet in width. Aristocrat is more pyramidal, with up-curving branches. Redspire is similar, with yellow to red fall color. Capital and Whitehouse are narrowly columnar. Chanticleer is narrow but not columnar, about 40 feet tall by 15 feet wide. Trinity is round-head form.	The best of the Callery flowering pears; good, medium size; used throughout City of Hughson; attractive spring bloom and fall color; fast growth.	Vigorous, upright growth habit; needs careful early training to develop strong framework; susceptible to iron chlorosis in wet, poorly-drained soils; nuisance fruits (small, brown fleshy berries) are often a problem.	A handsome and quite worthwhile street tree with bright fall colors.

Appendix

B

Chinese Tallow ***Sapium sebiferum***	Deciduous tree. To 35-feet with dense round or conical crown of equal width. Outstanding fall color. Tends toward shrubbiness, multiple trunks, suckering, but easily trained to single trunk. In colder areas, un-ripened branch tips freeze back each winter; new growth quickly covers damage, but may require thinning. Leaves are poplar-like, roundish, tapering to slender point, light green. Foliage is dense, but general effect is airy; leaves flutter in lightest breeze. If tree is in full sun and has moderate autumn chill, its foliage turns brilliant, translucent, neon red. Some trees color plum purple, yellow, orange, or mixture of colors. If possible, select your tree while it is in fall color; a few specimens have shown nondescript yellow instead of flaming red. Tiny yellowish flowers in spikes at branch tips; fruit small, clustered, grayish white; they are covered by a waxy coating.Hardy to 10* - 15* F. Grows in most soils, but does somewhat better in mildly acid conditions. Give it ample water for fast growth and prune only to correct shape. Stake young plants securely.	Medium size; fast growth; beautiful fall color; good lawn tree.	Produces small nuisance fruits (small, gray-white berries in clusters); small twigs throughout tree freeze and die back.	Good lawn or street tree, patio or terrace shade tree. Resistant to oak root fungus. Good screening against low summer sun or objectionable view. Gives light to moderate shade.
Japanese Privet ***Ligustrum japonica***	Evergreen shrub. Dense, compact growth habit to 20 – 12 feet, but can be kept lower by trimming. Roundish oval leaves 2 – 4 inches long, dark to medium green and glossy above, distinctly paler to almost whitish beneath; have thick, slightly spongy feeling. Sunburns in hot spells. In areas of caliche soil, or where Texas root rot prevails, grow it in containers.		Not recommend as a street tree. It produces heavy crops of nuisance fruits (small, black berries); the City of City of Hughson pulled out several dozen privets in the downtown area several years ago, and replaced them with Bradford pears.	Excellent plants for hedges or screens, or for shaping into globes, pyramids, other shapes, or small standard trees.

Chinese Hackberry, Yunnan Hackberry ***Celtis occidentalis, sineisis***	Deciduous trees. Related to elms and similar to them in most details, but smaller (to 50–feet). All have virtue of deep rooting; old trees in narrow planting strips expand in trunk diameter and nearly fill strips; but without a surface rood or any sign of heaving the sidewalk or curb. Bare-root plants, especially in larger sizes, sometimes fail to leaf out. Safer to buy in containers. Or try for small bare-root trees with big root systems. Especially good in windy locations. Though young trees should be staked until well established. When established, trees will take wind, desert heat, much drought, and alkaline soil. Similar in growth habit to common hackberry, but smaller. Leaves to 4 inches long, smoother and glossier than those of other hackberries, with scallop-toothed edges.	Relatively large tree; tolerates drought; fast growth; strong branches.	Produces nuisance fruits (small, purple berries).	Street or lawn trees, even near buildings or paving; will take overhead shade. All have incon-spicuous flowers. Only pest problems of note seems to be occa-sional aphid attack.
Australian Willow, Wilga ***Geijera parviflora. Rutaceae***	Graceful, fine textured, to 25 30 feet high, 20 foot wide. Main branches sweep up and out, little branches hang down, Distant citrus relative; called Australian willow because its 3 – 6 inch long, narrow, medium green, drooping leaves give a kind of weeping willow effect. With age, produces loose clusters of unimportant small, creamy white flowers in early spring, early fall. Well-drained soil and full sun; plant tolerates light shade but tends to be thin in foliage. Established three resists drought but responds to ample water with faster growth. Needs pruning only to correct from (much less pruning than willow). Quite pest free.	Very attractive, weeping habit.	Frost sensitive – will be seriously injured at temperatures below 32 degrees F; evergreen, so winter sun is blocked; often sheds many leaves in spring.	Has much of the willow's grace and the eucalyptus's toughness. Moderate growth rate; deep, noninvasive roots. Casts light shade. Plant singly as patio.

Appendix

B

American Linden ***Tilia americana***	To 40-60 feet with 20 – 25 foot spread. Straight trunk; dense, compact narrow crown Heart-shaped, dull dark green leaves to 4-6 inches long, 3-4 inches wide (some times longer). Lose clusters of fragrant, yellowish white flowers in June-July. Redmond is a pyramidal form with glossy foliage.	Respond well to deep rich soil and plenty of water. All grow at slow to moderate rate. Young trees need staking and shaping. Older trees need only corrective pruning	Like all Linden, under certain circumstances, aphids cause disagreeable drip of honeydew and accompanying sooty mildew.	Potential Street Tree. Little experience with this tree in City of Hughson.
Greenshire Little Leaf Linden ***Tilia cordata***	Deciduous trees. Dense, compact crowns. Much used for street and park planting in Europe. All have small, quite fragrant, yellowish white flowers in drooping clusters. All respond well to deep rich soil and plenty of water. All grow at slow to moderate rate. Young trees need staking and shaping. Older trees need only corrective pruning. Under certain circumstances, aphids cause disagreeable drip of honeydew and accompanying sooty mildew.To 30-50 feet with 15 – 30 foot spread. Form densely pyramidal. Leaves 1 ½ - 3 inches long, equally broad or broader, dark green above, silvery beneath. Flowers in July. It is the hardiest linden. Chancellor, Glenleven, Greenspire, June Bride, and Olympic are selected forms. June Bride has an especially heavy show of flowers.	Relatively good lawn tree.	Attacked by aphids; upright form does not provide as much shade as spreading species.	Excellent medium-sized lawn or street tree. Given space to develop its symmetrical crown, it can be a fine patio shade tree (but expect bees in flowering season).

Japanese Zelkova ***Zelkova serrata***	Deciduous tree. A good shade tree, it grows at moderate to fast rate, eventually to 60 feet or higher and equally wide. Smooth, gray bark like that of beech. Leaves similar to those of elm (2 – 3 ½ inches long by 1 ½ inches wide) but rougher textured, with saw-tooth margins. Carefully train young trees to develop strong framework – head back excessively long pendulous branches to force side growth, thin competing branches to permit full development of the strongest. Water deeply to encourage deep rooting. Pest resistant, but elm leaf beetles are a problem in local elms died. Fall foliage color varies from yellow to dark red to dull reddish brown.	Relatively good street tree species, but needs lots of space; large, spreading tree; tolerates drought; fast growth.	Susceptible to elm leaf beetle; gangly and somewhat unattractive when young.	Three grafted selections are sold; Halka, the fastest growing , resembles American elm more than do Green Vase and Village Green. All are good substitutes for elm.
Black or Sun Burst Locust ***Robinia pseudoaca-cia***	Deciduous trees or shrubs. Leaves divided like feathers into many roundish leaflets; clusters of sweet pea-shaped, white or pink flowers mid-spring to early summer. They are hardy everywhere, fairly fast growing, and sell adapted to dry hot regions. Will take poor soil, much drought when established. Drawbacks: wood is brittle, roots aggressive, plants often spread by suckers. Fast growth to 75 feet, with rather open, sparse-branching habit. Deeply furrowed brown bark. Thorny branchlets. Leaves divided into 7 – 19 leaflets 1 – 2 inches long. Flowers are white, fragrant, ½ - ¾ inches long, in dense, hanging clusters 4 –8 inches long. Bean-like, 4-inch long pods turn brown and hang on tree all winter.	Very drought tolerant. With pruning and training in its early years, it is a truly handsome flowering tree – but it is so common, and so commonly neglected, that it's often overlooked	Not recommend; either black or honey locusts as street trees; root systems are very invasive, and sprout freely; foliage is thin and unattractive; black locust is very susceptible to aphids.	Can be used as a park or garden tree.

Appendix

B

Eastern Redbud ***Cercis candensis***	Deciduous shrubs or trees. Early spring flowers are sweet pea-shaped, small, in clusters; where tree is adapted, blossoms are borne in great profusion on bare twigs, branches, sometimes even on main trunk. Flowers are followed by clusters of flat pods. Attractive broad, rounded leaves are heart shaped at base. All give fall color with first frosts. Average water needs (except for drought-tolerant *C. occidentalis*). Native of eastern U. S. Largest and fastest growing of available species where adapted. To 25 – 35 feet tall. Most apt to take tree form. Round headed but with horizontally tiered branches in age. Rich green, 3 – 6 inches long leaves have pointed tips. Small (1/2 inch long), rosy pink flowers clothe bare brown branches in early spring. Varieties are Alba (white flowers), Forest Pansy (purple foliage, needs some shade in hot climates), Oklahoma (wine red flowers, thick, glossy, heat resistant leaves), Plena (double flowers), and Rubye Atkinson (pure pink flowers).	Very nice small tree; mostly planted for its blossoms and attractive fruit.	Small size does not make it a very effective street tree.	Valuable for filling the gap between the early-flowering fruit trees (flowering peach, flowering plum), and the crabapples and late-flowering cherries.
London Plane Tree, Sycamore. ***Platanus acerifolia***	Deciduous trees. All grow large, have lobed, maple-like leaves. Older park sheds in patches to reveal pale, smooth, new park beneath. Brown, ball-like seed clusters hang from branches on long stalks through winter; prized for winter arrangements. Somewhat drought tolerant but better with some deep watering in summer. Subject to blight (anthracnose) which causes early, continued leave fall; *p. racemosa* especially susceptible. Rake up and dispose of dead leaves, since fungus spores can over-winter on them. Fast growth to 40 – 80 feet, with 30 – 40 foot spread. Smooth, cream-colored upper trunk and limbs. Leaves are 3 – 5- lobed, 4- 5 inches wide. Watch for spider mites and scale. Boot street, park, or lawn tree. Used on lines and blocks for formal plantings; avenues, screens masses. Powdery mildew can cause premature leave drop in some seasons. The scarce variety Yarwood is somewhat resistant. Bloodgood has some resistance to anthracnose.	Still one of the best, hardiest, problem-free large street trees; good near sidewalks; tolerates lawn water; excellent branch structure with little pruning.	Some people have allergic reactions to the hairs on the bottom of the leaves.	Tolerates most soils, stands up beautifully under city smog, soot, dust, reflected heat. Can be pollarded to create dense, low canopy.

African Sumac *Rhus* (Male Only)	Evergreen or deciduous shrubs or trees. Of the ornamental sumacs, deciduous kinds are hardy anywhere and thrive in poor soils. They tend to produce suckers, especially if their roots are disturbed by soil cultivation. They need some water. Evergreen sumacs are not as hardy as the deciduous kinds, but they will grow in almost any soil as long as it is well drained (soggy soils may kill them). They are fire retardant if fairly well watered. Evergreen tree. Slow growing to 25-feet. Open, spreading habit; graceful weeping outer branchlets. Leaves divided into 3-willow-like, dark green leaflets 4-5 inches long. Pea-sized, berry-like, yellow or red fruit grows in clusters on female tree, can be messy on pavement. African Sumac can tolerate high summer heat. Established plants are drought resistant, but will also thrive in lawns. Hardy to 12* F. Stake and prune to establish form you want.	Tough tree; tolerates heat and drought; good lawn tree.	Evergreen, so blocks winter sun; very messy leaf drop in spring and summer; produces nuisance fruits (red berries); requires careful training when young to prevent blowing over, especially in shallow or poorly-drained soils; frost sensitive.	Makes attractive, airy tree with interesting branch pattern and effective dark red, rough bark. You can train it to a single trunk or let it grow as multi-trunked tree that looks somewhat like olive. Also useful as screens, clipped hedges, or background plantings.

Appendix

B

Chinese Elm, Chinese Evergreen Elm ***Ulmus Ulmaceae parvifolia*** **(often sold a *U. p.* 'Sempervirens')**	Deciduous or partially evergreen trees. Best with normal watering, but will tolerate low moisture conditions at expense of good growth, plant health. Branch crotches often narrow, easily split. Evergreen or deciduous according to winter temperatures and tree's individual heredity. So-called evergreen elm usually sold as Sempervirens; this may be evergreen most winters, lose its leaves in unusual cold snap (new leaves come on fast). Very fast growth to 40- 60 feet, with 50 – 70 foot spread. Often reaches 30 feet in 5 years. Extremely variable in form, but generally spreading, with long, arching, eventually weeping branchlets. Trunks of older trees have bark which sheds in patches somewhat like sycamore. Leaves leathery, ¾ - 2 ½ inches long, 1/3 – 1 1/3 inches wide, oval, evenly toothed. Round fruit forms in fall while leaves are still on tree. Stake young trees until trunks can carry weight of branches. Stake and head leading shoot higher than other shade trees to compensate for weeping. Rub or cut out small branches along trunk for first few years. Shorten overlong branches or strongly weeping branches to strengthen tree scaffolding. Older trees may need thinning to lessen chance of storm damage. Very little bothered by pests or diseases. Varieties are Brea, with larger leaves, more upright habit; and Drake, with small leaves, weeping habit. Both are more or less evergreen. True Green has small deep green leaves, is round headed, more evergreen than others.	Very beautiful spreading tree; attractive bark; tolerates drought; fast growth. Easy to grow in any fairly good soil; will survive in most poor ones.	Partially evergreen – drops more leaves in cold weather; susceptible to European elm scale.	Good for patio shade in milder portions of West. Useful for sun screening. With careful pruning, useful as a street tree. Root systems are aggressive and close to surface; you will have trouble growing other plants under these trees. Many of the larger elms are tasty to leaf beetles, bark beetles, leafhoppers, aphids, and scale, making them either time-consuming to care for or messy (or both).

Liquidambar *Hamamelidiaceae*	Deciduous trees to 60 feet in height; some low growth ornamental species to 30-feet. Valuable for form, foliage, and fall color, easy culture. Moderate growth rate; young and middle-aged trees generally upright, somewhat cone shaped, spreading in age. Lobed, apple-like leaves. Flowers inconspicuous; fruits are spiny balls which ornament trees in winter, need raking in spring. Requires neutral or slightly acid soils; cholorosis is strongly alkaline soils is hard to correct. Prune only to shape. Trees branch from ground up and look most natural that way; can be pruned high for easier foot traffic. Brilliant fall foliage. Leaves color best when trees are in full sun and well-drained soil; fall color less effective in mildest climates or in mild, late autumns. For best appearance, should be watered deeply once a month in heavy soils, twice a month in sandy soils through dry season	Fast, upright growth that needs little or no pruning; beautiful fall colors.	Bears large crops of nuisance fruits (large, spiny balls); subject to limb breakage; shallow, invasive roots in lawns.	Good street trees along parkways and parking lots. Form surface roots which can be nuisance in lawns or parking strips. Effective in tall screens or groves, planted 6-10 ft. apart.
Kentucky Coffee Tree *Gymnocladus dioica*	Deciduous tree, native to eastern U. S. Saplings grow very fast, but slow down at 8-10 feet. Trees ultimately reach 50 feet in height. Narrowish habit in youth. Older trees broader, with fairly few heavy, contorted branches. These, together with stout winter twigs, make bare tree picturesque. Leaves (1 ½ - 3 feet long) come out late in spring; they are pinkish when expanding, deep green in summer, yellow in autumn. Inconspicuous flowers are followed by 6-10 inch long flat reddish brown pods containing hard black seeds. Average soil and routine watering. Established trees will take some drought, much heat and cold, poor soil. Effective for form in any cold-winter garden.	Colorful and hardy.	Nuisance seed pods	No experience with this tree in City of Hughson.

Appendix

B

Japanese Tree Lilac. *S. reticulata (s. japanica, S. amurensis japonica).*	Large shrub easily trained as single-stemmed 30-ft. tree. Bark is smooth, something like cherry in its gloss. Large leaves (to 5 inches long). White flower clusters to 1 ft. appear in late spring, early summer. Flowers showy, but not fragrant; they smell like privet flowers. Useful small shade or street tree in difficult climates.	Colorful flowers; like alkaline soil.		Can be used as a street tree under power lines or in areas requiring low shrubbery.
Crape Myrtle *Lagerstroemia indica Lythraceae*.	Deciduous shrub or tree. Native of China. Dwarf shrubby forms and shrub-tree forms, 6-30 feet tall. Slow growing as shrub, spreads as wide as high; trained as tree, becomes vase shaped with very attractive trunk and branch pattern. Spring foliage is light green tinged bronze red; mature leaves 1-2 inches long, oval deep glossy green. Fall foliage is yellow, more rarely orange to red. Crinkled, crepe-like, 1 ½ inch flowers in rounded, slightly conical clusters, 6-12 inches long, at ends of branches. Colors in shapes of red, rose, deep or soft pink, rosy orchid, purple, white. Long flowering period from July to September.	Root hardy and sometimes treated as perennial. Flower freely.	Subject to mildew. Selections called Indian Tribes have heavy foliage with considerable resistance to mildew. (Catawba, Cherokee, Potomac, Seminole, Powhata). Hybrids between *L. indica* and the species *L. fauriei* have even greater resistance to mildew than Indian Tribes.	Small yard or street tree.
Trident Maple *A. buergeranum*	Native of China and Japan. Grows 20-25 feet high. Lobed leaves that are pale beneath. Fall color usually red, varies to orange or yellow. Low, spreading growth;	Attractive small leaves and colorful.	Extensive fibrous root systems that take water and nutrients form the topsoil.	Small yard or street tree A decorative, useful patio tree and favorite bonsai subject.

Japanese Maple *A. palmatum*	Native to Japan and Korea. Slow growing to 20-feet; normally many stemmed. Most airy and delicate of all maples. Leaves 2-4 inches long deeply cut into 5-9 toothed lobes. All-year interest; young spring growth is flowing red; summer's leaves are soft green; fall foliage scarlet, orange, or yellow. Slender leafless branches in greens and reds provide winter pattern.	Attractive all year. Resistant to oak root fungus.	Extensive fibrous root systems that take water and nutrients form the topsoil. Ample deep watering and periodic feeding will help keep roots down.	Small yard or street tree
Canary Island Date Palm ***Phoenix canariensis***	Mostly large feather palms, but one a dwarf. Trunks patterned with bases of old leafstalks. Small yellowish flowers in large, hanging sprays followed by clusters of often-edible fruit (*P. dactylifera* bears dates of commerce). Big, heavy-trunked plant to 60-feet tall with 50-foot spread composed of a great many gracefully arching fronds. Grows slowly until it forms trunk, then speeds up a little. Hardy to 20* F. Slow to develop new head of foliage after hard-frost damage.		Not a good street tree in residential areas, as it does not produce shade; should be planted along wide avenues (like Las Palmas), or in parks to be enjoyed at a distance.	Young plants do well in pots for many years, looking something like pineapples. Grow on slopes, in parks, big spaces along wide streets; not for small city lots

Appendix C: Relevance to Blueprint Principles

As the Central Valley Blue Print has become an adopted policy guide for cities and counties in the Central Valley, the following provides a description of the linkages of the Urban Forest Plan and Resource Guide to the 12 adopted Blue Print Principals.

Urban Forests are basic to our perceptions of "livability" within our communities. The also play a critical role in supporting a community's effort to comply with State Law with respect to "sequestering" and/or reducing Greenhouse Gas emission within a local jurisdiction. Other non-regulatory benefits are obvious. The following table has been developed to demonstrate the linkage between the Urban Forest Plan/Resource Guide and the 12 Blue Print Principals.

Blue Print Principle	Supports	Indirectly Related	Limited or No Support
Create a range of housing opportunities and choices			x
Create walkable neighborhoods	X		
Encourage community and stakeholder collaboration	X		
Foster distinctive, attractive communities with a strong sense of place	X		
Make development decisions predictable, fair, and cost-effective		X	
Mix land uses		X	
Preserve open space, farmland, natural beauty, critical environmental areas	X		
Provide a variety of transportation choices			X
Strengthen and direct development towards existing communities		X	
Take advantage of compact building design		X	
Enhance the economic vitality of the region		X	
Support actions that encourage environmental resource management	X		

Table 1. Project Linkage to Blue Print Principles

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8.1

If we don't maintain, it'll fall apart

Wednesday, September 11, 2013

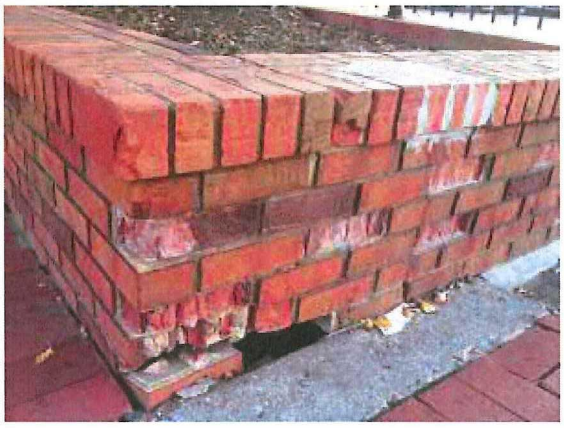
Nathaniel M. Hood in Highland Park, Mistakes A Town Makes, Neighborhood Design, St. Paul, Tactical Urbanism

If we don't maintain what we have, it will fall apart.

My neighborhood is lobbying the City for $1 million in streetscape redesign money to match $4 million promised by our business district. At some level, this is a reasonable public-private partnership; businesses provide 80 percent of the funding and the city covers the rest. Yet, there is another side to this otherwise agreeable story.

The neighborhood has been arguing that our streetscape is falling apart and it needs to be fixed. They've been making this plea for a couple years. Maintenance is expensive, or so it goes, and it'd be just better if we tore it all out and built something new.

Here's what it looks like today:



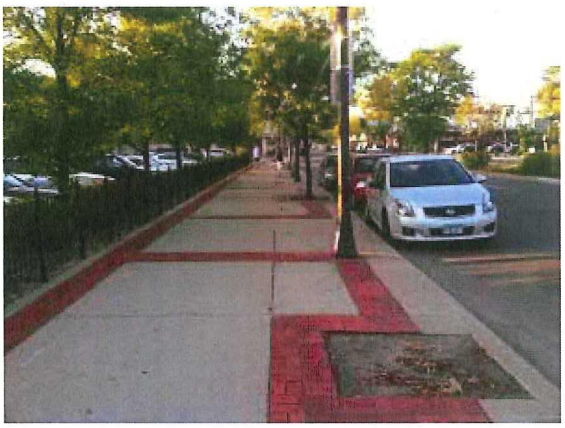
Bricks are missing. Retaining walls are sloping. The area is starting to age (*well, it's almost 30 years old!*).

Something has bothered me about the not-so-old bricked streetscape and the business district's complaint: *there's nothing wrong that can't be fixed with a little duct tape and TLC*. All of the neighborhood's minor chips and dents could be solved with about $5,000 of brick, mortar and the labor cost of an underemployed bricklayer.

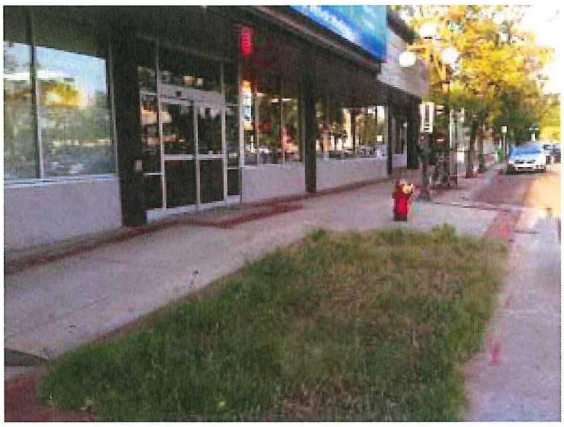
But, if fixing what we have takes such little effort, *why aren't we doing it?* And why are we spending $5 million to boot!?! And, *why should we trust someone with a new, more expensive streetscape if they aren't even responsible enough to minimally maintain the basics of what they currently have?*

Let me give you a few examples:

Ten bricks have fallen off, but no one has even bothered to pick the weeds?



A tree has been removed, yet instead of re-planting a tree (*total cost:* ***$250 - $400***), we let the soil collect weeds?



A patch of weeds? How about some grass, a bench and a bike rack?

Here's the level of disregard: I noticed the condition (*left*) had been poor for a couple weeks. I decided to get on my knees and get to work. Two minutes later I had rearranged the bricks (*right*). It's not a perfect, but it looks 10 times better (and it took literally two minutes). In weeks, not a soul who worked for the business or the city government thought to do something.

These are not streetscapes in front of marginal businesses. This is Highland Park in St. Paul. The photos were taken outside of a high-end yoga studio, boutique medical clinic, Barnes & Noble, upscale gift shop, popular book store and a busy sub shop. So, *what gives?*

The best analogy is that you buy a new house in 1985. For 28 years, you do nothing. Now, it's 2013 and the roof leaks water, the kitchen is out-dated and the basement is moldy. It's in a state of disrepair and you tear it down!

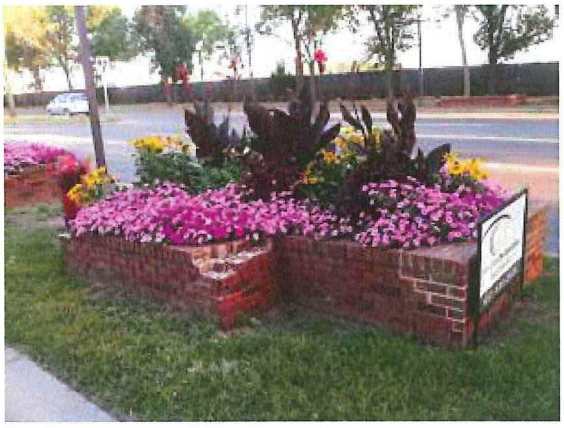
This, of course, is ridiculous. You wouldn't do that! The second the roof started to leak, *you'd fix it*. When the stove stopped working, *you'd replace it*. When the basement got musty, *you'd clean it and buy a dehumidifier*. Now, why aren't we doing this with local community infrastructure?

This is exactly what is happening with my local business district, and likely, yours too. The problem is that people involved assume it's someone else's responsibility. It's a byproduct of the top-down approach. The business district can contend it's the city's fault while the city claims the business district has it backwards. The real is answer that it's not clear. Nobody appears to know what's going on, so by default, no one does anything.

This model takes the constant "*eyes on the street*" to handle small issues away from locals, or at least, confuses them about what to do. The $5 million project is a big windfall that takes little effort on behalf of the businesses besides a financial contribution. They provide the money and the city rebuilds the sidewalks. Yet, constantly tending to bricks, picking weeds and planting flowers; *well, that takes effort* (but little money). It's the type of effort that can only be handled by the locals, those who experience and interact with the space on a daily basis.

We've bypassed the maintenance and defaulted to the *"built it brand-spanking-new then leave it alone for 20 years and then say it's falling apart and we need a new one" policy*. This is how we treat public infrastructure in the United States, be it a water main, public park, **sports stadium** or **pedestrian mall**.

There is one place that has a not-so-crumbling bricked planter. It's outside a wine and cheese shop and eye clinic. They've given the street some duct tape and it looks like this:



Not bad. It's the same bricked planter as everywhere else in the neighborhood. It's missing a few bricks, but pieced together and has some flowers. Flowers aren't cheap, but their small investment makes the streetscape better by many times over. If nothing else, while walking past, one gets the impression that the business, and the people who run it, care about the neighborhood.

St. Paul giving $1 million to Highland Park to improve the streetscape is akin to watching your teenager beat up the old Buick and then deciding to buy him a new car because the old car is in such bad shape (that, and there are about 1 million better ways to spend $1 million locally).

The heart of the matter is that this isn't the way we should treat shared infrastructure. We need to constantly be on the lookout at the most local level and constantly care for its health. If we don't maintain what we have, it will fall apart. And it'll cost us a lot more money to fix it back up.
