

**GCG**

GOODWIN CONSULTING GROUP

**DEVELOPMENT IMPACT FEE (DIF)  
UPDATED NEXUS STUDY**

**CITY OF WHEATLAND**



**ADMINISTRATIVE DRAFT**

**JUNE 15, 2022**

**CITY OF WHEATLAND  
DEVELOPMENT IMPACT FEE  
UPDATED NEXUS STUDY**

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**CITY OF WHEATLAND  
DEVELOPMENT IMPACT FEE  
UPDATED NEXUS STUDY**

**EXECUTIVE SUMMARY**

***INTRODUCTION***

The City of Wheatland (the “City”), incorporated in 1874, is one of two incorporated cities in Yuba County. It lies at the southernmost end of Yuba County, approximately 14 miles southeast of the Yuba City/Marysville area in California’s Sacramento Valley. Regionally, the City of Sacramento is located approximately 40 miles to the south. The California Department of Finance estimates that the City’s population as of January 2022 was 3,664.

Wheatland is located along SR 65, which connects the Cities of Roseville and Rocklin to the south with the Olivehurst area and SR 70 to the north. Future development in the City can loosely be described as having three components: the portion that lies southwest of SR 65; the portion that lies between the northeast side of existing SR 65 and the proposed SR 65 Bypass; and the portion that lies northeast of the proposed SR 65 Bypass. Some of these areas are already within existing City limits, while others are within the City Sphere of Influence and are anticipated to annex into the City at some point in the future. These areas will provide future residential and non-residential development potential for the City. Note that the Sphere of Influence, as well as the even larger General Plan Study Area, includes thousands of acres that are currently designated as Urban Reserve; these areas are not included in the analysis contained in this report.

***PURPOSE OF THE STUDY***

This *Development Impact Fee (DIF) Updated Nexus Study* (the “Nexus Study”) updates the City’s *Development Impact Fee Calculation and Nexus Report*, dated January 2007 (the “2007 Nexus Report”). This Nexus Study contains the following major changes from the 2007 Nexus Report:

- The City’s current planned development areas and planning horizon have changed from those in the 2007 Nexus Report. The future development area for this Nexus Study, which is referred to as the Fee Program Area, contains more residential units and less non-residential building square footage. In particular, the Nexus Study anticipates approximately 2,300 more residential units (roughly 1/4 more) and approximately 2.2 million square feet less of combined retail and employment and light industrial uses (roughly 1/3 less).
  
- During the 2004-2006 timeframe, the City prepared a General Plan Update Background Report and backbone infrastructure Master Plans, all of which informed the 2007 Nexus Report. Currently, the City has conducted preliminary analyses of General Plan land uses and backbone infrastructure needs; a formal General Plan Update and backbone infrastructure Master Plan process is expected to commence in the near future. The public facilities recommended in the four high-level, conceptual infrastructure memos identified in the Table of Contents and described more fully in this Nexus Study are sized based on the City’s revised development areas and land use quantities mentioned in the prior paragraph.
  
- The City’s updated Capital Improvement Plan (the “CIP”) is summarized below, and amounts to \$511 million. The CIP included in the 2007 Nexus Report amounted to \$451 million, but accounted for several infrastructure items that are now funded by other public agencies, including:
  - \$58 million for a wastewater treatment plant
  - \$45 million associated with the SR 65 Bypass
  
- As alluded to in the prior paragraph, new development within the City will be subject to impact fees for public facilities that are not City facilities. These fees are not incorporated into this Nexus Study, but they include the following:
  - Yuba County public facilities
  - Olivehurst Public Utility District (OPUD) or Linda County Water District (LCWD) wastewater treatment plant facilities
  - South Yuba Transportation Improvement Authority (SYTIA) SR 65 Bypass and East Wheatland Expressway improvements

- While some impact fees have moved to other public agencies, as noted above, the City has added one new fee to the Fee Program with this Nexus Study. A separate impact fee will be collected to fund new development's fair share of a proposed City pool facility, which is estimated to cost \$8.5 million. More detail on that is presented in Section X of this Nexus Study.
  
- Two new land use categories have been added to the Fee Program as part of this Nexus Study. The Employment Use category remains, but it now applies only to land uses that are strictly office-related. Light Industrial land uses, which formerly were integrated into the larger Employment Use category, now comprise their own Light Industrial land use category. In addition, an Ag Tourism category is introduced in this Nexus Study to account for the ag-related retail uses that are developing in the Bishop's Pumpkin Farm area.

Goodwin Consulting Group has prepared this Nexus Study to be compliant with the regulations set forth in AB 1600, ensuring that a rational nexus exists between future development in the Fee Program Area and the use and need of the proposed facilities. This Nexus Study demonstrates that a reasonable relationship exists between the amount of each impact fee and the cost of the facilities attributable to the type of development that will be required to pay the impact fee.

### ***FEES INCLUDED IN THE STUDY***

This Nexus Study determines development impact fees for the following:

- Bridges, signals, and thoroughfares
- Sewer collection improvements
- Water distribution improvements
- Storm drainage facilities
- Law enforcement facilities
- Pool facility
- Parkland facilities

- General government facilities
- Public meeting facilities

The fees in this Nexus Study are established to mitigate the impacts on the City from future development in the Fee Program Area. Updated facilities costs and the addition of new facilities to the City’s CIP, together with updated future development projections, have created the need to update the 2007 Nexus Report.

***FACILITIES AND COSTS***

The Fee Program Area will fund various types of backbone infrastructure, public facilities, and equipment that will serve future development within its boundaries. The City has updated the CIP and the associated costs; these facilities and their itemized costs can be found in this report. Table ES-1 below summarizes the City’s CIP costs by facility category.

**Table ES-1  
Capital Improvement Plan Cost and Funding Summary**

<b>Facility Category</b>	<b>Total Cost</b>	<b>Impact Fee Fund Balance<sup>1</sup></b>	<b>Updated DIF Funding</b>
Bridges, Signals, Thoroughfares	\$148,300,000	\$275,000	\$148,025,000
Sewer Collection	\$60,300,000	\$4,155,000	\$56,145,000
Water Distribution	\$70,500,000	\$72,000	\$70,428,000
Storm Drainage	\$117,200,000	\$71,000	\$117,129,000
Law Enforcement	\$14,968,000	\$7,000	\$14,961,000
Pool Facility <sup>1</sup>	\$8,489,000	\$801,000	\$7,688,000
Parkland Facilities	\$57,300,000	\$15,000	\$57,285,000
General Government	\$24,810,000	\$160,000	\$24,650,000
Public Meeting Facilities	\$9,400,000	-\$188,000	\$9,588,000
<b>Total (rounded)</b>	<b>\$511,267,000</b>	<b>\$5,368,000</b>	<b>\$505,899,000</b>

<sup>1</sup> Future development is responsible for 90.6% of the Pool Facility cost; the remaining 9.4% (\$801,000) will need to be funded from another source identified by the City.



## SUMMARY OF THE FEE PROGRAM FEES

Table ES-2 summarizes fees in the Fee Program as calculated in this Nexus Study. An Administrative Fee, equal to two percent (2.0%) of all other fees, is included to pay for administration and maintenance of the Fee Program.

**TABLE ES-2**  
**FEE PROGRAM SUMMARY\***

Land Use	Bridges, Signals, Thoroughfares	Sewer Collection	Water Distribution	Storm Drainage	Law Enforce- ment	Pool Facility	Parkland Facilities	General Government	Public Meeting Facilities	Admin- istrative (2.0% of Fees)	Total DIF
<b>Residential</b>											
<i>Per Dwelling Unit</i>											
Single Family	\$10,536	\$4,102	\$5,428	\$9,576	\$1,177	\$646	\$4,819	\$1,939	\$807	\$781	<b>\$39,811</b>
Multi-Family	\$7,060	\$2,998	\$3,257	\$1,827	\$893	\$490	\$3,656	\$1,471	\$612	\$445	<b>\$22,709</b>
Mobile Home	\$5,479	\$2,998	\$4,343	\$3,654	\$731	\$401	\$2,991	\$1,204	\$501	\$446	<b>\$22,748</b>
<b>Non-Residential</b>											
<i>Per Hotel Unit</i>											
Commercial Lodgin	\$4,215	\$1,578	\$2,172	\$914	\$121	n/a	n/a	\$199	n/a	\$184	<b>\$9,383</b>
<i>Per Building SF</i>											
Retail Use	\$7.74	\$2.12	\$2.08	\$3.14	\$0.31	n/a	n/a	\$0.50	n/a	\$0.32	<b>\$16.21</b>
Employment Use	\$5.14	\$1.82	\$1.79	\$2.76	\$0.21	n/a	n/a	\$0.34	n/a	\$0.24	<b>\$12.30</b>
Light Industrial	\$2.83	\$1.04	\$0.90	\$2.90	\$0.14	n/a	n/a	\$0.23	n/a	\$0.16	<b>\$8.20</b>
Ag Tourism	\$1.94	\$0.53	\$0.52	\$0.90	\$0.08	n/a	n/a	\$0.13	n/a	\$0.08	<b>\$4.18</b>

\*Excludes fire facilities, as described further in Section XIV.

Table ES-3 on the following page compares the City's current impact fees with the proposed fees in this Nexus Study. As shown in that table, the proposed fees reflect fairly significant reductions for the residential, hotel, and other non-residential land uses, compared to the City's current fees. Detailed impact fee comparison tables can be found in Tables A-2a through A-2i in Appendix A.

**Table ES-3**  
**Development Impact Fee Comparison**

<b>Land Use Category</b>		<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Single Family	per Dwelling Unit	\$44,512	\$39,811	-10.6%
Multi-Family	per Dwelling Unit	\$28,301	\$22,709	-19.8%
Mobile Home	per Dwelling Unit	\$26,149	\$22,748	-13.0%
Commercial Lodging	per Hotel Room	\$10,776	\$9,383	-12.9%
Retail Use	per Bldg. SF	\$16.99	\$16.21	-4.6%
Employment Use	per Bldg. SF	\$13.04	\$12.30	-5.7%
Light Industrial	per Bldg. SF	n/a	\$8.20	n/a
Ag Tourism	per Bldg. SF	n/a	\$4.18	n/a

***FEE ADJUSTMENTS***

The Fee Program may be adjusted in future years to reflect revised facility standards, receipt of funding from alternative sources (e.g., state or federal grants, a Community Facilities District), revised costs, inclusion of additional capital improvements, or changes in demographics or the land use plan. In lieu of such adjustments, the fees should continue to be inflated each year by an index such as the *Engineering News Record (ENR) Construction Cost Index*.

## *I. INTRODUCTION*

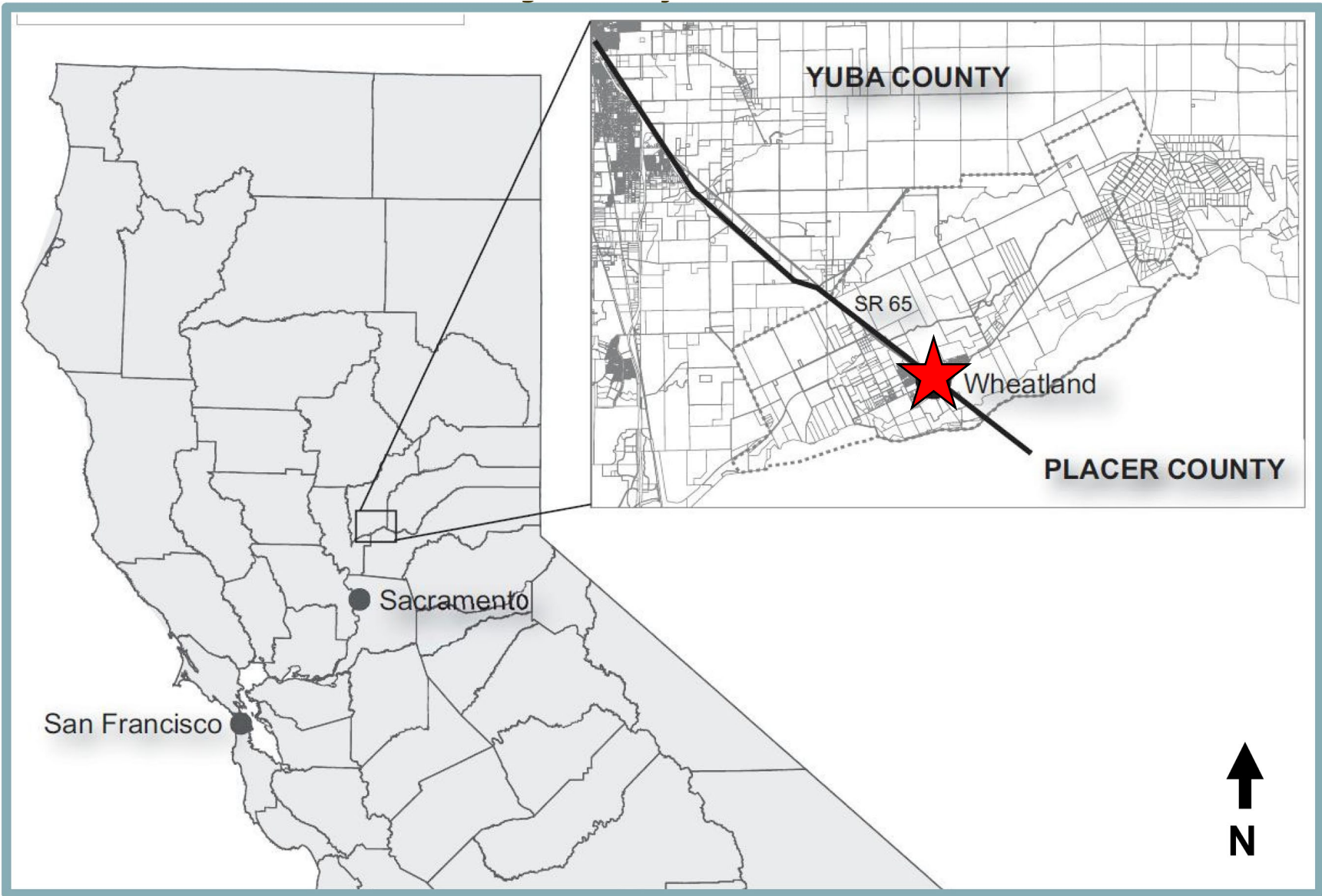
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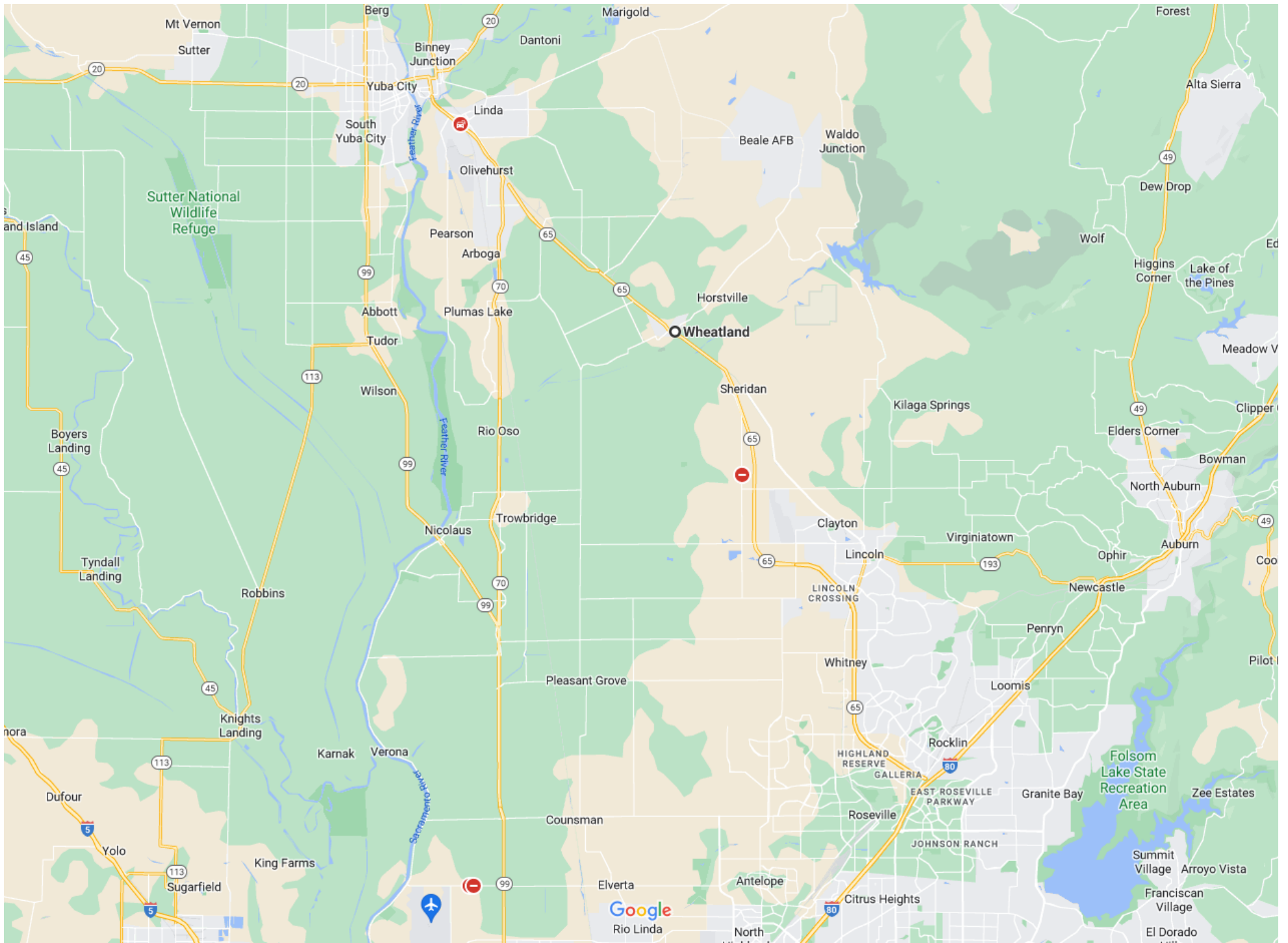
The City of Wheatland (the “City”), incorporated in 1874, is one of two incorporated cities in Yuba County. It lies in the southernmost end of Yuba County, approximately 14 miles southeast of the Yuba City/Marysville area in California’s Sacramento Valley. Regionally, the City of Sacramento is located approximately 40 miles to the south. The California Department of Finance estimates that the City’s population as of January 2022 was 3,664.

A map of the northern California vicinity and Wheatland’s position within it, together with a Wheatland location map, are provided on the following two pages.

Wheatland is located along SR 65, which connects the Cities of Roseville and Rocklin to the south with the Olivehurst area and SR 70 to the north. Future development in the City can loosely be described as having three components: the portion that lies southwest of SR 65; the portion that lies between the northeast side of existing SR 65 and the proposed SR 65 Bypass; and the portion that lies northeast of the proposed SR 65 Bypass. Some of these areas are already within existing City limits, while others are within the City Sphere of Influence and are anticipated to annex into the City at some point in the future. These areas will provide future residential and non-residential development potential for the City. Note that the Sphere of Influence, as well as the even larger General Plan Study Area, includes thousands of acres that are currently designated as Urban Reserve; these areas are not included in the analysis contained in this report.

As the City continues to develop, backbone infrastructure, public facilities, and attendant equipment will be required to serve the new development areas. Since these facilities are needed as a direct result of development in the new areas, the cost of these facilities should be borne exclusively by development that occurs there. Although the exact funding strategy is not known at this time, much of the funding for these facilities will come from development impact fees, and so the fees are established to cover 100% of the applicable costs.





Rio Linda

## **A. Purpose of Study**

This *Development Impact Fee (DIF) Updated Nexus Study* (the “Nexus Study”) updates the City’s *Development Impact Fee Calculation and Nexus Report*, dated January 2007 (the “2007 Nexus Report”). This Nexus Study contains the following major changes from the 2007 Nexus Report:

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- As alluded to in the prior paragraph, new development within the City will be subject to impact fees for public facilities that are not City facilities. These fees are not incorporated into this Nexus Study, but they include the following:

- Yuba County public facilities
  - Olivehurst Public Utility District (OPUD) or Linda County Water District (LCWD) wastewater treatment facilities
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- While some impact fees have moved to other public agencies, as noted above, the City has added one new fee to the Fee Program with this Nexus Study. A separate impact fee will be collected to fund new development’s fair share of a proposed City pool facility, which is estimated to cost \$8.5 million. More detail on that is presented in Section X of this Nexus Study.
  - Two new land use categories have been added to the Fee Program as part of this Nexus Study. The Employment Use category remains, but it now applies only to land uses that are strictly office-related. Light Industrial land uses, which formerly were integrated into the larger Employment Use category, now comprise their own Light Industrial category. In addition, an Ag Tourism category is introduced in this Nexus Study to account for the ag-related retail uses that are developing in the Bishop’s Pumpkin Farm area.

Goodwin Consulting Group has prepared this Nexus Study to be compliant with the regulations set forth in AB 1600, ensuring that a rational nexus exists between future development in the Fee Program Area and the use and need of the proposed facilities. This Nexus Study demonstrates that a reasonable relationship exists between the amount of each impact fee and the cost of the facilities attributable to the type of development that will be required to pay the impact fee.

**B. Impact Fee Nexus Requirements (AB 1600)**

Assembly Bill No. 1600 (“AB 1600”), which was enacted by the State of California in 1987, created Section 66000 et seq. of the California Government Code. AB 1600, also referred to as the Mitigation Fee Act, requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval of a development project:

1. Identify the purpose of the fee.
2. Identify the use to which the fee is to be put.
3. Determine how there is a reasonable relationship between:
  - a. The fee’s use and the type of development project on which the fee is imposed.
  - b. The need for the public facility and the type of development project on which the fee is imposed.
  - c. The amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

As stated above, the purpose of this study is to demonstrate that all fees in this updated Fee Program comply with AB 1600. The assumptions, fee methodologies, and facility standards, costs, and cost allocation factors that were used to establish the nexus between the fees and the development on which they will be levied are summarized in the subsequent sections of this report.

### **C. Organization of Report**

The remainder of this report has been organized into the following sections:

- |                 |   |
|-----------------|---|
| Section II      | Describes the demographic and land use development assumptions used in the detailed calculations of the Fee Program.  |
| Section III     | Summarizes the infrastructure categories and costs in the City’s updated CIP.   |
| Section IV      | Provides a detailed explanation of the fee methodologies used to calculate the various individual fees in the Fee Program.  |
| Sections V-XIII | Presents the detailed calculations for transportation, sewer collection, water distribution, storm drainage, law enforcement, pool, parkland, general government, and public meeting facility fees. |



Section XIV Summarizes the individual fee amounts developed in this Nexus Study, and explains why the fire facilities fee is not updated in this analysis.

Section XV Addresses fee implementation, future fee adjustments, fee credits and reimbursements, periodic administrative duties, and other relevant items.

## ***II. POPULATION AND LAND USE CATEGORIES***

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### **A. Population and Employment**

Table II-1 on the following page, as well as Table A-3 in Appendix A, shows existing and future land uses, population, and employment estimates for the City. The California Department of Finance estimates that as of January 2022 the City had 3,664 residents. Additionally, City planning documents and Claritas, a private demographics company, estimate that the City has approximately 300,000 square feet of commercial and industrial building space with just under 600 jobs.

### **B. Fee Program Area**

The Fee Program Area in this Nexus Study includes future planning and development areas that total approximately 3,400 acres of residential and non-residential land uses. It is estimated that residential development will fully build out by around 2050, while commercial/industrial development may span an additional two or more decades beyond that time.

At buildout of the Fee Program Area, it is estimated that an additional 12,292 residential units will be constructed with an estimated 34,480 additional residents. Buildout of the non-residential land uses in the City will produce an estimated 4.26 million square feet of retail, office, and light industrial building space combined, with an estimated 8,038 additional employees.

Four specific development areas account for approximately 10,500, or 85%, of the total future residential units anticipated within the Fee Program Area; these include Heritage Oaks Estates, properties south of Bishop's Pumpkin Farm, properties surrounding Nichols Grove, and Johnson Rancho. The Johnson Rancho project, together with Hop Farm north of Grasshopper Slough, represents 370 acres, or 87%, of the total future commercial/industrial building square footage expected to be built within the Fee Program Area. Appendix B presents a table that estimates future development quantities, together with a map that delineates the future development areas.

**Table II-1**  
**Existing and Future Development in the City**

<u><i>Existing Development in the City</i></u>						
<b>Residential</b>						
Single Family		982	2.90	2,848		
Multi-Family		341	2.20	750		
Mobile Home		37	1.80	66		
<b>Subtotal</b>		<b>1,360</b>	<b>--</b>	<b>3,664</b>		
<b>Non-Residential</b>						
Retail		0	400	0		
Office/Commercial		0	300	0		
Industrial		0	700	0		
<b>Subtotal</b>		<b>291,000</b>	<b>497</b>	<b>586</b>		
<b><u><i>Incremental Future Development at Build Out of DIF Program Area</i></u></b>						
<b>Residential</b>						
	<b>Gross Build Out Acres</b>	<b>Net Build Out Acres<sup>1</sup></b>	<b>Gross Density</b>	<b>Units</b>	<b>PPH</b>	<b>Population</b>
Single Family	2,782	1,947	3.8	10,624	2.90	30,810
Multi-Family <sup>2</sup>	75	53	22.2	1,668	2.20	3,670
Mobile Home	0	0	--	0	1.80	0
<b>Subtotal</b>	<b>2,857</b>	<b>2,000</b>	<b>--</b>	<b>12,292</b>	<b>--</b>	<b>34,480</b>
<b>Non-Residential</b>						
	<b>Gross Build Out Acres</b>	<b>Net Build Out Acres<sup>1,3</sup></b>	<b>Net FAR</b>	<b>Bldg. SF</b>	<b>SF/Emp</b>	<b>Employees</b>
Commercial Lodging	0	0	0.30	0	1,000	0
Retail Use	184	129	0.30	1,685,772	400	4,214
<sup>4</sup> Employment Use	161	113	0.35	1,722,798	600	2,871
<sup>4</sup> Light Industrial	81	56	0.35	853,776	900	949
Ag Tourism	140	0.13	0.30	1,650	400	4
<b>Subtotal</b>	<b>566</b>	<b>298</b>	<b>--</b>	<b>4,263,996</b>	<b>--</b>	<b>8,038</b>
<b><u><i>Totals at Buildout of the City</i></u></b>						
<b>Residential</b>						
Single Family		11,606	3.00	33,658		
Multi-Family		2,009	2.00	4,420		
Mobile Home		37		66		
<b>Subtotal</b>		<b>13,652</b>	<b>--</b>	<b>38,144</b>		
<b>Non-Residential</b>						
Retail		0	400	0		
Office/Commercial		1,685,772	300	4,214		
Industrial		1,722,798	700	2,871		
<b>Subtotal</b>		<b>4,554,996</b>	<b>--</b>	<b>8,624</b>		

<sup>1</sup> Gross to net acreage factor of 70% applied to account for interior infrastructure such as roads, medians, landscape strips, and on-site drainage.

<sup>2</sup> Does not include acreage associated with 500 mixed-use dwelling units.

<sup>3</sup> Net acreage for Ag Tourism assumes that only a small parcel of approximately 6,000 sf is developed.

<sup>4</sup> A portion of the land designated for Employment Use is assumed to develop as Light Industrial, which produces different public facility demands than office-type uses; therefore, Light Industrial uses are treated separately from traditional Employment Uses for purposes of the DIF program.

### **C. Land Use Categories**

The Mitigation Fee Act, specifically §66001 of the Government Code, requires that a reasonable relationship exist between the need for public facilities and the type of development on which the impact fee is imposed. The need for public facilities is related to the level of service demanded, which varies in proportion to the number of residents or employees generated by a particular land use type. Therefore, land use categories have been defined in order to distinguish between relative impacts on facilities. All impact fees in this study have been calculated on a per-dwelling unit basis for residential land use categories, per hotel room for commercial lodging, and per building square foot for other non-residential land use categories.

The following land use categories, together with a brief description of each category, are utilized for purposes of this study and will be integrated into the City's Fee Program:

#### **Residential Land Uses**

- ***Single Family.*** This is an existing category in the Fee Program, and generally applies to one residential dwelling unit on a single parcel of land. This category would include a single family detached unit or attached unit on one lot.
- ***Multi-Family.*** This is an existing category in the Fee Program, and generally applies to a duplex, triplex, or larger multi-unit structure on a single parcel of land. These types of units are typically apartments and condominiums.
- ***Mobile Home.*** This is an existing category in the Fee Program, and generally applies to a mobile home pad for either mobile homes or modular units that would be located within a mobile-home park or enclosed park-like setting typically (but not necessarily) without the subdivision of land.

### *Non-Residential Land Uses*

- ***Commercial Lodging.*** This is an existing category in the Fee Program, and generally applies to commercial (as opposed to residential) short-term lodging facilities, such as hotels, motels, and resorts.
- ***Retail Use.*** This is an existing category in the Fee Program, and generally applies to the broad category of buildings that house businesses offering retail goods and services. Such buildings may be restaurants, shopping centers, banks, etc.
- ***Employment Use.*** This is an existing category in the Fee Program, but it has been revised to exclude light industrial land uses. This category would entail office-related uses that generally do not include sales tax producing businesses, such as office buildings, business parks, and research and development operations.
- ***Light Industrial.*** This is a new category being added to the Fee Program, but was formerly included within the Employment Use category. Light Industrial uses would include warehouse, distribution, light manufacturing, and related businesses.
- ***Ag Tourism.*** This is a new category being added to the Fee Program. It would typically involve a small retail and/or restaurant operation, together with a beer garden, apple cider and/or kettle corn offerings, hop farm, and agricultural entertainment such as a pumpkin farm or cornfield maze. These uses commonly do not operate year-round.

The City will make the final determination as to which land use category a particular development will be assigned. The City is authorized to determine the land use category that corresponds most directly to the actual or intended use. Alternatively, the City may conclude that no land use category adequately corresponds to the development in question and may determine the applicable impact fees in a reasonable way at the City's sole discretion.

### III. BACKBONE INFRASTRUCTURE AND PUBLIC FACILITIES

The Fee Program will fund various types of backbone infrastructure and public facilities that will serve future development. Infrastructure requirements and itemized costs have been developed by City staff and consultants, and are based on high-level, cursory analyses. Backbone infrastructure components and costs can be found in Table C-1 of Appendix C; public facilities components and costs can be found in Tables A-9 through A-13 in Appendix A. City staff have reviewed and prioritized these facilities based on the primary needs of the City. Table III-1 below summarizes the City’s CIP costs and funding by facility category; this is also Table A-4 in Appendix A.

**Table III-1  
Capital Improvement Plan Cost and Funding Summary**

<b>Facility Category</b>	<b>Total Cost</b>	<b>Impact Fee Fund Balance<sup>1</sup></b>	<b>Updated DIF Funding</b>
Bridges, Signals, Thoroughfares	\$148,300,000	\$275,000	\$148,025,000
Sewer Collection	\$60,300,000	\$4,155,000	\$56,145,000
Water Distribution	\$70,500,000	\$72,000	\$70,428,000
Storm Drainage	\$117,200,000	\$71,000	\$117,129,000
Law Enforcement	\$14,968,000	\$7,000	\$14,961,000
Pool Facility <sup>1</sup>	\$8,489,000	\$801,000	\$7,688,000
Parkland Facilities	\$57,300,000	\$15,000	\$57,285,000
General Government	\$24,810,000	\$160,000	\$24,650,000
Public Meeting Facilities	\$9,400,000	-\$188,000	\$9,588,000
<b>Total (rounded)</b>	<b>\$511,267,000</b>	<b>\$5,368,000</b>	<b>\$505,899,000</b>

<sup>1</sup> Future development is responsible for 90.6% of the Pool Facility cost; the remaining 9.4% (\$801,000) will need to be funded from another source identified by the City.

Table III-1 shows that the total cost of the facilities in the CIP is approximately \$511.3 million. Funding from other City sources is estimated to account for approximately \$5.4 million. Of this amount, approximately \$4.6 million will come from existing impact fee fund balances that may be utilized to offset CIP costs. Additionally, \$0.8 million from other City sources will be necessary to fund a portion of the pool facility. The net facilities cost to be funded with Fee Program revenues is \$505.9 million.

## **A. Oversizing and Reimbursement**

In an effort to ensure that capital facilities are available in a timely manner for future development, the City may regularly condition developers to construct certain facilities upfront, prior to development occurring. In some cases, the cost of these improvements will exceed the developer's fair-share. As a result, the developer and City may enter into a reimbursement agreement that obligates the City to repay the developer for the cost of oversizing the facility or improvement. If the constructed facility benefits future development areas beyond the developer's area, the other areas should rightfully share in the cost, ultimately reimbursing the original developer.

## **B. Other City Funds**

As noted above, Table III-1 shows approximately \$5.4 million in funding to be provided by the City. This includes approximately \$4.2 million for sewer collection facilities and \$0.8 million for the pool facility. The City's existing sewer collection impact fee fund balance of \$4.2 million may be applied against the sewer system costs attributable to future development. Note that sewer collection fees received pursuant to development agreements for the Heritage Oaks East, Heritage Oaks West, and Caliterra projects have been deducted from the sewer collection fee fund balance.

Because the pool facility will provide a citywide benefit that covers both existing and future development, the portion of the total pool facility cost that is attributable to the existing City (9.4%) is allocated to the City to find another source of funding. The City is planning to compete for a \$3 million grant from the State Department of Parks and Recreation Rural Recreation and Tourism Program to help offset the cost of the community pool, which is an example of one potential City funding source. All of the fees in this Nexus Study include only that portion of the total cost of facilities that will specifically benefit future development; any remaining costs must be funded with other funding sources secured by the City.

### **C. Backbone Facilities Preliminary Plans**

In May 2022, the City’s consultant, Coastland Engineering, completed very high-level, preliminary analyses and technical memoranda for the City’s future transportation, sewer collection, water distribution, and storm drainage infrastructure. These conceptual plans identify the backbone facilities required to serve the buildout of all land designated for future development within the City, except for those areas set aside for distant future development and designated as Urban Reserve. They form the basis of the backbone facilities and costs incorporated into this Nexus Study. For more detailed information on those backbone facilities and costs, please refer to the four technical memos provided in Appendix C of this report.

It is anticipated that more detailed engineering studies and backbone infrastructure master plans will be prepared during the formal General Plan Update process to more clearly identify required facilities and to more accurately estimate facility costs. An update to this Nexus Study would be conducted at that time as well to reflect the findings of those studies/plans.



#### ***IV. FEE METHODOLOGY***

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When impact fees are calculated, an analysis must be presented in enough detail to demonstrate that logical and thorough consideration was applied in the process of determining how the fees relate to the impacts from new development. Various findings must be made to ensure that there is a reasonable relationship between the amount of the fee and the development on which that impact fee will be levied. There are several methods of determining impact fees for future development. The choice of the method used depends on the type of facility for which an impact fee is being calculated. Following is a discussion of the two methods used in this Nexus Study to calculate the individual fees in this Fee Program.

##### **A. Plan-Based Fee Methodology**

The plan-based fee methodology is used for facilities that must be designed based on future demand projections within a geographic location. Typically, a formal plan such as a specific plan or facilities master plan identifies and supports the level of facilities required to serve the plan area. For example, the need for transportation-related improvements depends specifically on the projected number of trips that must be accommodated on specific roadways within a geographic location. An analysis of existing facilities, geographical constraints, and current levels of service must be completed in order to identify future facility needs. This information is analyzed in conjunction with a projection of the amount and location of future development in the plan area to determine the adequacy of existing facilities and the demand for new improvements that will be required. The steps to calculate a fee under the plan-based fee methodology include the following:

- Step 1*** Identify existing development and estimate future demand projections as well as the geographic location of anticipated growth.
  
- Step 2*** Determine facilities needed to serve anticipated growth and, if necessary, existing development within the City.

- Step 3** Estimate the gross cost of facilities needed to serve both existing and future development.
- Step 4** Subtract the gross cost of any facilities included in the facilities plan that will cure an existing deficiency in service or will serve existing development.
- Step 5** Subtract revenues available from alternative funding sources, if any, to identify a net facilities cost that will be allocated to future development.
- Step 6** Select the demand variable (e.g., trips generated, gallons per day, persons served) that will be used to allocate facility costs on a rational benefit basis; apply demand variable rates to each of the land use categories based on its service demand.
- Step 7** Estimate the total demand from future development by multiplying the total number of units/acres/square footage/etc. for each respective land use by its assigned demand variable rate. Total the amounts for all the land uses.
- Step 8** Divide the net facilities cost allocated to future development that was calculated in Step 5 by the total demand derived in Step 7 to determine the cost per demand variable (e.g., cost per trip generated, cost per gallon, cost per person served).
- Step 9** Multiply the cost per demand variable determined in Step 8 by the demand variable assigned to each land use category in Step 6 to compute the impact fee for that particular land use category.

The plan-based fee methodology has been used in this report to calculate the transportation, sewer collection, water distribution, and storm drainage fees.

## **B. Standard-Based Fee Methodology**

The standard-based fee methodology is used when a consistent facility level of service standard is to be applied to each increment of new development (e.g., residential unit, non-residential square foot) regardless of future demand projections or the geographic location of anticipated growth. The standard to be used in calculating impact fees under this method may be based on an existing City standard, a preferred standard that the City wishes to attain, or a minimum standard prescribed by law. To the extent a preferred standard is used that is higher than the existing standard, the public agency will need to rely on other sources of funds to mitigate the deficit related to existing development in the City created through the adoption of the higher standard. The steps to calculate a fee under the standard-based fee methodology include the following:

- Step 1* Define the existing facility standard (e.g., park acres per 1,000 residents, police officers per 1,000 residents) expressed in terms of residents, employees, persons served, or other standard appropriate for the type of facility for which a fee is being calculated.
  
- Step 2* Determine a cost for each incremental facility standard identified in Step 1 based on current replacement costs; reduce the facility costs by subtracting alternative funding sources, if applicable.
  
- Step 3* Apply demand variable rates to each of the land uses based on service demand (e.g. persons served).
  
- Step 4* Multiply the demand variable for each type of land use identified in Step 3 by the cost for each incremental facility standard determined in Step 2 to calculate the impact fee for each of the land use categories.

The standard-based fee methodology has been used in this report to calculate the law enforcement, pool, parkland, general government, and public meeting facilities fees. Additional detail for each fee of the Fee Program is included in the following Sections V through XIII.

## ***V. BRIDGES, SIGNALS, THOROUGHFARES FEE***

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This section of the report identifies the facilities, costs, and fees required to fund the bridge, signal, and thoroughfare improvements needed to serve future development through buildout of the Fee Program Area.

### **A. Nexus Test**

The paragraphs below demonstrate how the Bridges, Signals, Thoroughfares Fee meets the AB 1600 nexus requirements discussed in this report.

***Identify the purpose of the fee.*** The purpose of the Bridges, Signals, Thoroughfares Fee is to fund streets-related capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The Bridges, Signals, Thoroughfares Fee will be used to fund the construction of street improvements determined by the City as necessary to maintain an adequate level of service as the City grows. These facilities are identified in Table C-1 of Appendix C.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential and commercial/industrial development occurs in the City, the City's roadway system will be impacted. In order for the City to maintain the existing level of service, it will need to increase the capacity of its roadway system to handle the additional trip generation from new development. The use of the fee revenue from the Fee Program to construct the street improvements identified in Appendix C will ensure that roadways will operate at an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** Residential and commercial/industrial development in the City will generate additional trips on the City's roadway system. This will impact the roadway system and, as a result, certain roadways will need to be improved or constructed in order to expand roadway system capacity. The transportation memo in Appendix C

identifies the need to improve or construct specific streets and intersections resulting from development of the land uses in the Fee Program Area identified in this Nexus Study.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Bridges, Signals, Thoroughfares Fee is calculated so that the fees collected offset the cost of constructing the street improvements necessary to serve only the development in the Fee Program Area. Improvements to cure existing deficiencies or those required by the City’s existing development are excluded from the City’s CIP shown in Table C-1. Future residential and non-residential development will be responsible for only the fair-share portion of the total cost based on a proportionate share of trips assigned to the individual land uses.

**B. Demand Variable: Peak Hour Trips**

Facility costs for the Bridges, Signals, Thoroughfares Fee are allocated to future development based on Peak Hour Trip Dwelling Unit Equivalents (“Trip DUEs”) modified by a Trip Adjustment Factor. The modified Trip DUEs are shown per dwelling unit for residential land uses, per hotel room for commercial lodging land uses, and per acre for the other non-residential categories. Table V-1 below presents the different demand variables assigned to each land use.

**Table V-1**  
**Peak Hour Trip DUE Rates**

<b>Residential Land Uses</b>	<b>Adjusted Peak Hour Trip DUEs per Dwelling Unit</b>
Single Family	1.00
Multi-Family	0.67
Mobile Home	0.52
<b>Non-Residential Land Uses</b>	<b>Adjusted Peak Hour Trip DUEs per Room or per Acre</b>
Commercial Lodging	0.40
Retail Use	9.60
Employment Use	7.43
Light Industrial	4.09
Ag Tourism	2.40

The Trip DUEs generated by non-residential land uses account for the fact that some stops are pass-by trips rather than trip-ends. For example, a resident may stop at a gas station on the way home from work. The stop at the gas station represents an intermediate stop on the way to the resident’s final destination (his/her house), and therefore, is not counted as an additional new trip end. The Trip Adjustment Factor of 0.25 applied to Ag Tourism reflects the intended operation of three months per year, or 25% of the time; this factor can be revised in the future if Ag Tourism land uses consistently operate higher or lower than 25% of a year.

**C. Facility Needs and Cost Estimates**

Based on future trip generation projections, the City estimated the impact on the current roadway system from development in the Fee Program Area. Street and intersection improvements needed to serve future development are identified and quantified in dollar terms and are summarized in Table C-1 in Appendix C. The facilities included in Table C-1 have been prioritized by City staff based on the City’s needs. The total cost of these capital improvements is approximately \$148.3 million.

Use of the plan-based fee methodology to calculate the Bridges, Signals, Thoroughfares Fee corresponds with the nature of future development's impact on the planned roadway system. Only by estimating the amount and location of future development can the appropriate improvements be identified and costs quantified. Included in the street facilities cost is the cost of new arterial and collector roadways, intersection improvements, signalization, slough crossings, congestion relief and turn lanes, and railroad/pedestrian safety enhancements. Facilities have been sized to accommodate the additional trips that will be generated based on future development in the Fee Program Area.

#### **D. Calculation of Bridges, Signals, Thoroughfares Fee**

Table A-5 in Appendix A shows the assumptions used in the calculation of the Bridges, Signals, Thoroughfares Fee. After accounting for the impact fee bund balance, the \$148.0 million net cost of the street improvements is allocated to future development in the Fee Program Area based on trip generation from the land uses in the Fee Program Area. Table A-5 shows that the total trips generated by both residential and non-residential development at buildout is estimated to be 14,049 Trip DUEs. Dividing the net cost by the total number of trip DUEs produces a cost per new trip DUE of \$10,536.

The cost per Trip DUE is then multiplied by the Trip DUE assigned to each of the land use categories to arrive at a fee per dwelling unit for residential development, per hotel room for commercial lodging, or per building square foot for other non-residential development.

#### **E. Bridges, Signals, Thoroughfares Fee**

The bottom section of Table A-5 shows the calculation of the Bridges, Signals, Thoroughfares Fee. Applying the \$10,536 cost per Trip DUE to the demand variable assigned to each of the land use categories results in the following Bridges, Signals, Thoroughfares Fees:

**Residential Land Uses**

- \$10,536 per dwelling unit for Single Family
- \$7,060 per dwelling unit for Multi-Family
- \$5,479 per dwelling unit for Mobile Home

**Non-Residential Land Uses**

- \$4,215 per hotel room for Commercial Lodging
  
- \$7.74 per building square foot for Retail Use
- \$5.14 per building square foot for Employment Use
- \$2.83 per building square foot for Light Industrial
- \$1.94 per building square foot for Ag Tourism



**VI. SEWER COLLECTION FEE**

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This section of the report identifies the facilities, costs, and fees required to fund the sewer collection improvements needed to serve future development through buildout of the Fee Program Area.

**A. Nexus Test**

The paragraphs below demonstrate how the Sewer Collection Fee meets the AB 1600 nexus requirements discussed in Section I.

*Identify the purpose of the fee.* The purpose of the Sewer Collection Fee is to fund wastewater collection-related capital costs attributable to the impact from new development in the Fee Program Area.

*Identify the use of the fee.* The Sewer Collection Fee will be used to fund the construction or purchase of wastewater facilities identified by the City as necessary to serve new development in the Fee Program Area. These facilities are identified in Table C-1 of Appendix C.

*Determine how there is a reasonable relationship between the fee’s use and the type of development project on which the fee is imposed.* As residential and commercial/industrial development occurs in the City, the City’s wastewater system will be impacted. In order for the City to maintain an adequate level of service, it will need to increase the capacity of these facilities to handle the additional sewer flows generated by new development. The use of the fee revenue from the Fee Program to construct the wastewater facilities identified in Appendix C will ensure that these facilities will be available to provide an adequate level of service as the City grows.

*Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.* Residential and commercial/industrial development in the City will generate additional demand on the City’s wastewater system. This will impact the wastewater system and, as a result, certain facilities will need to be improved or constructed in order to expand sewer collection system capacity. The sewer collection memo in

Appendix C identifies the need to improve or construct specific wastewater facilities as a result of development of the land uses in the Fee Program Area identified in this Nexus Study.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Sewer Collection Fee is calculated so that the fees collected offset the cost of constructing or purchasing the facilities that are necessary to serve new development in the Fee Program Area. Facilities to cure existing deficiencies or those required by the City's existing development are excluded from the City's CIP, as shown in Table C-1. Residential and non-residential development will be responsible for the fair-share portion of the total cost that will be allocated based on the gallons of wastewater generated per day for each separate land use category.

#### **B. Demand Variable: Gallons of Wastewater Generated per Day**

Facility costs within the wastewater CIP are allocated to future development based on the number of gallons of wastewater generated per day, modified by a Flow Rate Adjustment Factor. The Adjusted Flow Rates are shown per dwelling unit for residential land uses, per hotel room for commercial lodging land uses, and per acre for the other non-residential categories. Table VI-1 below presents the different generation variables assigned to each land use. The Flow Rate Adjustment Factor of 0.25 applied to Ag Tourism reflects the intended operation of three months per year, or 25% of the time; this factor can be revised in the future if Ag Tourism land uses consistently operate higher or lower than 25% of a year.

**Table VI-1**  
**Gallons per Day Flow Rates**

<b>Residential Land Uses</b>	<b>Adjusted Gallons per Day per Dwelling Unit</b>
Single Family	260
Multi-Family	190
Mobile Home	190
<b>Non-Residential Land Uses</b>	<b>Adjusted Gallons per Day per Room or per Acre</b>
Commercial Lodging	100
Retail Use	1,750
Employment Use	1,750
Light Industrial	1,000
Ag Tourism	438

**C. Facility Needs and Cost Estimates**

Based on future demand projections, the City and its consultants have estimated the impact on the City’s wastewater system from development in the Fee Program Area. Wastewater facilities required to serve this development are identified and quantified in dollar terms in Table C-1 of Appendix C. The facilities included in Table C-1 have been prioritized by City staff based the City’s needs. The total cost of the sewer collection facilities is \$60.3 million.

After accounting for the impact fee fund balance, the net cost of the wastewater improvements allocated to the Fee Program is \$56.1 million. Wastewater facilities include 8-inch to 36-inch sanitary sewer lines, lift stations, pump station upgrades, and a nearly 9-mile force main from the Jasper pump station to the OPUD pump station. Facilities have been sized to accommodate the additional wastewater that will be generated from future development in the City.

#### **D. Calculation of Sewer Collection Fee**

Table A-6 in Appendix A presents assumptions used in the calculation of the Sewer Collection Fee. The table shows the total net infrastructure cost of \$56.1 million to be allocated to the Fee Program as well as the 3.6 million total gallons of wastewater generated per day from development in the Fee Program Area. Dividing the total cost by the total gallons yields a cost per gallon of \$15.78.

The \$15.78 cost per gallon is applied to the demand variable assigned to each of the land use categories to arrive at a fee per dwelling unit for residential development, per hotel room for commercial lodging, and per building square foot for other non-residential development.

#### **E. Sewer Collection Fee**

The bottom section of Table A-6 shows the calculation of the Sewer Collection Fee. Applying the cost per gallon per day to the demand variable assigned to each of the land use categories results in the following Sewer Collection Fees:

##### **Residential Land Uses**

- \$4,102 per dwelling unit for Single Family
- \$2,998 per dwelling unit for Multi-Family
- \$2,998 per dwelling unit for Mobile Home

##### **Non-Residential Land Uses**

- \$1,578 per hotel room for Commercial Lodging
- \$2.12 per building square foot for Retail Use
- \$1.82 per building square foot for Employment Use
- \$1.04 per building square foot for Light Industrial
- \$0.53 per building square foot for Ag Tourism

**VII. WATER DISTRIBUTION FEE**

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This section of the report identifies the facilities, costs, and fees required to fund water distribution improvements needed to serve future development in the Fee Program Area.

**A. Nexus Test**

The paragraphs below demonstrate how the Water Distribution Fee meets the AB 1600 nexus requirements discussed in Section I of this report.

*Identify the purpose of the fee.* The purpose of the Water Distribution Fee is to fund water-related capital costs attributable to the impact from new development in the Fee Program Area.

*Identify the use of the fee.* The Water Distribution Fee will be used to fund the construction or purchase of water facilities deemed by the City as necessary to serve new development. These facilities are identified in Table C-1 of Appendix C.

*Determine how there is a reasonable relationship between the fee’s use and the type of development project on which the fee is imposed.* As residential and commercial/industrial development occurs in the City, the City’s water system will be impacted. In order for the City to maintain an adequate level of service, it will need to increase the capacity of these facilities to handle the additional demand generated by new development. The use of the fee revenue from the Fee Program to construct the water facilities identified in Appendix C will ensure that these facilities will be available to provide an adequate level of service as the City grows.

*Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.* Residential and commercial/industrial development in the City will generate additional demand on the City’s water system. This will impact the water system and, as a result, additional facilities will need to be constructed or improved in order to expand water distribution capacity. The water distribution memo in Appendix C

identifies the need to improve or construct specific water facilities as a result of development of the land uses in the Fee Program Area.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Water Distribution Fee is calculated so that the fees collected offset the cost of constructing or purchasing the facilities necessary to serve new development in the Fee Program Area. Facilities to cure existing deficiencies or those required by the City's existing development are excluded from the City's CIP, as shown in Table C-1. Residential and non-residential development will be responsible for the fair-share portion of the total cost that will be allocated based on the gallons of water demanded per day for each separate land use.

#### **B. Demand Variable: Gallons of Water Needed per Day**

Water facility costs are allocated to development based on the number of gallons of water needed per day, modified by a Demand Rate Adjustment Factor. The Adjusted Demand Rates are shown per dwelling unit for residential land uses, per hotel room for commercial lodging land uses, and per acre for the other non-residential categories. Table VII-1 below presents the different demand variables assigned to each land use. The Demand Rate Adjustment Factor of 0.25 applied to Ag Tourism reflects the intended operation of three months per year, or 25% of the time; this factor can be revised in the future if Ag Tourism land uses consistently operate higher or lower than 25% of a year.

**Table VII-1  
Gallons per Day Demand Rates**

<b>Residential Land Uses</b>	<b>Adjusted Gallons per Day per Dwelling Unit</b>
Single Family	500
Multi-Family	300
Mobile Home	400
<b>Non-Residential Land Uses</b>	<b>Adjusted Gallons per Day per Room or per Acre</b>
Commercial Lodging	200
Retail Use	2,500
Employment Use	2,500
Light Industrial	1,250
Ag Tourism	625

**C. Facility Needs and Cost Estimates**

Based on future demand projections, the City and its consultants have estimated the impact on the City’s water system from development in the Fee Program Area. Water facilities required to serve such development were identified and quantified in dollar terms, and are summarized in Table C-1 of Appendix C. The facilities included in Table C-1 have been prioritized by City staff based on the City’s needs. The total cost of the water distribution facilities is \$70.5 million.

After accounting for the impact fee fund balance, the net cost of the water improvements allocated to the Fee Program is \$70.4 million. Water facilities include new 6-inch to 14-inch water mains, 800 GPM water wells, 1.5 MGD water tanks, and other distribution improvements. Facilities have been sized to accommodate the additional infrastructure requirements of future development in the Fee Program Area.

#### **D. Calculation of Water Distribution Fee**

Table A-7 in Appendix A shows the assumptions used in the calculation of the Water Distribution Fee. The \$70.4 million cost is allocated based on the estimated 6.5 million gallons of water demanded per day from future development in the Fee Program Area. Dividing this total cost by the total gallons results in a cost per gallon of \$10.86.

The cost per demand variable is then applied to the demand variable assigned to each of the land use categories to arrive at a fee per dwelling unit for residential development, per hotel room for commercial lodging, or per building square foot for other non-residential development.

#### **E. Water Distribution Fee**

The bottom section of Table A-7 shows the calculation of the Water Distribution Fee. Applying the \$10.86 cost per gallon to the demand variable assigned to each of the land use categories results in the following Water Distribution Fees:

##### **Residential Land Uses**

- \$5,428 per dwelling unit for Single Family
- \$3,257 per dwelling unit for Multi-Family
- \$4,343 per dwelling unit for Mobile Home

##### **Non-Residential Land Uses**

- \$2,172 per hotel room for Commercial Lodging
- \$2.08 per building square foot for Retail Use
- \$1.79 per building square foot for Employment Use
- \$0.90 per building square foot for Light Industrial
- \$0.52 per building square foot for Ag Tourism



## ***VIII. STORM DRAINAGE FEE***

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This section of the report identifies the facilities, costs, and fees required to fund storm drainage improvements needed to serve future development in the Fee Program Area.

### **A. Nexus Test**

The paragraphs below demonstrate how the Storm Drainage Fee meets the AB 1600 nexus requirements presented in the Nexus Study.

***Identify the purpose of the fee.*** The purpose of the Storm Drainage Fee is to fund storm drainage-related capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The Storm Drainage Fee will be used to fund the construction or purchase of storm drainage facilities delineated by the City as necessary to serve the Fee Program Area. These facilities are identified in Table C-1 of Appendix C.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential and commercial/industrial development occurs in the City, the City's storm drainage system will be impacted. In order for the City to maintain an adequate level of service, it will need to increase the capacity of these facilities to handle the additional demand generated by new development. The use of the fee revenue from the Fee Program to construct the storm drainage facilities identified in Appendix C will ensure that these facilities will be available to provide an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** Residential and commercial/industrial development in the City will generate additional demand on the City's storm drainage system. This will impact the storm drainage system and, as a result, certain facilities will need to be improved or constructed in order to expand drainage capacity. The storm drainage memo in Appendix C

identifies the need to improve specific storm drainage facilities as a result of development of the land uses in the Fee Program Area.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Storm Drainage Fee is calculated so that the fees collected offset the cost of constructing or purchasing the facilities necessary to serve new development in the Fee Program Area. Facilities to cure existing deficiencies or those required by the City's existing development are excluded from the CIP in this Nexus Study; as shown in Table C-1, 100% of the facilities cost is allocated to the Fee Program Area. Residential and non-residential development will be responsible for the fair-share portion of the total cost that will be allocated based on the storm water runoff coefficient for each separate land use.

#### **B. Demand Variable: Runoff Coefficient**

Facility costs in the storm drainage CIP are allocated to future development based on storm water runoff coefficients provided by the City, modified by a Coefficient Adjustment Factor. The modified Coefficient DUEs are shown per dwelling unit for residential land uses, per hotel room for commercial lodging land uses, and per acre for the other non-residential categories. Table VIII-1 presents the adjusted runoff coefficient for each land use category. The Coefficient Adjustment Factor of 0.25 applied to Ag Tourism reflects the intended operation of three months per year, or 25% of the time; this factor can be revised in the future if Ag Tourism land uses consistently operate higher or lower than 25% of a year.

**Table VIII-1  
Runoff Coefficient DUEs**

<b>Residential Land Uses</b>	<b>Adjusted Coefficient DUEs per Dwelling Unit</b>
Single Family	0.194
Multi-Family	0.037
Mobile Home	0.074
<b>Non-Residential Land Uses</b>	<b>Adjusted Coefficient DUEs per Room or per Acre</b>
Commercial Lodging	0.019
Retail Use	107.00
Employment Use	96.00
Light Industrial	50.00
Ag Tourism	0.030

**C. Facility Needs and Cost Estimates**

Based on future projections and the geographic location of anticipated growth, the City estimated the impact on the current storm drainage system from development in the Fee Program Area. Storm drainage facilities needed to serve development were identified and quantified in dollar terms, and are summarized in Table C-1 in Appendix C. Facilities include detention basins, outlet piping, channels, and other drainage improvements. These improvements will benefit all future development in the Fee Program Area.

The total cost of these improvements is approximately \$117.2 million. After accounting for the impact fee fund balance, the net cost of the drainage improvements allocated to the Fee Program is \$117.1 million.

**D. Calculation of Storm Drainage Fee**

Table A-8 in Appendix A shows the assumptions used in the calculation of the Storm Drainage Fee. The net cost of approximately \$117.1 million is allocated based on the estimated 2,373 total runoff

coefficient DUEs associated with future development in the Fee Program Area. Dividing this total cost by the total DUEs results in a cost per DUE of \$49,358.

The cost per DUE is then applied to the adjusted coefficients assigned to each of the land use categories to arrive at a fee per dwelling unit for residential development, per hotel room for commercial lodging, or per building square foot for other non-residential development.

### **E. Storm Drainage Fee**

The bottom section of Table A-8 shows the calculation of the Storm Drainage Fee. Applying the calculation methodology described above results in the following Storm Drainage Fees:

#### **Residential Land Uses**

- \$9,576 per dwelling unit for Single Family
- \$1,827 per dwelling unit for Multi-Family
- \$3,654 per dwelling unit for Mobile Home

#### **Non-Residential Land Uses**

- \$914 per hotel room for Commercial Lodging
- \$3.14 per building square foot for Retail Use
- \$2.76 per building square foot for Employment Use
- \$2.90 per building square foot for Light Industrial
- \$0.90 per building square foot for Ag Tourism

## ***IX. LAW ENFORCEMENT FEE***

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This section of the report identifies the facilities, costs, and fees required to fund the law enforcement public improvements needed to serve future development in the Fee Program Area.

### **A. Nexus Test**

The paragraphs below demonstrate how the Law Enforcement Fee meets the AB 1600 nexus requirements discussed in Section I.

***Identify the purpose of the fee.*** The purpose of the Law Enforcement Fee is to fund police-related capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The Law Enforcement Fee will be used to fund the construction or purchase of additional police facilities, vehicles, and equipment needed to serve new development. These facilities are identified in Table A-9 in Appendix A.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential and commercial/industrial development occurs in the City, police facilities, vehicles, and equipment will be impacted by the addition of residents and employees. In order for the City to maintain an adequate level of service, it will need to increase these facilities to handle the additional demand generated by the additional residents and employees. The use of the fee revenue from the Fee Program to construct or purchase police facilities, vehicles, and equipment will ensure that these facilities will be available to provide an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** Residential and commercial/industrial development in the City will generate additional calls for police services. This will place excessive demand on the existing police force unless additional officers are hired by the City to maintain the

existing level of service. The additional police personnel will need additional building space at the police station, as well as vehicles and equipment, to handle the additional calls for service.

***Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.*** The Law Enforcement Fee is calculated so that the fees collected will offset the cost of constructing or purchasing the facilities necessary to serve new development in the Fee Program Area. Facilities to cure existing deficiencies or those required by the City's existing development are excluded from the police facilities in this Nexus Study. The police facilities included in this Nexus Study are based on a City police level of service that is somewhat below the currently high level related to the currently small population. This lower level of service – still above average by industry standards – is the basis of the assumptions used to calculate the additional building square footage to house future police personnel, and additional vehicles and equipment required to serve the Fee Program Area. Fair shares of the facilities costs are allocated based on a per person served approach.

### **B. Demand Variable: Persons Served**

Facility costs included in the calculation of the Law Enforcement Fee are allocated to future development based on the estimated persons served. The persons served is equal to residents for residential land uses and employees for non-residential categories. Table IX-1 below presents the different demand variables assigned to each land use. In the Law Enforcement Fee calculation, residents are subject to the full cost per future person served, but employees are subject to a weighted amount (i.e., one employee equals 0.30 residents) since it is assumed that employees require less police services because they do not spend a full 24-hour day at their place of employment.

**Table IX-1  
Persons Served Rates**

<b>Residential Land Uses</b>	<b>Persons per Dwelling Unit</b>
Single Family	2.90
Multi-Family	2.20
Mobile Home	1.80
<b>Non-Residential Land Uses</b>	<b>Weigh-Adjusted Employees per Acre</b>
Commercial Lodging	3.89
Retail Use	9.72
Employment Use	7.56
Light Industrial	5.04
Ag Tourism	2.43

**C. Facility Needs and Cost Estimates**

Calculation of the Law Enforcement Fee involves the standard-based fee methodology, which applies a consistent facility service level standard to new development regardless of projected development. The amount of anticipated growth can be used to estimate revenues that will be generated at build out of the Fee Program Area.

Included in the total facilities cost are costs related to new police station and dispatch center building square footage, patrol cars, communication and technology systems, and officer safety equipment. The total estimated cost of police facilities needed to serve future development in the Fee Program Area is approximately \$15.0 million; the net cost after accounting for the impact fee fund balance is also \$15.0 million. This cost includes construction of 17,750 additional building square feet and purchase of 41 police vehicles.

#### **D. Calculation of Law Enforcement Fee**

Table A-9 shows the calculation of total persons served, which is the sum of the residential population plus 30% of the employee population generated by development in the Fee Program Area. The police facilities, vehicles, and equipment were sized based only on the needs of the future persons served in the City.

Dividing the estimated net cost of \$15.0 million by the projected 36,871 persons served in the Fee Program Area at buildout generates a cost per future person served of \$406. The cost per person served is then applied to the person served rates assigned to each of the land use categories to derive a Law Enforcement Fee per dwelling unit for residential development, per room for commercial lodging, and per building square foot for other non-residential development.

#### **E. Law Enforcement Fee**

The bottom section of Table A-9 shows the calculation of the Law Enforcement Fee. Applying the \$406 cost per future person served to the demand variable assigned to each of the land use categories results in the following Law Enforcement Fees:

##### **Residential Land Uses**

- \$1,177 per dwelling unit for Single Family
- \$893 per dwelling unit for Multi-Family
- \$731 per dwelling unit for Mobile Home

##### **Non-Residential Land Uses**

- \$121 per hotel room for Commercial Lodging



- \$0.31 per building square foot for Retail Use
- \$0.21 per building square foot for Employment Use
- \$0.14 per building square foot for Light Industrial
- \$0.08 per building square foot for Ag Tourism

## **X. POOL FACILITY FEE**

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This section of the report identifies the facilities, costs, and fees required to fund pool facility improvements needed to serve the Fee Program Area.

### **A. Nexus Test**

The paragraphs below demonstrate how the Pool Facility Fee meets the AB 1600 nexus requirements.

***Identify the purpose of the fee.*** The purpose of the Pool Facility Fee is to fund pool-related capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The Pool Facility Fee will be used to fund a fair-share portion of the construction or purchase of pool facilities identified by the City to serve new development. These facilities are identified in Table A-10 in Appendix A.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential development occurs in the City, demand for pool facilities will increase with the addition of new residents. In order for the City to provide this service, it will need to develop a pool facility to handle the demand generated by new residents. The use of the fee revenue from the Fee Program to construct or purchase pool improvements will ensure that these facilities will be available to provide an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** Residential development in the Fee Program Area will generate residents who will demand pool facilities. This demand, in addition to the demand that already exists from existing residents, requires that the City develop a pool facility. However, the City does not currently offer a pool facility for its residents, and future residents will compound this problem with their desire and expectation that the City offer such a facility.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Pool Facility Fee is calculated so that the fees collected will offset the cost of constructing or purchasing the facilities necessary to serve new residential development in the Fee Program Area. The cost of facilities to cure existing deficiencies or those required by the City’s existing development are excluded in this Nexus Study. Only a portion of the total cost is assigned to future development; a fair-share of the facilities costs is allocated based on a per-resident served approach.

**B. Demand Variable: Residents Served**

Costs associated with the Pool Facility Fee are allocated to development based on residents served. Table X-1 below presents the demand variables assigned to each land use. The City estimates that non-residential development will not have a significant impact on pool facilities and, therefore, costs are only allocated to residential development.

**Table X-1  
Residents Served Rates**

<b>Residential Land Uses</b>	<b>Persons per Dwelling Unit</b>
Single Family	2.90
Multi-Family	2.20
Mobile Home	1.80
<b>Non-Residential Land Uses</b>	
	<b>Weigh-Adjusted Employees per Acre</b>
Commercial Lodging	n/a
Retail Use	n/a
Employment Use	n/a
Light Industrial	n/a
Ag Tourism	n/a

### **C. Facility Needs and Cost Estimates**

Table A-10 identifies the pool facilities and improvements recommended in the *Wheatland Aquatic Center Feasibility Study*, dated September 23, 2021, prepared by Melton Design Group. The recommended “One-Pool” option includes pools, play structure, and other facilities, sitework, and buildings, as well as indirect construction costs and a contingency, that total approximately \$8.5 million. It is anticipated that complete development of the pool facility would occur over two phases.

### **D. Calculation of Pool Facility Fee**

The pool facilities have been sized to serve both existing development within the City and future development in the Fee Program Area. Since the pool facilities will serve the entire City at buildout, only a portion of the \$8.5 million cost is allocated to future development. Dividing the total cost by the 38,144 total Citywide residents expected at full buildout of the Fee Program Area results in a cost per resident of \$223. Approximately 90.6% of the total pool facility cost, or about \$7.7 million, is allocated to development housing future residents and included in the Fee Program; the remaining 9.4% of the cost, or roughly \$0.8 million, will need to be funded through other sources. One example of a potential City funding source is a \$3 million grant from the State Department of Parks and Recreation Rural Recreation and Tourism Program that the City intends to apply for.

### **E. Pool Facility Fee**

The bottom section of Table A-10 shows the calculation of the Pool Facility Fee. Applying the total cost per resident to the demand variable assigned to each of the residential land use categories results in the following Pool Facility Fees:

- \$646 per dwelling unit for Single Family uses
- \$490 per dwelling unit for Multi-Family uses
- \$401 per dwelling unit for Mobile Home uses

## ***XI. PARKLAND FACILITIES FEE***

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This section of the report identifies the facilities, costs, and fees required to fund parkland public improvements needed to serve the Fee Program Area.

### **A. Nexus Test**

The paragraphs below demonstrate how the Parkland Facilities Fee meets the AB 1600 nexus requirements.

***Identify the purpose of the fee.*** The purpose of the Parkland Facilities Fee is to fund parks and recreation-related capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The Parks and Recreation Fee will be used to fund the construction or purchase of park and recreation facilities, and acquisition of land for parks and open space, identified by the City to serve new development. These facilities are identified in Table A-11 in Appendix A.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential development occurs in the City, existing park facilities will be impacted by the addition of new residents. In order for the City to improve its existing parks service level of 2.0 acres of park land per 1,000 residents, it will need to increase its park standard to 3.0 acres per 1,000 residents and apply that higher standard to the additional demand generated by the new residents. The use of the fee revenue from the Fee Program to construct or purchase park land and improvements will ensure that these facilities will be available to provide an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** Residential development in the Fee Program Area will generate residents who will demand park facilities. This will place excessive demand on existing parks unless the City develops more park land. The City currently provides approximately 7.5 park acres spread across four different City parks, which translates to a level of

service that is approximately 2.0 acres per 1,000 residents. Future residents will expect the City to maintain at least a minimum level of service within those future development areas. The Quimby Act (Section 66477 of the California Government Code) allows for a minimum ratio of 3.0 acres per 1,000 residents level of service, even if the City does not currently achieve that standard. By the time that buildout of the Fee Program Area occurs, the City will need to fund the construction of an additional 4.0 acres of parks to reach a final service level of 3.0 acres per 1,000 residents across the entire City.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Parkland Facilities Fee is calculated so that the fees collected will offset the cost of constructing or purchasing the facilities necessary to serve new residential development in the Fee Program Area at the minimum level of service of 3.0 acres per 1,000 residents.

#### **B. Demand Variable: Residents Served**

Facility costs associated with the Parkland Facilities Fee are allocated to development based on residents served. Table XI-1 below presents the demand variables assigned to each land use. The City estimates that non-residential development will not have a significant impact on park and recreation facilities and, therefore, costs are only allocated to residential development.

**Table XI-1**  
**Residents Served Rates**

<b>Residential Land Uses</b>	<b>Persons per Dwelling Unit</b>
Single Family	2.90
Multi-Family	2.20
Mobile Home	1.80
<b>Non-Residential Land Uses</b>	
	<b>Weigh-Adjusted Employees per Acre</b>
Commercial Lodging	n/a
Retail Use	n/a
Employment Use	n/a
Light Industrial	n/a
Ag Tourism	n/a

**C. Facility Needs and Cost Estimates**

The City intends to apply a park service level of 3.0 acres per 1,000 residents to future development areas, although it currently provides a service level that is slightly lower than this. Table A-11 identifies the parkland facility needs and assumes development of a variety of new local/neighborhood parks and community/sports parks. The additional new park acreage comes to 103 acres.

The City also provides approximately 23.3 acres of existing City open space, which produces a ratio of roughly 6.4 open space acres per 1,000 residents. Applying that ratio to future development results in a need for another 219 acres of open space, which are integrated into the total parkland facilities requirements. The total cost of park development, parkland acquisition, and open space acquisition is estimated to be \$57.3 million; the net cost after accounting for the impact fee fund balance is also \$57.3 million.

#### **D. Calculation of Parkland Facilities Fee**

Table A-11 presents the total park development, park land acquisition, and open space acquisition costs. These facilities have been sized to serve future development in the Fee Program Area, so the total cost of the park CIP is allocated to future development. Dividing the \$57.3 million total cost by the 34,480 future residents expected in the Fee Program Area results in a cost per resident of \$1,344 for park development and land acquisition, and \$318 per resident for open space land acquisition.

#### **E. Parkland Facilities Fee**

The bottom section of Table A-11 shows the calculation of the Parkland Facilities Fee. Applying the total cost of \$1,661 per future resident to the demand variable assigned to each of the residential land use categories results in the following Parkland Facilities Fees:

- \$4,819 per dwelling unit for Single Family uses
- \$3,656 per dwelling unit for Multi-Family uses
- \$2,991 per dwelling unit for Mobile Home uses



## ***XII. GENERAL GOVERNMENT FEE***

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This section of the report identifies the facilities, costs, and fees required to fund general government improvements needed to serve future development in the Fee Program Area.

### **A. Nexus Test**

The paragraphs below demonstrate how the General Government Fee meets the AB 1600 nexus requirements.

***Identify the purpose of the fee.*** The purpose of the General Government Fee is to fund general government capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The General Government Fee will be used to fund the construction or purchase of general government facilities determined by the City as necessary to serve new development. These facilities are identified in Table A-12 in Appendix A.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential and commercial/industrial development occurs in the City, general government facilities, which include additional office space and vehicles, will be impacted by the addition of residents and employees. In order for the City to maintain an adequate level of service, it will need to increase these facilities to handle the additional demand generated by the additional residents and employees. The use of the fee revenue from the Fee Program to construct or purchase general government facilities and vehicles will ensure that these facilities will be available to provide an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** New general government facilities will be needed as new residential and non-residential development will generate additional residents and employees and increase the demand placed on the existing general governmental departments. This excessive demand on the existing government personnel will require the City to hire additional

personnel to maintain the existing level of service. The additional City personnel will need additional building space and vehicles to perform their duties.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The General government Fee is calculated so that the fees collected will offset the cost of constructing or purchasing the facilities necessary to serve new development in the Fee Program Area. Facilities to cure existing deficiencies or those required by the City's existing development are excluded from the general government facilities in this Nexus Study. The general government facilities included in this Nexus Study are based on the City's current number of City employees. The current level of City employees will determine the level of service, in terms of City employees per 1,000 residents, needed for future development in the Fee Program Area. Based on the estimate of future City employees, additional building space and vehicles can be estimated and a cost can be assigned to these facilities. A fair-share of these facilities costs can then be allocated to land uses based on a per-person approach.

### **B. Demand Variable: Persons Served**

Facility costs used to calculate the General Government Fee are allocated to future development based on persons served. Persons served are equivalent to residents for residential land uses and employees for non-residential categories. Table XII-1 below presents the demand variables assigned to each land use. For the General Government Fee calculation, residents are subject to the full cost per future person served, but employees are subject to a weighted amount (i.e., one employee equals 0.30 residents) since it is assumed that employees require less general government services because they do not spend a full 24-hour day at their workplace.

**Table XII-1  
Persons Served Rates**

<b>Residential Land Uses</b>	<b>Persons per Dwelling Unit</b>
Single Family	2.90
Multi-Family	2.20
Mobile Home	1.80
<b>Non-Residential Land Uses</b>	<b>Weigh-Adjusted Employees per Acre</b>
Commercial Lodging	3.89
Retail Use	9.72
Employment Use	7.56
Light Industrial	5.04
Ag Tourism	2.43

**C. Facility Needs and Cost Estimates**

The calculation of the General Government Fee uses the standard-based fee methodology, which applies a consistent facility service level standard to new development. The calculation utilizes a service standard assuming that the City currently has approximately 2.5 City employees per 1,000 City residents. This is based on the City’s nine general government employees serving the City’s 3,664 existing residents. Those nine employees do not include Police staff who would be located in police station facilities or Public Works plant and maintenance staff who would be located at the corporation yard or another facility. Assuming an average of 300 square feet of building space per City employee, the City will need approximately 25,000 additional square feet of office space to house the additional 85 employees needed by buildout of the Fee Program Area. Including two acres of land for the facility, the cost of the additional building space will be approximately \$16.0 million.

In addition to the general government office facility, the City will need to expand its corporation yard facilities to meet the growing needs of future development in the Fee Program Area. A 10-acre corporation yard facility with an additional 23,000 square feet of building space will be required to serve new development, which is estimated to cost \$7.2 million.

The City also estimates that it will need approximately 0.4 vehicles per new City employee for its car-pool and maintenance fleet, which amounts to 34 new vehicles at buildout of the Fee Program Area at a cost of approximately \$1.7 million. The total cost for office building space, corporation yard space, and vehicles required to serve development in the Fee Program Area comes to approximately \$24.8 million; after accounting for the impact fee fund balance, the net cost is \$24.6 million.

#### **D. Calculation of General Government Fee**

Table A-12 shows the assumptions used in the calculation of the General Government Fee. The total persons served, which is estimated to be 36,871 at buildout of the Fee Program Area, is divided into the net facilities cost of approximately \$24.6 million. This yields a cost per person served of \$669.

The cost per person served is then applied to the demand variable assigned to each of the land use categories to arrive at a fee per dwelling unit for residential development, per hotel room for commercial lodging, or per building square foot for other non-residential development.

#### **E. General Government Fee Component**

The bottom section of Table A-12 shows the calculation of the General Government Fee. Applying the \$669 cost per future person served to the demand variable assigned to each of the land use categories results in the following General Government Fees:

##### **Residential Land Uses**

- \$1,939 per dwelling unit for Single Family
- \$1,471 per dwelling unit for Multi-Family
- \$1,204 per dwelling unit for Mobile Home

**Non-Residential Land Uses**

- \$199 per hotel room for Commercial Lodging
- \$0.50 per building square foot for Retail Use
- \$0.34 per building square foot for Employment Use
- \$0.23 per building square foot for Light Industrial
- \$0.13 per building square foot for Ag Tourism

### ***XIII. PUBLIC MEETING FACILITIES FEE***

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This section of the report identifies the facilities, costs, and fees required to fund public meeting improvements needed to serve the Fee Program Area.

#### **A. Nexus Test**

The paragraphs below demonstrate how the Public Meeting Facilities Fee meets the AB 1600 nexus requirements.

***Identify the purpose of the fee.*** The purpose of the Public Meeting Facilities Fee is to fund public meeting facility capital costs attributable to the impact from new development.

***Identify the use of the fee.*** The Public Meeting Facilities Fee will be used to fund the construction or purchase of a public meeting facility and related land identified by the City to serve new development. These facilities are identified in Table A-13 in Appendix A.

***Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*** As residential development occurs in the City, existing public meeting facilities will be impacted by the addition of new residents. The use of the fee revenue from the Fee Program to construct or purchase public meeting improvements will ensure that these facilities will be available to provide an adequate level of service as the City grows.

***Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*** Residential development in the Fee Program Area will generate residents who will demand public meeting facilities. This will place excessive demand on existing public meeting facilities unless the City develops another such facility. The City currently provides public meeting facilities at a level of service that exceeds the desired and typical level of service for a smaller City. The City has determined that it will need one 20,000 square foot facility to complement the facility it already has (the 101 C Street Community Center) in

order to provide its buildout desired level of service. Future residents will expect the City to achieve this level of service.

*Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.* The Public Meeting Facilities Fee is calculated so that the fees collected will offset the cost of constructing or purchasing the facilities necessary to serve new residential development in the Fee Program Area.

**B. Demand Variable: Residents Served**

Facility costs associated with the Public Meeting Facilities Fee are allocated to future development based on residents served. Table XIII-1 below presents the demand variables assigned to each land use. The City estimates that non-residential development will not have a significant impact on public meeting facilities and, therefore, costs are only allocated to residential development.

**Table XIII-1  
Residents Served Rates**

<b>Residential Land Uses</b>	<b>Persons per Dwelling Unit</b>
Single Family	2.90
Multi-Family	2.20
Mobile Home	1.80
<b>Non-Residential Land Uses</b>	
	<b>Weigh-Adjusted Employees per Acre</b>
Commercial Lodging	n/a
Retail Use	n/a
Employment Use	n/a
Light Industrial	n/a
Ag Tourism	n/a

### **C. Facility Needs and Cost Estimates**

The City intends to develop a 20,000 square foot public meeting facility to supplement the public meeting facility already serving the existing City. Table A-13 identifies the public meeting facility and accompanying two acres of land that constitute the required improvements. The total cost of the public meeting facility is estimated to be \$9.4 million; however, a negative impact fee fund balance raises that total to \$9.6 million.

### **D. Calculation of Public Meeting Facilities Fee**

Table A-13 presents the total public meeting facility development and land acquisition costs. The public meeting facility has been sized to serve future development in the Fee Program Area, so the total cost of the public meeting facility is allocated to future development. Dividing the total \$9.6 million cost by the 34,480 future residents expected in the Fee Program Area results in costs per resident of \$272 for public meeting facility development and \$6 per resident for public meeting facility land acquisition, for a total of \$278 per future resident.

### **E. Public Meeting Facility Fee**

The bottom section of Table A-13 shows the calculation of the Public Meeting Facilities Fee. Applying the total cost per future resident to the demand variable assigned to each of the residential land use categories results in the following Public Meeting Facilities Fees:

- \$807 per dwelling unit for Single Family uses
- \$612 per dwelling unit for Multi-Family uses
- \$501 per dwelling unit for Mobile Home uses



***XIV. FEE PROGRAM SUMMARY AND FIRE FACILITIES FEE***

Table XIV-1 summarizes the fees in the Fee Program as calculated in this Nexus Study. Based on industry standards and the City’s prior experience regarding the costs to administer and maintain the Fee Program, a two percent (2.0%) administrative fee is included to pay for these costs.

**TABLE XIV-1  
FEE PROGRAM SUMMARY\***

<b>Land Use</b>	<b>Bridges, Signals, Thoroughfares</b>	<b>Sewer Collection</b>	<b>Water Distribution</b>	<b>Storm Drainage</b>	<b>Law Enforcement</b>	<b>Pool Facility</b>	<b>Parkland Facilities</b>	<b>General Government</b>	<b>Public Meeting Facilities</b>	<b>Administrative (2.0% of Fees)</b>	<b>Total DIF</b>
<b>Residential</b>											
	<i>Per Dwelling Unit</i>										
Single Family	\$10,536	\$4,102	\$5,428	\$9,576	\$1,177	\$646	\$4,819	\$1,939	\$807	\$781	<b>\$39,811</b>
Multi-Family	\$7,060	\$2,998	\$3,257	\$1,827	\$893	\$490	\$3,656	\$1,471	\$612	\$445	<b>\$22,709</b>
Mobile Home	\$5,479	\$2,998	\$4,343	\$3,654	\$731	\$401	\$2,991	\$1,204	\$501	\$446	<b>\$22,748</b>
<b>Non-Residential</b>											
	<i>Per Hotel Unit</i>										
Commercial Lodging	\$4,215	\$1,578	\$2,172	\$914	\$121	n/a	n/a	\$199	n/a	\$184	<b>\$9,383</b>
	<i>Per Building SF</i>										
Retail Use	\$7.74	\$2.12	\$2.08	\$3.14	\$0.31	n/a	n/a	\$0.50	n/a	\$0.32	<b>\$16.21</b>
Employment Use	\$5.14	\$1.82	\$1.79	\$2.76	\$0.21	n/a	n/a	\$0.34	n/a	\$0.24	<b>\$12.30</b>
Light Industrial	\$2.83	\$1.04	\$0.90	\$2.90	\$0.14	n/a	n/a	\$0.23	n/a	\$0.16	<b>\$8.20</b>
Ag Tourism	\$1.94	\$0.53	\$0.52	\$0.90	\$0.08	n/a	n/a	\$0.13	n/a	\$0.08	<b>\$4.18</b>

*\*Excludes fire facilities, as described further below.*

In addition to the fees presented above, new development will be subject to a fire protection facilities fee. The Wheatland Fire Department is part of a joint powers agency that combines the Fire Department with the Plumas-Brophy Fire Protection District. That agency – the Wheatland Fire Authority – was established in January 2006 and is governed by a four-member Board of Directors. The Authority is responsible for fire prevention, emergency response and medical services, fire suppression and protection, and other services such as fire education and disaster preparedness.

Later in 2006, the Authority formed a Fire Suppression and Protection Services Assessment District, which covers the entire boundary of the Authority and which levies an annual assessment to help fund ongoing fire-related services. However, the City is responsible for levying and collecting its

own development impact fees to fund fire-related capital facilities required to support new growth within the City.

It is not recommended that the City’s current fire facilities development impact fees be updated at this time since a public safety or fire services master plan will need to be conducted to identify facilities required to support currently envisioned development and to estimate the costs of those facilities. The number of fire stations, their locations, vehicles and equipment, and other fire capital facilities will reflect the needs of future development and will be determined to optimize response times and the Fire Department’s ISO rating. It is anticipated that such a master plan will be prepared as part of the General Plan Update process, and fire facilities impact fees will be updated at that time as well. Also, because the current fire impact fees are based on the size (square feet) and features (residential vs non-residential, type of use, etc.) of a structure, they cannot be easily incorporated into the fee program summary table above. For reference, the current fire facilities fees are presented below in Table XIV-2.

**TABLE XIV-2  
CURRENT FIRE FACILITIES FEES\***

<b>Construction Type</b>	<b>Cost Per Square Foot</b>
Light load residential, commercial, and industrial construction with or without sprinklers	\$1.38
Moderate load commercial and industrial construction WITH sprinklers	\$1.38
Moderate load commercial and industrial construction WITHOUT sprinklers	\$2.77
Heavy load commercial and industrial construction WITH sprinklers	\$2.08
Heavy load commercial and industrial construction WITHOUT sprinklers	\$4.15

*\*Effective January 1, 2022.*

## ***XV. ONGOING ADMINISTRATION OF THE FEE PROGRAM***

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### **A. Fee Implementation**

According to the California Government Code, prior to levying a new fee or increasing an existing fee, a public agency must hold at least one open and public meeting; a public notice for this meeting must be posted at least 30 days prior to the meeting. At least 10 days prior to this meeting, the agency must make data on facility costs and funding sources available to the public. Notice of the time and place of the meeting, and a general explanation of the matter, are to be published in accordance with Section 6062a of the Government Code. The Nexus Study and fees established herein will be adopted through a City ordinance and resolution.

### **B. Fee Adjustments**

The Development Impact Fees will be adjusted in future years to reflect revised facility standards, receipt of funding from alternative sources (e.g., state or federal grants, a Community Facilities District), revised costs, or changes in demographics, land uses, or development plans that could materially affect the results of the Nexus Study. If none of these circumstances apply and the Fees do not need to be adjusted for those purposes, at least annually the Fees should be adjusted to reflect the change in a predetermined index, such as the *Engineering News Record* 20-City or San Francisco Construction Cost Index (CCI). This will help to ensure that the Fee Program does not collect less than what is needed as facility costs rise due to inflation. All fees calculated in this Nexus Study are presented in year 2022 dollars.

The Fee Program land use categories utilized in the Nexus Study may not be applicable to specialized development projects in the City. For example, development of a cemetery, golf course, or church would not fall easily under any of the fee categories in this study. For specialized development projects, the City will review the impacts and decide on applicable fees.

### **C. Fee Credits or Reimbursements**

The City may provide fee credits or possibly reimbursements to developers who dedicate land or construct facilities. Fee credits or reimbursements may be provided up to the cost of the improvement, as shown in an applicable improvement plan, subject to periodic inflation adjustments, or the actual cost paid by the developer, whichever is lower. For construction cost overruns, only that amount shown in the applicable improvement plan, subject to periodic inflation adjustments, should be credited or reimbursed. The City will evaluate the appropriate fee credit or reimbursement based on the value of the dedication or improvement. Credits or reimbursements may be repaid based on the priority of the capital improvements, as determined by the City. In some cases, repayment for constructed facilities that have low priority may be postponed. Fee credits and reimbursements will be determined by the City on a case-by-case basis.

### **D. Interfund Transfers**

The City may allow for the transfer of fee revenues between fee funds. This will provide greater funding flexibility and facilitate the timely phasing of improvements by allowing fees to be combined and used as necessary. All interfund transfers must be repaid with interest.

### **E. Annual Administrative Duties**

The Government Code requires a public agency to report, every year and every fifth year, certain financial information regarding their impact fees. Within 180 days after the last day of each fiscal year, the public agency must make the following information available for the past fiscal year:

1. A brief description of the type of fee in the account or fund
2. The amount of the fee
3. The beginning and ending balance of the account or fund
4. The amount of fee revenue collected and interest earned

5. An identification of each public improvement on which fees were expended and the amount of expenditures on each improvement, including the total percentage of the cost of the public improvement that was funded with fees
6. An identification of an approximate date, by which time construction of an improvement will commence if the local agency determines that sufficient funds have been collected to complete financing on an incomplete public improvement
7. A description of each interfund transfer or loan made from the account or fund, when it will be repaid, and at what interest rate
8. The amount of any refunds made once it is determined that sufficient monies have been collected to fund all projects

The public agency must make this information available for public review and must also present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

#### **F. Fifth-Year Administrative Duties**

For the fifth year following the first deposit into the fee account, and every five years thereafter, the public agency must make the following findings with respect to any remaining funds in the fee accounts:

1. Identify the purpose to which the fee is to be put
2. Demonstrate a reasonable relationship between the fee and the purpose for which it is charged
3. Identify all sources and amounts of funding anticipated to complete the financing of any incomplete improvements
4. Designate the approximate dates on which funding is expected to be deposited into the appropriate accounts or funds

As with the annual report, the five-year report must be made public within 180 days after the end of the public agency's fiscal year and must be reviewed at the next regularly scheduled public meeting.

The City must make these findings; otherwise, the law states that the City must refund the fee revenue to the then current owners of applicable development projects.

### **G. Assembly Bill No. 1483**

On October 9, 2019, Governor Gavin Newsom signed Assembly Bill No. 1483 (“AB 1483”), adding Section 65940.1 to the California Government Code (GC). As it relates to development impact fees, a city, county, or special district that has an internet website shall make the following available on its website:

- A current schedule of fees, exactions, or affordability requirements imposed by the city, county, or special district, including any dependent special district, applicable to a proposed housing development project, which shall be presented in a manner that clearly identifies the fees, exactions, or affordability requirements that apply to each parcel.
- The current and five previous annual fee reports, or the current and five previous annual financial reports, that were required pursuant to subdivision (b) of Section 66006 and subdivision (d) of Section 66013 of the GC.
- An archive of impact fee nexus studies, cost of service studies, or equivalent, conducted by the public agency on or after January 1, 2018. A cost of service study means the data provided to the public pursuant to subdivision (a) of Section 66016 of the GC.

AB 1483 defines a housing development project as consisting of (a) residential units only; or (b) mixed-use developments consisting of residential and non-residential land uses with at least two-thirds of the square footage designated for residential use; or (c) transitional housing or supportive housing. AB 1483 also requires a city, county, or special district to update this information on their website within 30 days of any changes made to the information.

## **H. Assembly Bill No. 602**

On September 28, 2021, Assembly Bill No. 602 (“AB 602”) was signed into law and became effective starting January 1, 2022. The law establishes additional procedural and transparency requirements on public agencies when establishing new fees or increasing existing development impact fees. AB 602 amends Government Code Sections 65940.1 and 66019, and adds Government Code Section 66016.5 and Health and Safety Code Section 50466.5. Following are some of the most significant requirements imposed by AB 602.

### ***New Requirements For Nexus Studies***

- When applicable, the nexus study shall identify the existing level of service (LOS) for the public facility, identify the proposed new level of service, and explain why the new level of service is appropriate.
- If a nexus study supports an increase to an existing fee, the public agency shall review the assumptions of the nexus study supporting the original fee and evaluate the amount of fee revenue collected under the original fee.
- Large jurisdictions – for example, counties that have a population greater than 250,000 residents – must adopt a capital improvement plan as a part of the nexus study.
- Nexus studies adopted after July 1, 2022, shall calculate a fee imposed on a housing development that is proportionate to the square footage of the proposed units of the development, or the nexus study must make findings that an alternative fee calculation methodology creates a reasonable relationship between the fee charged and the burden posed by the development.
- This section of the impact fee requirements does not apply to any fees or charges pursuant to Government Code Section 60013, which includes water and sewer connection fees and capacity charges.

### ***New Transparency Requirements For Public Agencies***

- Fees must be posted to the public agency’s website within 30 days of any change in the fees.
- Public agencies must post to their website the current and five previous annual impact fee accounting reports that are required pursuant to Government Code Section 66006.
- Public agencies must post to their website all nexus studies, cost of service studies, or equivalent studies that were conducted on or after January 1, 2018.

### ***New Nexus Study Procedural Requirements***

- Nexus studies must be updated at least every eight years, from the period beginning on January 1, 2022.
- Nexus studies and impact fees must be adopted at a public hearing with at least a 30-day notice (this is an increase from what was a 10-day requirement).
- Members of the public may submit evidence that the nexus findings in the nexus study are insufficient; the public agency must consider all such evidence.



# *APPENDIX A*

*DEVELOPMENT IMPACT FEE PROGRAM*

*ASSUMPTIONS AND CALCULATIONS*

**Table A-1**  
**City of Wheatland**  
**Development Impact Fee (DIF) Program Summary**

*Effective July 2022*

Land Use	Bridges, Signals, Thoroughfares	Sewer Collection	Water Distribution	Storm Drainage	Law Enforce- ment	Pool Facility	Parkland Facilities	General Government	Public Meeting Facilities	Admin- istrative (2.0% of Fees)	Total DIF
<b>Residential</b>											
	<i>Per Dwelling Unit</i>										
Single Family	\$10,536	\$4,102	\$5,428	\$9,576	\$1,177	\$646	\$4,819	\$1,939	\$807	\$781	<b>\$39,811</b>
Multi-Family	\$7,060	\$2,998	\$3,257	\$1,827	\$893	\$490	\$3,656	\$1,471	\$612	\$445	<b>\$22,709</b>
Mobile Home	\$5,479	\$2,998	\$4,343	\$3,654	\$731	\$401	\$2,991	\$1,204	\$501	\$446	<b>\$22,748</b>
<b>Non-Residential</b>											
	<i>Per Hotel Unit</i>										
Commercial Lodging	\$4,215	\$1,578	\$2,172	\$914	\$121	n/a	n/a	\$199	n/a	\$184	<b>\$9,383</b>
	<i>Per Building SF</i>										
Retail Use	\$7.74	\$2.12	\$2.08	\$3.14	\$0.31	n/a	n/a	\$0.50	n/a	\$0.32	<b>\$16.21</b>
Employment Use	\$5.14	\$1.82	\$1.79	\$2.76	\$0.21	n/a	n/a	\$0.34	n/a	\$0.24	<b>\$12.30</b>
Light Industrial	\$2.83	\$1.04	\$0.90	\$2.90	\$0.14	n/a	n/a	\$0.23	n/a	\$0.16	<b>\$8.20</b>
Ag Tourism	\$1.94	\$0.53	\$0.52	\$0.90	\$0.08	n/a	n/a	\$0.13	n/a	\$0.08	<b>\$4.18</b>

Source: Goodwin Consulting Group

06/15/2022

**Table A-2a**  
**City of Wheatland**  
**Total Fee Program Comparison**

<b>Land Use Category</b>		<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Single Family	per Dwelling Unit	\$44,512	\$39,811	-10.6%
Multi-Family	per Dwelling Unit	\$28,301	\$22,709	-19.8%
Mobile Home	per Dwelling Unit	\$26,149	\$22,748	-13.0%
Commercial Lodging	per Hotel Room	\$10,776	\$9,383	-12.9%
Retail Use	per Bldg. SF	\$16.99	\$16.21	-4.6%
Employment Use	per Bldg. SF	\$13.04	\$12.30	-5.7%
Light Industrial	per Bldg. SF	n/a	\$8.20	n/a
Ag Tourism	per Bldg. SF	n/a	\$4.18	n/a

Sources: City of Wheatland; Goodwin Consulting Group

06/15/2022

**Table A-2b**  
**Impact Fee Comparison - Single Family Dwelling Unit**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	\$9,813	\$10,536	7.4%
Sewer Collection	\$2,142	\$4,102	91.5%
Water Distribution	\$5,422	\$5,428	0.1%
Storm Drainage	\$11,216	\$9,576	-14.6%
Law Enforcement	\$1,233	\$1,177	-4.5%
Pool Facilities	n/a	\$646	n/a
Parkland Facilities	\$8,524	\$4,819	-43.5%
General Government	\$2,308	\$1,939	-16.0%
Public Meeting Facilities	\$3,275	\$807	-75.4%
Administrative Fee	\$579	\$781	34.8%
<b>Total</b>	<b>\$44,512</b>	<b>\$39,811</b>	<b>-10.6%</b>

Sources: City of Wheatland; Goodwin Consulting Group

06/15/2022

**Table A-2c**  
**Impact Fee Comparison - Multi-Family Dwelling Unit**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	\$6,553	\$7,060	7.7%
Sewer Collection	\$1,070	\$2,998	180.2%
Water Distribution	\$3,253	\$3,257	0.1%
Storm Drainage	\$3,235	\$1,827	-43.5%
Law Enforcement	\$1,054	\$893	-15.3%
Pool Facilities	n/a	\$490	n/a
Parkland Facilities	\$7,576	\$3,656	-51.7%
General Government	\$2,305	\$1,471	-36.2%
Public Meeting Facilities	\$2,907	\$612	-78.9%
Administrative Fee	\$348	\$445	28.0%
<b>Total</b>	<b>\$28,301</b>	<b>\$22,709</b>	<b>-19.8%</b>

Sources: City of Wheatland; Goodwin Consulting Group

06/15/2022

**Table A-2d**  
**Impact Fee Comparison - Mobile Home Dwelling Unit**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	\$5,140	\$5,479	6.6%
Sewer Collection	\$1,070	\$2,998	180.2%
Water Distribution	\$4,336	\$4,343	0.2%
Storm Drainage	\$5,271	\$3,654	-30.7%
Law Enforcement	\$593	\$731	23.3%
Pool Facilities	n/a	\$401	n/a
Parkland Facilities	\$5,138	\$2,991	-41.8%
General Government	\$2,305	\$1,204	-47.8%
Public Meeting Facilities	\$1,975	\$501	-74.6%
Administrative Fee	\$321	\$446	39.0%
<b>Total</b>	<b>\$26,149</b>	<b>\$22,748</b>	<b>-13.0%</b>

Sources: City of Wheatland; Goodwin Consulting Group

06/15/2022

**Table A-2e**  
**Impact Fee Comparison - Commercial Lodging Hotel Room**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	\$5,162	\$4,215	-18.3%
Sewer Collection	\$715	\$1,578	120.7%
Water Distribution	\$2,169	\$2,172	0.1%
Storm Drainage	\$1,097	\$914	-16.7%
Law Enforcement	\$1,268	\$121	-90.5%
Pool Facilities	n/a	n/a	n/a
Parkland Facilities	n/a	n/a	n/a
General Government	\$217	\$199	-8.3%
Public Meeting Facilities	n/a	n/a	n/a
Administrative Fee	\$148	\$184	24.3%
<b>Total</b>	<b>\$10,776</b>	<b>\$9,383</b>	<b>-12.9%</b>

Sources: City of Wheatland; Goodwin Consulting Group

06/15/2022

**Table A-2f**  
**Impact Fee Comparison - Retail Use Bldg. SF**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	\$9.59	\$7.74	-19.3%
Sewer Collection	\$0.91	\$2.12	133.0%
Water Distribution	\$1.78	\$2.08	16.9%
Storm Drainage	\$2.87	\$3.14	9.4%
Law Enforcement	\$1.04	\$0.31	-70.2%
Pool Facilities	n/a	n/a	n/a
Parkland Facilities	n/a	n/a	n/a
General Government	\$0.57	\$0.50	-12.3%
Public Meeting Facilities	n/a	n/a	n/a
Administrative Fee	\$0.23	\$0.32	38.2%
<b>Total</b>	<b>\$16.99</b>	<b>\$16.21</b>	<b>-4.6%</b>

Sources: City of Wheatland; Goodwin Consulting Group

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**Table A-2g**  
**Impact Fee Comparison - Employment Use Bldg. SF**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	\$6.41	\$5.14	-19.8%
Sewer Collection	\$0.91	\$1.82	100.0%
Water Distribution	\$1.78	\$1.79	0.6%
Storm Drainage	\$2.94	\$2.76	-6.1%
Law Enforcement	\$0.24	\$0.21	-12.5%
Pool Facilities	n/a	n/a	n/a
Parkland Facilities	n/a	n/a	n/a
General Government	\$0.57	\$0.34	-40.4%
Public Meeting Facilities	n/a	n/a	n/a
Administrative Fee	\$0.19	\$0.24	26.9%
<b>Total</b>	<b>\$13.04</b>	<b>\$12.30</b>	<b>-5.7%</b>

Sources: City of Wheatland; Goodwin Consulting Group

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**Table A-2h**  
**Impact Fee Comparison - Light Industrial Bldg. SF**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	n/a	\$2.83	n/a
Sewer Collection	n/a	\$1.04	n/a
Water Distribution	n/a	\$0.90	n/a
Storm Drainage	n/a	\$2.90	n/a
Law Enforcement	n/a	\$0.14	n/a
Pool Facilities	n/a	n/a	n/a
Parkland Facilities	n/a	n/a	n/a
General Government	n/a	\$0.23	n/a
Public Meeting Facilities	n/a	n/a	n/a
Administrative Fee	n/a	\$0.16	n/a
<b>Total</b>	<b>n/a</b>	<b>\$8.20</b>	<b>n/a</b>

Sources: City of Wheatland; Goodwin Consulting Group

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**Table A-2i**  
**Impact Fee Comparison - Ag Tourism Bldg. SF**

<b>Facility Category</b>	<b>Current City Impact Fees</b>	<b>Proposed City Impact Fees</b>	<b>Percent Change</b>
Bridges, Signals, Thoroughfares	n/a	\$1.94	n/a
Sewer Collection	n/a	\$0.53	n/a
Water Distribution	n/a	\$0.52	n/a
Storm Drainage	n/a	\$0.90	n/a
Law Enforcement	n/a	\$0.08	n/a
Pool Facilities	n/a	n/a	n/a
Parkland Facilities	n/a	n/a	n/a
General Government	n/a	\$0.13	n/a
Public Meeting Facilities	n/a	n/a	n/a
Administrative Fee	n/a	\$0.08	n/a
<b>Total</b>	<b>n/a</b>	<b>\$4.18</b>	<b>n/a</b>

Sources: City of Wheatland; Goodwin Consulting Group

06/15/2022

**Table A-3**  
**City of Wheatland**  
**Land Use Assumptions**

<b><u>Existing Development in the City</u></b>						
<b><u>Residential</u></b>			<b>Units</b>	<b>PPH</b>	<b>Population</b>	
Single Family			982	2.90	2,848	
Multi-Family			341	2.20	750	
Mobile Home			37	1.80	66	
<b>Subtotal</b>			<b>1,360</b>	<b>--</b>	<b>3,664</b>	
<b><u>Non-Residential</u></b>			<b>Bldg. SF</b>	<b>SF/Emp</b>	<b>Employees</b>	
Retail			0	400	0	
Office/Commercial			0	300	0	
Industrial			0	700	0	
<b>Subtotal</b>			<b>291,000</b>	<b>497</b>	<b>586</b>	
<b><u>Incremental Future Development at Build Out of DIF Program Area</u></b>						
<b><u>Residential</u></b>			<b>Gross Build Out Acres</b>	<b>Net Build Out Acres<sup>1</sup></b>	<b>Gross Density</b>	<b>Units</b>
Single Family			2,782	1,947	3.8	10,624
Multi-Family <sup>2</sup>			75	53	22.2	1,668
Mobile Home			0	0	--	0
<b>Subtotal</b>			<b>2,857</b>	<b>2,000</b>	<b>--</b>	<b>12,292</b>
<b><u>Non-Residential</u></b>			<b>Gross Build Out Acres</b>	<b>Net Build Out Acres<sup>1,3</sup></b>	<b>Net FAR</b>	<b>Bldg. SF</b>
Commercial Lodging			0	0	0.30	0
Retail Use			184	129	0.30	1,685,772
<sup>4</sup> Employment Use			161	113	0.35	1,722,798
<sup>4</sup> Light Industrial			81	56	0.35	853,776
Ag Tourism			140	0.13	0.30	1,650
<b>Subtotal</b>			<b>566</b>	<b>298</b>	<b>--</b>	<b>4,263,996</b>
<b><u>Totals at Buildout of the City</u></b>						
<b><u>Residential</u></b>			<b>Units</b>	<b>PPH</b>	<b>Population</b>	
Single Family			11,606	3.00	33,658	
Multi-Family			2,009	2.00	4,420	
Mobile Home			37		66	
<b>Subtotal</b>			<b>13,652</b>	<b>--</b>	<b>38,144</b>	
<b><u>Non-Residential</u></b>			<b>Bldg. SF</b>	<b>--</b>	<b>Employees</b>	
Retail			0	400	0	
Office/Commercial			1,685,772	300	4,214	
Industrial			1,722,798	700	2,871	
<b>Subtotal</b>			<b>4,554,996</b>	<b>--</b>	<b>8,624</b>	

<sup>1</sup> Gross to net acreage factor of 70% applied to account for interior infrastructure such as roads, medians, landscape strips, and on-site drainage.

<sup>2</sup> Does not include acreage associated with 500 mixed-use dwelling units.

<sup>3</sup> Net acreage for Ag Tourism assumes that only a small parcel of approximately 6,000 sf is developed.

<sup>4</sup> A portion of the land designated for Employment Use is assumed to develop as Light Industrial, which produces different public facility demands than office-type uses; therefore, Light Industrial uses are treated separately from traditional Employment Uses for purposes of the DIF program.



**Table A-4**  
**City of Wheatland**  
**Capital Improvement Plan Cost and Funding Summary**

<b>Facility Category</b>	<b>Total Cost</b>	<b>Impact Fee Fund Balance<sup>1</sup></b>	<b>Updated DIF Funding</b>
Bridges, Signals, Thoroughfares	\$148,300,000	\$275,000	\$148,025,000
Sewer Collection	\$60,300,000	\$4,155,000	\$56,145,000
Water Distribution	\$70,500,000	\$72,000	\$70,428,000
Storm Drainage	\$117,200,000	\$71,000	\$117,129,000
Law Enforcement	\$14,968,000	\$7,000	\$14,961,000
Pool Facility <sup>1</sup>	\$8,489,000	\$801,000	\$7,688,000
Parkland Facilities	\$57,300,000	\$15,000	\$57,285,000
General Government	\$24,810,000	\$160,000	\$24,650,000
Public Meeting Facilities	\$9,400,000	-\$188,000	\$9,588,000
<b>Total (rounded)</b>	<b>\$511,267,000</b>	<b>\$5,368,000</b>	<b>\$505,899,000</b>

<sup>1</sup> Future development is responsible for 90.6% of the Pool Facility cost; the remaining 9.4% (\$801,000) will need to be funded from another source identified by the City.

**Table A-5**  
**City of Wheatland**  
**Bridges, Signals, Thoroughfares Fee Calculation**

**Total Bridges, Signals, Thoroughfares Costs Allocated to Future Development** **\$148,025,000**

**Trip Generation from Future Development**

<b><u>Residential</u></b>	<b>Future Dwelling Units</b>	<b>Peak Hour Trip DUEs per Unit</b>	<b>Trip Adjustment Factor</b>	<b>Peak Hour Trip DUEs Generated by Future Dev't</b>
Single Family	10,624	1.00	1.00	10,624
Multi-Family	1,668	0.67	1.00	1,118
Mobile Home	0	0.52	1.00	0
<b>Subtotal</b>	<b>12,292</b>			<b>11,742</b>

<b><u>Non-Residential</u></b>	<b>Future Rooms or Acres<sup>1</sup></b>	<b>Peak Hour Trip DUEs per Room or Acre<sup>1</sup></b>	<b>Trip Adjustment Factor<sup>2</sup></b>	<b>Peak Hour Trip DUEs Generated by Future Dev't</b>
Commercial Lodging	0	0.40	1.00	0
Retail Use	129	9.60	1.00	1,238
Employment Use	113	7.43	1.00	840
Light Industrial	56	4.09	1.00	229
Ag Tourism	0	9.60	0.25	0
<b>Subtotal</b>	<b>298</b>			<b>2,307</b>

**Total Trip DUEs Generated by Future Development (Residential & Non-Residential)** **14,049**

**Cost per New Trip DUE** **\$10,536**

**Bridges, Signals, Thoroughfares Fee Calculation**

<b><u>Residential</u></b>	<b>Cost per Trip DUE</b>	<b>Adj. Peak Hour Trip DUEs per Dwelling Unit</b>	<b>Impact Fee per Dwelling Unit</b>
Single Family	\$10,536	1.00	\$10,536
Multi-Family	\$10,536	0.67	\$7,060
Mobile Home	\$10,536	0.52	\$5,479
<b><u>Non-Residential</u></b>	<b>Cost per Trip DUE</b>	<b>Adj. Peak Hour Trip DUEs per Room or Acre<sup>1</sup></b>	<b>Impact Fee per Room or SF<sup>1</sup></b>
Commercial Lodging	\$10,536	0.40	\$4,215
Retail Use	\$10,536	9.60	\$7.74
Employment Use	\$10,536	7.43	\$5.14
Light Industrial	\$10,536	4.09	\$2.83
Ag Tourism	\$10,536	2.40	\$1.94

<sup>1</sup> Commercial lodging figures are expressed per hotel room.

<sup>2</sup> Ag Tourism operates approximately 3 months (or 25%) of the year.

**Table A-6**  
**City of Wheatland**  
**Sewer Collection Fee Calculation**

<b>Total Sewer Collection Facility Costs Allocated to Future Development</b>			<b>\$56,145,000</b>	
<hr/>				
<b><u>Gallons of Wastewater Generated by Future Development</u></b>				
	<b>Future Dwelling Units</b>	<b>Sewer Flow Gallons per Day per Unit</b>	<b>Flow Rate Adjustment Factor</b>	<b>Sewer Flow Gallons per Day Generated by Future Dev't</b>
<b><u>Residential</u></b>				
Single Family	10,624	260	1.00	2,762,240
Multi-Family	1,668	190	1.00	316,920
Mobile Home	0	190	1.00	0
<b>Subtotal</b>	<hr/> 12,292			<hr/> 3,079,160
	<b>Future Rooms or Acres<sup>1</sup></b>	<b>Sewer Flow Gallons per Day per Room or Acre<sup>1</sup></b>	<b>Flow Rate Adjustment Factor<sup>2</sup></b>	<b>Sewer Flow Gallons per Day Generated by Future Dev't</b>
<b><u>Non-Residential</u></b>				
Commercial Lodging	0	100	1.00	0
Retail Use	129	1,750	1.00	225,750
Employment Use	113	1,750	1.00	197,750
Light Industrial	56	1,000	1.00	56,000
Ag Tourism	0	1,750	0.25	55
<b>Subtotal</b>	<hr/> 298			<hr/> 479,555
<b>Total Gallons per Day Generated by Future Development (Residential &amp; Non-Residential)</b>				<b>3,558,715</b>
<b>Cost per New Gallon per Day</b>				<b>\$15.78</b>
<hr/>				
<b><u>Sewer Collection Fee Calculation</u></b>				
	<b>Cost per Gallon per Day</b>	<b>Adj. Flow Rate Gallons per Day per Dwelling Unit</b>	<b>Impact Fee per Dwelling Unit</b>	
<b><u>Residential</u></b>				
Single Family	\$15.78	260	\$4,102	
Multi-Family	\$15.78	190	\$2,998	
Mobile Home	\$15.78	190	\$2,998	
	<b>Cost per Gallon per Day</b>	<b>Adj. Flow Rate Gallons per Day per Room or Acre<sup>1</sup></b>	<b>Impact Fee per Room or SF<sup>1</sup></b>	
<b><u>Non-Residential</u></b>				
Commercial Lodging	\$15.78	100	\$1,578	
Retail Use	\$15.78	1,750	\$2.12	
Employment Use	\$15.78	1,750	\$1.82	
Light Industrial	\$15.78	1,000	\$1.04	
Ag Tourism	\$15.78	438	\$0.53	

<sup>1</sup> Commercial lodging figures are expressed per hotel room.

<sup>2</sup> Ag Tourism operates approximately 3 months (or 25%) of the year.

**Table A-7**  
**City of Wheatland**  
**Water Distribution Fee Calculation**

<b>Total Water Distribution Facility Costs Allocated to Future Development</b>				<b>\$70,428,000</b>
<hr/>				
<b><u>Gallons of Water Demanded by Future Development</u></b>				
	<b>Future</b>	<b>Water Demand</b>	<b>Demand Rate</b>	<b>Water Demand</b>
	<b>Dwelling Units</b>	<b>Gallons per Day</b>	<b>Adjustment</b>	<b>Gallons per Day</b>
		<b>per Unit</b>	<b>Factor</b>	<b>Generated by</b>
<b><u>Residential</u></b>				<b>Future Dev't</b>
Single Family	10,624	500	1.00	5,312,000
Multi-Family	1,668	300	1.00	500,400
Mobile Home	0	400	1.00	0
<b>Subtotal</b>	<u>12,292</u>			<u>5,812,400</u>
	<b>Future</b>	<b>Water Demand</b>	<b>Demand Rate</b>	<b>Water Demand</b>
	<b>Rooms or Acres<sup>1</sup></b>	<b>Gallons per Day</b>	<b>Adjustment</b>	<b>Gallons per Day</b>
		<b>per Room or Acre<sup>1</sup></b>	<b>Factor<sup>2</sup></b>	<b>Generated by</b>
<b><u>Non-Residential</u></b>				<b>Future Dev't</b>
Commercial Lodging	0	200	1.00	0
Retail Use	129	2,500	1.00	322,500
Employment Use	113	2,500	1.00	282,500
Light Industrial	56	1,250	1.00	70,000
Ag Tourism	0	2,500	0.25	79
<b>Subtotal</b>	<u>298</u>			<u>675,079</u>
<b>Total Gallons per Day Demanded by Future Development (Residential &amp; Non-Residential)</b>				<b>6,487,479</b>
<b>Cost per New Gallon per Day</b>				<b>\$10.86</b>
<hr/>				
<b><u>Water Distribution Fee Calculation</u></b>				
	<b>Cost per</b>	<b>Adj. Demand Rate</b>	<b>Impact Fee</b>	
	<b>Gallon per Day</b>	<b>Gallons per Day</b>	<b>per Dwelling Unit</b>	
		<b>per Dwelling Unit</b>		
<b><u>Residential</u></b>				
Single Family	\$10.86	500	\$5,428	
Multi-Family	\$10.86	300	\$3,257	
Mobile Home	\$10.86	400	\$4,343	
	<b>Cost per</b>	<b>Adj. Demand Rate</b>	<b>Impact Fee</b>	
	<b>Gallon per Day</b>	<b>Gallons per Day</b>	<b>per Room or SF<sup>1</sup></b>	
		<b>per Room or Acre<sup>1</sup></b>		
<b><u>Non-Residential</u></b>				
Commercial Lodging	\$10.86	200	\$2,172	
Retail Use	\$10.86	2,500	\$2.08	
Employment Use	\$10.86	2,500	\$1.79	
Light Industrial	\$10.86	1,250	\$0.90	
Ag Tourism	\$10.86	625	\$0.52	

<sup>1</sup> Commercial lodging figures are expressed per hotel room.

<sup>2</sup> Ag Tourism operates approximately 3 months (or 25%) of the year.

**Table A-8**  
**City of Wheatland**  
**Storm Drainage Fee Calculation**

**Total Storm Drainage Facility Costs Allocated to Future Development** **\$117,129,000**

**Runoff Generation from Future Development**

	Future Acres	Runoff Coefficient per Acre	Total Runoff DUEs	Runoff Coefficient Adjustment Factor	Runoff Coefficient DUEs Generated by Future Dev't
<b><u>Residential</u></b>					
Single Family	2,782	0.74	2,059	1.00	2,059
Multi-Family	75	0.81	61	1.00	61
Mobile Home	0	0.81	0	1.00	0
<b>Subtotal</b>	<u>2,857</u>				<u>2,120</u>

	Future Acres	Runoff Coefficient per Acre	Total Runoff DUEs	Coefficient Adjustment Factor <sup>2</sup>	Runoff Coefficient DUEs Generated by Future Dev't
<b><u>Non-Residential</u></b>					
Commercial Lodging	0	0.82	0	1.00	0
Retail Use	129	0.83	107	1.00	107
Employment Use	113	0.85	96	1.00	96
Light Industrial	56	0.90	50	1.00	50
Ag Tourism	0.13	0.83	0.10	0.25	0.03
<b>Subtotal</b>	<u>298</u>				<u>253.03</u>

**Total Runoff Coefficient DUEs Generated by Future Development (Residential & Non-Residential)** **2,373.03**

**Cost per New Runoff Coefficient DUE** **\$49,358**

**Storm Drainage Fee Calculation**

	Cost per Runoff Coefficient DUE	Adj. Coefficient DUEs per Dwelling Unit	Impact Fee per Dwelling Unit
<b><u>Residential</u></b>			
Single Family	\$49,358	0.194	\$9,576
Multi-Family	\$49,358	0.037	\$1,827
Mobile Home	\$49,358	0.074	\$3,654
	Cost per Runoff Coefficient DUE	Adj. Coefficient DUEs per Room or Acre <sup>1</sup>	Impact Fee per Room or SF <sup>1</sup>
<b><u>Non-Residential</u></b>			
Commercial Lodging	\$49,358	0.019	\$914
Retail Use	\$49,358	107.00	\$3.14
Employment Use	\$49,358	96.00	\$2.76
Light Industrial	\$49,358	50.00	\$2.90
Ag Tourism	\$49,358	0.030	\$0.90

<sup>1</sup> Commercial lodging figures are expressed per hotel room.

<sup>2</sup> Ag Tourism operates approximately 3 months (or 25%) of the year.

**Table A-9**  
**City of Wheatland**  
**Law Enforcement Fee Calculation**

<b><u>Persons Served From Future Development</u></b>			
<b>Land Use</b>	<b>Residents</b>	<b>Weighting Adjustment<sup>2</sup></b>	<b>Weight-Adjusted Residents</b>
Single Family	30,810	1.00	30,810
Multi-Family	3,670	1.00	3,670
Mobile Home	0	1.00	0
Subtotal - Residential	34,480		34,480
	<b>Employees</b>		<b>Weight-Adjusted Employees</b>
Commercial Lodging	0	0.30	0
Retail Use	4,214	0.30	1,254
Employment Use	2,871	0.30	854
Light Industrial	949	0.30	282
Ag Tourism	4	0.07	0
Subtotal - Non-Residential	8,038		2,391
<b>Total Persons Served</b>			<b>36,871</b>
	<b>Sworn Officers per 1,000 Residents</b>	<b>Support Staff per Officer</b>	
<b><u>Police Staffing &amp; Equipment</u></b>			
Additional Sworn Officers Required By Build Out	1.20	--	41
Additional Support Staff Required By Build Out		0.43	18
Total Additional Police Personnel Required			59
<b><u>Building</u></b>			
Police Station Square Feet per Police Employee			300
Building Cost per SF			\$630
Building Size Required to House Additional Future Police Personnel			17,750
Building Cost			\$11,183,000
<b><u>Vehicles</u></b>	<b>Vehicles per Sworn Officer</b>	<b>Fully-Equipped Cost per Vehicle</b>	
Marked/Unmarked Patrol Cars Required by Future Police Personnel	1.00	\$54,100	41
<b><u>Equipment</u></b>			
Police Communication and Technology Systems (\$65/SF)			\$1,153,770
Police Safety Equipment (\$9,500 per Officer)			\$393,000
Subtotal			\$1,547,000
<b><u>Total Cost Allocated to Future Development</u></b>			
Police Station			\$11,183,000
Total Estimated Cost of Police Vehicles			\$2,238,000
Total Estimated Cost of Police Equipment			\$1,547,000
Impact Fee Fund Balance			-\$7,000
<b>Total Police Cost Allocated to Future Development</b>			<b>\$14,961,000</b>
<b>Cost per Future Person Served at Build Out</b>			<b>\$406</b>
<b><u>Law Enforcement Fee Calculation</u></b>			
<b><u>Residential</u></b>	<b>Persons per Household</b>	<b>Cost per Future Resident</b>	<b>Impact Fee per Dwelling Unit</b>
Single Family	2.90	\$406	\$1,177
Multi-Family	2.20	\$406	\$893
Mobile Home	1.80	\$406	\$731
<b><u>Non-Residential</u></b>	<b>Adj. Employees per Acre</b>	<b>Cost per Future Employee</b>	<b>Impact Fee per Room or SF<sup>1</sup></b>
Commercial Lodging	3.89	\$121	\$121
Retail Use	9.72	\$121	\$0.31
Employment Use	7.56	\$121	\$0.21
Light Industrial	5.04	\$121	\$0.14
Ag Tourism	2.43	\$30	\$0.08

<sup>1</sup> Commercial lodging figures are expressed per hotel room.

<sup>2</sup> Ag Tourism operates approximately 3 months (or 25%) of the year.

**Table A-10**  
**City of Wheatland**  
**Pool Facility Fee Calculation**

<b><u>Persons Served from Existing and Future Development</u></b>			
<b>Land Use</b>	<b>Existing and Future Residents</b>	<b>Weighting Adjustment</b>	<b>Weight-Adjusted Residents</b>
Single Family	33,658	1.00	33,658
Multi-Family	4,420	1.00	4,420
Mobile Home	66	1.00	66
Subtotal - Residential	38,144		38,144
<b>Total Residents Served - Citywide</b>			<b>38,144</b>
<b><u>Pool Facility Cost - One Pool Option</u></b>			
			<b>Total Cost</b>
Sitework			\$1,202,000
Buildings			\$1,484,000
Pools, Play Structure, and Other Facilities			\$3,263,000
Indirect Costs and Contingency			\$2,540,000
<b>Total Pool Cost Allocated to All Development in the City at Buildout</b>			<b>\$8,489,000</b>
<b>Cost per Person Served at Build Out</b>			<b>\$223</b>
<b><u>Pool Facility Fee Calculation</u></b>			
<b><u>Residential</u></b>	<b><u>Persons per Household</u></b>	<b><u>Cost per Future Resident</u></b>	<b><u>Impact Fee per Dwelling Unit</u></b>
Single Family	2.90	\$223	\$646
Multi-Family	2.20	\$223	\$490
Mobile Home	1.80	\$223	\$401
<b><u>Non-Residential</u></b>	<b><u>Adj. Employees per Acre</u></b>	<b><u>Cost per Future Employee</u></b>	<b><u>Impact Fee per Room or SF<sup>1</sup></u></b>
Commercial Lodging	n/a	n/a	n/a
Retail Use	n/a	n/a	n/a
Employment Use	n/a	n/a	n/a
Light Industrial	n/a	n/a	n/a
Ag Tourism	n/a	n/a	n/a

**Table A-11**  
**City of Wheatland**  
**Parkland Facilities Fee Calculation**

**Persons Served From Future Development**

<b>Land Use</b>	<b>Future Residents</b>
Single Family	30,810
Multi-Family	3,670
Mobile Home	0
Total - Residential	34,480

**Parkland Facilities Costs**

Park Level of Service (Acres per 1,000 Residents) - Minimum Quimby Allowance	3.0	
Total Future Park Acres to be Developed Based on Level of Service	103	
Open Space Level of Service (Acres per 1,000 Residents) - Based on 23.3 Ac Existing	6.36	
Total Future Open Space Acres to be Developed Based on Level of Service	219	
Total Park Development Cost	\$350,000 per Acre	\$36,050,000
Total Park Land Acquisition Cost	\$100,000 per Acre	\$10,300,000
Total Open Space Land Acquisition Cost	\$50,000 per Acre	\$10,950,000
Impact Fee Fund Balance		-\$15,000
<b>Total Parkland Facilities Cost Allocated to Future Development</b>		<b>\$57,285,000</b>

**Parkland Facilities Fee Calculation**

<b>Residential</b>	<b>Total Park Cost per Person</b>	<b>Open Space Land Acquisition Cost per Person</b>	<b>Persons per Household</b>	<b>Impact Fee per Dwelling Unit</b>
Single Family	\$1,344	\$318	2.90	\$4,819
Multi-Family	\$1,344	\$318	2.20	\$3,656
Mobile Home	\$1,344	\$318	1.80	\$2,991
<b><u>Non-Residential</u></b>				
Commercial Lodging	n/a	n/a	n/a	n/a
Retail Use	n/a	n/a	n/a	n/a
Employment Use	n/a	n/a	n/a	n/a
Light Industrial	n/a	n/a	n/a	n/a
Ag Tourism	n/a	n/a	n/a	n/a



**Table A-12  
City of Wheatland  
General Government Fee Calculation**

<b><u>Persons Served From Future Development</u></b>			
<b>Land Use</b>	<b>Residents</b>	<b>Weighting Adjustment<sup>2</sup></b>	<b>Weight-Adjusted Residents</b>
Single Family	30,810	1.00	30,810
Multi-Family	3,670	1.00	3,670
Mobile Home	0	1.00	0
Subtotal - Residential	<u>34,480</u>		<u>34,480</u>
			<b>Weight-Adjusted Employees</b>
	<b>Employees</b>		
Commercial Lodging	0	0.30	0
Retail Use	4,214	0.30	1,254
Employment Use	2,871	0.30	854
Light Industrial	949	0.30	282
Ag Tourism	4	0.07	0
Subtotal - Non-Residential	<u>8,038</u>		<u>2,391</u>
<b>Total Persons Served</b>			<b>36,871</b>
<b><u>General Government Cost</u></b>			
<b><u>City Hall/Administration Building Cost</u></b>			
City Non-Police/Non-Public Works (Plant and Maintenance) Employees per 1,000 Residents			2.46
Additional City Employees Required by Build Out			85
Building Space per Employee			300 sq. ft.
Additional Building Space Required by Build Out			25,000 sq. ft.
Building, Furniture, Fixtures, and Equipment Cost per Square Foot			\$630
Total Cost of Additional Building Space			\$15,750,000
Land Acquisition                                   2.0 Acres			<u>\$200,000</u>
<b>Total City Hall Cost</b>			<b>\$15,950,000</b>
<b><u>10-Ac Corporation Yard</u></b>			
Additional Building Space Required at Buildout			23,000 sq. ft.
Office, Locker/Lunchroom, Supply Storage, and Workshop Cost per Square Foot			\$270
Total Cost of Additional Building Space			\$6,210,000
Land Acquisition                                   10.0 Acres			<u>\$1,000,000</u>
<b>Total Corp Yard Cost</b>			<b>\$7,210,000</b>
<b><u>Vehicle Cost</u></b>			
Vehicles per Employee			0.400
Additional Vehicles Required by Build Out			34
Cost per Vehicle			\$48,700
<b>Total Vehicle Cost</b>			<b>\$1,650,000</b>
City Hall/Administration Building			\$15,950,000
Corporation Yard			\$7,210,000
Vehicles			\$1,650,000
Impact Fee Fund Balance			<u>-\$160,000</u>
<b>Total General Government Cost Allocated to Future Development</b>			<b>\$24,650,000</b>
<b>Cost per Future Person Served at Build Out</b>			<b>\$669</b>
<b><u>General Government Fee Calculation</u></b>			
	<b>Persons</b>	<b>Cost per</b>	<b>Impact Fee</b>
<b>Residential</b>	<b>per Household</b>	<b>Future Resident</b>	<b>per Dwelling Unit</b>
Single Family	2.90	\$669	\$1,939
Multi-Family	2.20	\$669	\$1,471
Mobile Home	1.80	\$669	\$1,204
	<b>Adj. Employees</b>	<b>Cost per</b>	<b>Impact Fee</b>
<b>Non-Residential</b>	<b>per Acre</b>	<b>Future Employee</b>	<b>per Room or SF<sup>1</sup></b>
Commercial Lodging	3.89	\$199	\$199
Retail Use	9.72	\$199	\$0.50
Employment Use	7.56	\$199	\$0.34
Light Industrial	5.04	\$199	\$0.23
Ag Tourism	2.43	\$50	\$0.13

<sup>1</sup> Commercial lodging figures are expressed per hotel room.

<sup>2</sup> Ag Tourism operates approximately 3 months (or 25%) of the year.

**Table A-13**  
**City of Wheatland**  
**Public Meeting Facilities Fee Calculation**

**Persons Served From Future Development**

<b>Land Use</b>	<b>Future Residents</b>
Single Family	30,810
Multi-Family	3,670
Mobile Home	0
Total - Residential	34,480

**Public Meeting Facilities Costs**

Public Meeting Facilities Level of Service (# of Community Centers)		1
Community Center Size (Square Feet)		20,000
Land Acquisition (Acres)		2
Community Center Development Cost	\$460 per Sq Ft	\$9,200,000
Community Center Land Acquisition Cost	\$100,000 per Acre	\$200,000
Impact Fee Fund Balance		\$188,000
<b>Total Public Meeting Facilities Cost Allocated to Future Development</b>		<b>\$9,588,000</b>

**Public Meeting Facilities Fee Calculation**

	<b>Community Center Development Cost per Person</b>	<b>Community Center Land Acquisition Cost per Person</b>	<b>Persons per Household</b>	<b>Impact Fee per Dwelling Unit</b>
<b><u>Residential</u></b>				
Single Family	\$272	\$6	2.90	\$807
Multi-Family	\$272	\$6	2.20	\$612
Mobile Home	\$272	\$6	1.80	\$501
<b><u>Non-Residential</u></b>				
Commercial Lodging	n/a	n/a	n/a	n/a
Retail Use	n/a	n/a	n/a	n/a
Employment Use	n/a	n/a	n/a	n/a
Light Industrial	n/a	n/a	n/a	n/a
Ag Tourism	n/a	n/a	n/a	n/a

# ***APPENDIX B***

## ***FUTURE DEVELOPMENT AREAS***

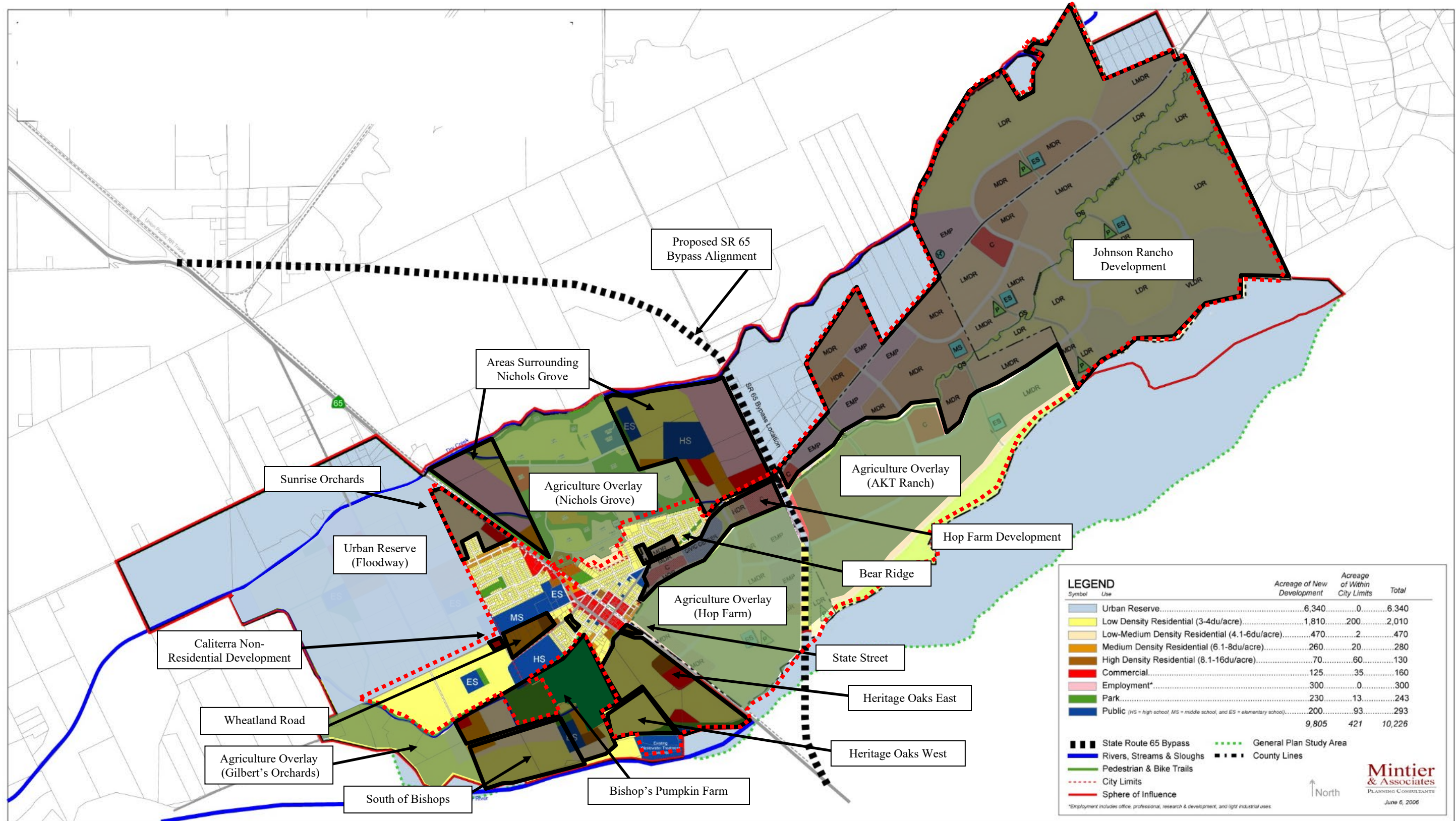
### ***TABLE AND MAP***

City of Wheatland - AB 1600 Fee Study Update Development Potential

Development	Commercial		Employment		Public/Quasi-Public		Mixed-Use	Very Low Density Residential		Low Density Residential		Low-Medium Density Residential		Medium Density Residential		High Density Residential		AG Tourism	Park <sup>1</sup>
	Acres	Square Feet	Acres	Square Feet	Acres	Square Feet	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Units	Acres	Acres
<b>AB 1600 Buildout Scenario</b>																			
State Street Mobile Home Park Reevaluation <sup>2</sup>	1.00	43,560.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	2.61	52	0.00	0.00
Bear Ridge Apartments	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	9.00	96	0.00	0.00
First Street Senior Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	2.25	52	0.00	0.00
Sunrise Orchards (f.k.a. Almond Estates)	30.00	1,306,800.00	0.00	0.00	0.00	0.00	0	0.00	0	10.00	36	0.00	0	0.00	0	10.00	200	0.00	0.00
Wheatland Road Properties	0.00	0.00	0.00	0.00	5.04	219,542.40	0	0.00	0	0.00	0	0.00	0	22.14	177	0.00	0	0.00	0.00
Heritage Oaks Estates - East	16.26	708,285.60	0.00	0.00	1.16	50,529.60	0	0.00	0	106.94	490	0.00	0	0.00	0	6.30	108	0.00	30.39
Heritage Oaks Estates - West	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0	59.40	173	0.00	0	0.00	0	0.00	0	0.00	0.00
Bishop's Pumpkin Farm	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	140	43.57
Properties South of Bishop's Pumpkin Farm	0.00	0.00	0.00	0.00	8.00	348,480.00	0	0.00	0	130.00	520	35.00	210	10.00	80	0.00	0	0.00	1.00
Caliterra Ranch Non-Residential Development	4.00	174,240.00	0.00	0.00	10.00	435,600.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5.00
Properties Surrounding Nichols Grove	3.00	130,680.00	0.00	0.00	15.00	653,400.00	0	0.00	0	130.00	520	70.00	420	30.00	240	5.00	100	0.00	1.35
Hop Farm North of Grasshopper Slough	29.00	1,263,240.00	44.75	1,949,310.00	24.00	1,045,440.00	0	0.00	0	0.00	0	0.00	0	10.00	80	10.00	200	0.00	0.00
Johnson Rancho Non Participating Properties	1.00	43,560.00	0.00	0.00	0.00	0.00	0	0.00	0	2.21	9	0.00	0	2.21	18	0.00	0	0.00	0.00
Johnson Rancho <sup>3</sup>	99.75	4,345,110.00	197.00	8,581,320.00	47.00	2,047,320.00	500	245.00	367	1,097.00	3,291	438.00	1,775	384.00	2,218	30.00	360	0.00	53.00
<b>Total</b>	<b>184.01</b>	<b>8,015,475.60</b>	<b>241.75</b>	<b>10,530,630.00</b>	<b>110.20</b>	<b>4,800,312.00</b>	<b>500</b>	<b>245.00</b>	<b>367</b>	<b>1,535.55</b>	<b>5,039</b>	<b>543.00</b>	<b>2,405</b>	<b>458.35</b>	<b>2,813</b>	<b>75.16</b>	<b>1,168</b>	<b>140</b>	<b>134.31</b>

Table Notes:  
1. Does not include drainage basins.  
2. Property is currently designated MDR in the GP, but zoned R-3.  
3. Subtract existing AKT Ranch property currently in active agricultural production.  
Very Low Density Residential development potential is based on up to **2.9 dwelling units per acre**, unless the development has identified the number of proposed dwelling units.  
Low Density Residential development potential is based on up to **4 dwelling units per acre**, unless the development has identified the number of proposed dwelling units.  
Low-Medium Density Residential development potential is based on up to **6 dwelling units per acre**, unless the development has identified the number of proposed dwelling units.  
Medium Density Residential development potential is based on up to **8 dwelling units per acre**, unless the development has identified the number of proposed dwelling units.  
High Density Residential development potential is based on up to **20 dwelling units per acre**, unless the development has identified the number of proposed dwelling units.

PROPOSED CITY OF WHEATLAND GENERAL PLAN LAND USE DIAGRAM



# *APPENDIX C*

*CAPITAL IMPROVEMENT PLAN*

*AND*

*SUPPORTING TECHNICAL MEMOS*

**Table C-1  
City of Wheatland  
Capital Improvement Plan  
Backbone Infrastructure Facilities, Costs, and Funding**

No.	Project Name	Total	DIF Funding	Other Funding
<b>BRIDGES, SIGNALS, THOROUGHFARES</b>				
BST-1	Arterial Roadways	\$82,900,000	\$82,900,000	
BST-2	Collector Roadways	\$46,900,000	\$46,900,000	
BST-3	Signalized Intersection - New	\$700,000	\$700,000	
BST-4	Roundabout Intersections - New	\$6,500,000	\$6,500,000	
BST-5	Roundabout Intersection - Existing	\$4,300,000	\$4,300,000	
BST-6	Grasshopper Slough Culvert Crossings	\$1,200,000	\$1,200,000	
BST-7	Hwy-65/Downtown Congestion Relief	\$2,500,000	\$2,500,000	
BST-8	Hwy-65/Main Street Left Turn Lane	\$1,000,000	\$1,000,000	
BST-9	Railroad/Pedestrian Safety Enhancements	\$2,300,000	\$2,300,000	
	Impact Fee Fund Balance		(\$275,000)	
	<b>Bridges, Signals, Thoroughfares Subtotal</b>	<b>\$148,300,000</b>	<b>\$148,025,000</b>	<b>\$275,000</b>
<b>SEWER COLLECTION</b>				
SC-1	8-in Sanitary Sewer	\$2,400,000	\$2,400,000	
SC-2	10-in Sanitary Sewer	\$1,500,000	\$1,500,000	
SC-3	12-in Sanitary Sewer	\$800,000	\$800,000	
SC-4	15-in Sanitary Sewer	\$6,000,000	\$6,000,000	
SC-5	18-in Sanitary Sewer	\$3,200,000	\$3,200,000	
SC-6	21-in Sanitary Sewer	\$4,900,000	\$4,900,000	
SC-7	24-in Sanitary Sewer	\$3,700,000	\$3,700,000	
SC-8	27-in Sanitary Sewer	\$1,800,000	\$1,800,000	
SC-9	30-in Sanitary Sewer	\$2,700,000	\$2,700,000	
SC-10	36-in Sanitary Sewer	\$2,000,000	\$2,000,000	
SC-11	Lift Stations	\$8,600,000	\$8,600,000	
SC-12	Upgrade City Pump Station on Jasper Ln	\$1,900,000	\$1,900,000	
SC-13	Upgrade City Pump Station at Rancho Rd	\$1,900,000	\$1,900,000	
SC-14	Forcemain: Jasper Pump Station to OPUD Pump Station	\$18,900,000	\$18,900,000	
	Impact Fee Fund Balance		(\$4,155,000)	
	<b>Sewer Collection Subtotal</b>	<b>\$60,300,000</b>	<b>\$56,145,000</b>	<b>\$4,155,000</b>
<b>WATER DISTRIBUTION</b>				
WD-1	New Water Mains (6" - 14")	\$22,800,000	\$22,800,000	
WD-2	New Wells (800 GPM)	\$18,700,000	\$18,700,000	
WD-3	New Tanks (1.5 MG)	\$26,300,000	\$26,300,000	
WD-4	AMI Collectors and Towers	\$1,800,000	\$1,800,000	
WD-5	AMI Repeaters	\$900,000	\$900,000	
	Impact Fee Fund Balance		(\$72,000)	
	<b>Water Subtotal</b>	<b>\$70,500,000</b>	<b>\$70,428,000</b>	<b>\$72,000</b>
<b>STORM DRAINAGE</b>				
SD-1	Detention Basins and Outlet Piping	\$97,100,000	\$97,100,000	
SD-2	Channels and Other Costs	\$20,100,000	\$20,100,000	
	Impact Fee Fund Balance		(\$71,000)	
	<b>Storm Drainage Subtotal</b>	<b>\$117,200,000</b>	<b>\$117,129,000</b>	<b>\$71,000</b>
<b>Total</b>		<b>\$396,300,000</b>	<b>\$391,727,000</b>	<b>\$4,573,000</b>



## Memorandum

**Date:** May 25, 2022  
**To:** Tim Raney – City of Wheatland Community Development Director  
**From:** Dane Schilling – City Engineer  
**Subject:** Transportation Infrastructure Estimate for the 2022 City of Wheatland Development Impact Fee Update

### Introduction

This memo has been prepared to support the City of Wheatland's 2022 Impact Fee Update. The purpose of this memo is to identify the costs required to expand the City's existing infrastructure to meet the needs of anticipated growth within areas identified for future development, excluding areas designated Urban Reserve (see growth areas on the attached schematic layout). The City last completed a thorough analysis of transportation infrastructure needs in 2005. The following documents were used as a basis of preparing this memo:

- *General Plan Update Background Report & Circulation Diagram* (July 2004)
- *City of Wheatland General Plan Land Use Diagram* (June 2006)
- *Development Impact Fee Calculation and Nexus Report* (January 2007)
- *City of Wheatland Proposed General Plan Land Use Diagram* (January 2021)
- *City of Wheatland Bikeway Master Plan* (October 2014)
- *Wheatland Employment Zone Feasibility Study* (July 2021)

This memo represents an estimate of costs for future City transportation infrastructure based on the best information available to date. Development impact fees for the East Wheatland Expressway and Highway 65 Bypass through Wheatland are assumed to be covered under a separate impact fee collected by the South Yuba Transportation Improvement Authority (SYTIA). There have been no master plan updates, preliminary design, or technical studies performed to support the results of this memo, other than the preliminary analysis described herein. This memo should in no way be considered an update to the City's master plans and it is highly encouraged that the City perform a master plan update in the near future.

The previous masterplans and fee updates were based on a concentric ring-road concept that was centered on the existing developed area of the City. Due to the significant changes in certain

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development areas, the prior planning documents are no longer applicable and cannot be re-used. This memo details the methodology used in determining the assumed improvements needed and ultimately identifies the costs associated with transportation infrastructure to support development within the City over the next twenty years. The changes since the 2005 General Plan, 2005 impact fee study and supporting documents are summarized below:

- In February 2011, FEMA published new Flood Insurance Rate Maps (FIRMs) which mapped a large portion of the western area of the 2006 General Plan as a special flood hazard area, thereby greatly reducing the likelihood of development in this area within the General Plan. This resulted in areas in the western portion of the City being identified as unavailable for development due to flooding and have since been designated as urban reserve.
- In 2014 the City annexed roughly 4,500-acres into the City in an area East of the City.
- In addition, some of the newly annexed areas and areas within the City's sphere of influence were designated for agricultural purposes and these areas are not expected to develop in the next 20 years.

The results of this memo account for the revised service area and recent studies that may impact future transportation projects. No formal study or traffic analysis was performed with this effort and it is encouraged that the City pursue a master plan update in the near future to more accurately estimate the City's future needs and develop a capital improvement program accordingly.

### Assumptions

The following assumptions were used in preparing the cost estimate for the transportation infrastructure costs contained in this memo:

- New major intersections will be controlled by either a roundabout or traffic signals. No distinction is made in this memo as to which traffic control method is applied. Costs, on the whole for the program, are assumed to cover both methods assuming new construction sites (not retrofit).
- Bike facilities on Arterial Roadways will be included in and covered by the transportation impact fee and all other bike facilities will be included in Parkland Facilities Impact Fees or will be developer funded.
- For collector and arterial roads east of Jasper Lane, through lanes will be funded with impact fees, and additional (frontage) lanes and right-turn lanes will be developer funded improvements.
- Developments contiguous to planned transportation projects would dedicate the needed street right-of-way for any additional frontage or turn lanes, fund and construct roadway landscaping, sound walls, curb, gutter, sidewalk, and street lighting.

There are extensive opportunities for development east of existing Wheatland and east of Highway 65, and it is assumed that this development will happen slowly. As development occurs,



it is expected that developers will design and construct complete transportation improvements and receive impact fee credits for any off-site improvements identified in this program.

A schematic transportation circulation system is provided on the following page. The layout of major roads and intersections on the exhibit is based primarily on the City's *Employment Zone Feasibility Study* (July 2021) Projects shown on the exhibit and included in this estimate consist of collector roads, arterial roads and major intersections which would involve traffic signals or roundabouts. For purposes of estimating the major intersections, a blended unit cost was applied to cover the costs of either a signalized intersection or a roundabout. The costs of roundabout intersections are typically higher than signalized intersections when applied to existing intersection, however the costs of constructing roundabouts from scratch in unconstrained areas without the need for extensive phasing to accommodate traffic will be much less than retrofit situations. Therefore, a uniform cost to major intersections was developed to allow for either option to be selected as individual areas develop.

It's important to note that the impact fees determined with this memo do not include SYTIA projects, which have their own impact fees. SYTIA projects in Wheatland include the East Wheatland Expressway and Highway 65 By-Pass project.

## Conclusions

A summary table quantifying the major roadway infrastructure and estimated costs is provided on Table T-1 below. A schematic drawing of the estimated backbone transportation infrastructure is attached.



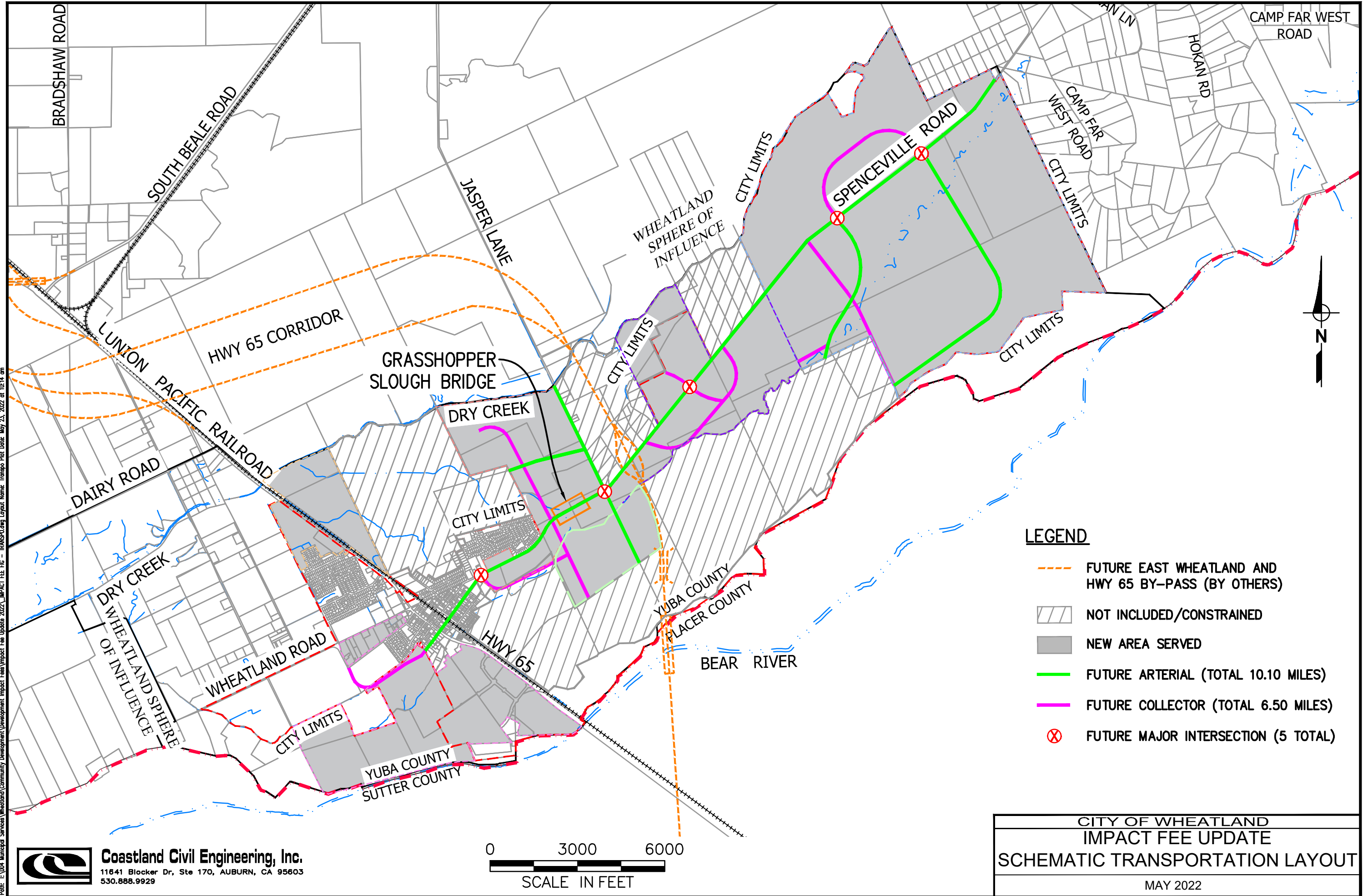
**TABLE T-1  
TRANSPORATION INFRASTRUCTURE COST ESTIMATE**

Item	Description	Unit	Quantity	Unit Price	Total
<b>Construction Cost</b>					
1	Arterial Roadways <sup>2</sup>	Mile	10.10	\$ 5,700,000	\$ 57,570,000
2	Collector Roadways <sup>3</sup>	Mile	6.50	\$ 5,000,000	\$ 32,500,000
3	Signalized Intersection - New	EA	1	\$ 500,000	\$ 500,000
4	Roundabout Intersection - New	EA	3	\$ 1,500,000	\$ 4,500,000
5	Roundabout Intersection - Existing	EA	1	\$ 3,000,000	\$ 3,000,000
6	Grasshopper Slough Crossings	EA	4	\$ 200,000	\$ 800,000
7	Hwy-65/Downtown Congestion Relief	LS	1	\$ 1,750,000	\$ 1,750,000
8	Hwy-65/Main St Lt-Turn Lanes	LS	1	\$ 700,000	\$ 700,000
9	Railroad/Pedestrian Safety Enhancement	EA	4	\$ 400,000	\$ 1,600,000
10	Contingency	%	20%	\$ 20,584,000	\$ 20,584,000
<b>Sub-Total Construction Cost</b>					<b>\$ 123,504,000</b>
<b>Other Costs</b>					
12%	Engineering - Design				\$ 14,820,480
8%	Construction Management, Inspection & Testing				\$ 9,880,320
<b>Sub-Total Other Costs</b>					<b>\$ 24,700,800</b>
<b>TOTAL ESTIMATED TRANSPORATION INFRASTRUCTURE COSTS (Rounded)</b>					<b>\$ 148,300,000</b>
<b>Notes:</b>					
1	All items include allowance for right-of-way costs.				
2	Three travel lanes & shoulders. Frontage improvements by developers. Credit of 25% for Spenceville Rd & Main St applied.				
3	Two travel lanes & bike lanes. Frontage improvements by developers.				









ORIGINAL PLOT DATE: DATE

Xref: Wheatland Proposing Wheatland Sewer.dwg;2005 MP Water Layout.dwg;Wheatland Water.dwg  
Images: Wheatland Logo Large Oct 2015.jpg;Wheatland Logo Oct 2015.jpg  
Path: I:\04 Municipal Services\Wheatland\Community Development\Development\Impact Fees\Impact Fee Update 2022\IMPACT FEE FIG - TRANSPO.dwg Layout Name: Transpo Plot Date: May 23, 2022 at 10:14 am

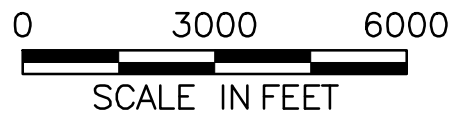


**LEGEND**

-  FUTURE EAST WHEATLAND AND HWY 65 BY-PASS (BY OTHERS)
-  NOT INCLUDED/CONSTRAINED
-  NEW AREA SERVED
-  FUTURE ARTERIAL (TOTAL 10.10 MILES)
-  FUTURE COLLECTOR (TOTAL 6.50 MILES)
-  FUTURE MAJOR INTERSECTION (5 TOTAL)



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CITY OF WHEATLAND  
 IMPACT FEE UPDATE  
 SCHEMATIC TRANSPORTATION LAYOUT  
 MAY 2022



## Memorandum

**Date:** May 20, 2022  
**To:** Tim Raney – City of Wheatland Community Development Director  
**From:** Dane Schilling – City Engineer  
**Subject:** Sewer System Infrastructure Estimate for the 2022 City of Wheatland Development Impact Fee Update

### Introduction

This memo has been prepared to support the City of Wheatland's 2022 Impact Fee Update. The purpose of this memo is to identify the costs required to expand the City's existing infrastructure to meet the needs of anticipated growth within areas identified for future development, excluding areas designated Urban Reserve (see growth areas on the attached schematic layout). The scope for this technical memo is limited and not intended to be an update to the existing 2005 Master Plan. The following documents were used as a basis of preparing this memo:

- *General Plan Update Background Report* (July 2004)
- *General Plan Update Sewer Collection System Master Plan* (July 2005)
- *City of Wheatland General Plan Land Use Diagram* (June 2006)
- *City of Wheatland Proposed General Plan Land Use Diagram* (January 2021)
- *Wheatland Employment Zone Feasibility* (June 7, 2021)
- *Wheatland Regional Sewer Pipeline Basis of Design Report* (April 2021)

This memo represents an estimate of costs for future City sewer collection and transmission infrastructure based on the best information available to date and does not include sewage treatment as explained later in this memo. This estimate should be thoroughly updated as new and more detailed information becomes available through subsequent studies. There have been no master plan updates, modeling, preliminary design, or technical studies performed to support the results of this memo, other than the preliminary analysis described herein. This memo should in no way be considered an update to the City's master plan and it is highly encouraged that the City perform master plan updates in the near future.

The 2005 Master Plan Update accounted for the conveyance of wastewater within the City limits leading to a future wastewater treatment plant site to the west of the existing City limits. Due to the significant changes in future service area, the results of the 2005 Sewer Collection System Master Plan are no longer applicable and cannot be re-used to determine the expected sewer flows, infrastructure, and costs associated with the City's buildout. Therefore, this memo details the methodology used in determining sewer flows, size pipes, and ultimately identifies the costs associated with accommodating sanitary sewer for development within the City.

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The changes to the City of Wheatland service area are summarized below:

- In February 2011, FEMA published new Flood Insurance Rate Maps (FIRMs) which mapped a large portion of the western area of the 2006 General Plan as a special flood hazard area, thereby greatly reducing the likelihood of development in this area within the General Plan. This resulted in areas in the western portion of the City being identified as unavailable for development due to flooding and have since been designated as urban reserve. These areas no longer require water infrastructure to serve them.
- In 2014 the City annexed roughly 4,500-acres into the City in an area East of the City.
- In addition, some of the newly annexed areas and areas within the City's sphere of influence were designated for agricultural purposes and these areas are not expected to develop in the next 20 years.

In 2019 the City commissioned a study to evaluate all its wastewater treatment and disposal alternatives. The study examined the feasibility of sending sewage to either Olivehurst Public Utilities District (OPUD), Linda County Water District (LCWD), Beale Air Force Base (Beale), or the City of Lincoln for treatment. The study also looked at the option to expand the City's existing wastewater treatment plant (WWTP) or construct a new City owned and operated WWTP. The report concluded that that Beale, Lincoln, and a new or upgraded City owned WWTPs were not viable alternatives and recommended connecting to either OPUD or LCWD. It further stated that connecting to either agency is technically feasible, would have lower upfront costs by as much as \$14 million, would have lower operating costs, and would be consistent with California State Water Resources Board policy of encouraging consolidation of smaller plants into larger, regional systems. The cost differential between the two agencies was close enough to warrant the next step of negotiating with OPUD and LCWD regarding proposed connection fees and estimated monthly rates. These discussions began in mid-2020 and are currently ongoing.

As a result, the City embarked on Phase 1 of the City of Wheatland Regional Sewer Pipeline Project (WRSP) which is currently in the design and environmental phases. The project consists of a series of pump stations and sewer force mains between the City and a connection point to the regional system at Rancho Road north of the City. The first phase of this project intends to convey flows from the existing City service area and future areas up to 5,500 EDUs to the regional system. For the purposes of this memo, phase one of the WRSP is assumed to be complete. A parallel pipeline and capacity upgrades to two of the three pump stations will be necessary to reach 20-year buildout capacity of the City's wastewater system. Costs related to the first phase of the WRSP are not included in this impact fee update, but the cost of future upgrades, additions, and expansions are accounted for. The Phase 2 upgrades would need to take place before the City exceeds the 5,500 EDU capacity of Phase 1.

In summary, the results of this memo account for the revised service area and revised land use designations as well as the City's new plan to convey wastewater out of the City and to a regional wastewater treatment plant. No modeling of the trunk mains and lift stations was performed with this effort, and it is encouraged that the City pursue a master plan update in the near future to more accurately estimate buildout flows, accurately size pipes, and develop a capital improvement program that includes the infrastructure needed to serve these areas.



## Methodology

The peak wet weather sewer flows were determined for each area designated on the Proposed General Plan Land Use Diagram. This process involved:

- Identifying the land use designation for the area.
- Quantifying the number of EDUs or “units” for each area based on acreage.
- Identifying the average daily flow.
- Multiplying the number of EDUs or units by the average daily flow and applying a peak factor to determine peak wet weather flow.

## Assumptions

In order to determine the size and capacity for the future sanitary sewer system, this memo made the following assumptions:

- Wastewater in all areas of the City can be conveyed to one of the two pump stations via a series of gravity mains and lift stations. However, the City may determine that a force main and pump station is a better option in one or more cases. The costs would be of similar magnitude in either scenario.
- The Malone pump station is located just south of the City and currently pumps all of the City’s wastewater to the City’s WWTP. The Malone pump station will undergo significant upgrades and reconfiguration as part of the WRSPP and will then pump wastewater from the City towards a new pump station located on Jasper Lane. The Jasper Lane pump station is one pump station in a series that will convey wastewater to the regional system tie in location on Rancho Road at Ostrom Road.
- Developments that are currently in progress or entitled, such as Caliterra Ranch, are addressing their own sewer system expansions as needed and are not considered in this update.
- Infrastructure within the existing City sewer service area is performing adequately and has capacity for the development of minor infill areas within the existing City service area without the need for increased pipe sizes or lift station upgrades.
- Any existing deficiencies in the City’s system are being addressed separately and are therefore not accounted for in this update.
- New pipe sizes have been based on the Manning’s pipe flow equation based on minimum slope and a Manning’s “n” of 0.013. Pipes are sized to convey peak wet weather flow (PWWF) at 70% of pipe capacity.
- Quantity of lift stations was assumed based on trunk lines being installed at a slope of 0.0035 ft/ft or flatter and a maximum pipe depth of 25-feet. This is an acceptable design slope for 8” diameter pipe or larger and an acceptable planning level slope for 10” diameter pipes or larger. This is a conservative approach, as many pipes will be larger than 8” diameter and therefore may be installed at slopes less than 0.0035 ft/ft.

There are extensive opportunities for development east of Jasper Lane, but it is understood that this development will happen slowly over time. Rather than installing a large trunk main that would be oversized until sufficient flows are realized for proper operation of the pipe, it was determined that installing two parallel mains in Spenceville Road is the best approach. This will allow for the



mains to be sized to carry 1/3 and 2/3 of the PWWF respectively. This allows the smaller pipe to reach scour velocity in the immediate future as development begins to ramp-up. Once the capacity of the smaller main is reached, the City will switch to using the larger of the two pipes until ultimately both pipes are needed to convey PWWF.

Land use was identified based on the Proposed General Plan Land Use Diagram (January 2021, not yet adopted). The following assumptions were made in the preparation of this technical memo:

- The attached Schematic Sewer Layout shows certain areas as “Not Included/Constrained”. This designation includes developable areas that are not likely to develop and may be used for agricultural purposes for the next 20 years or more.
- EDUs were calculated based on the land use designated on the Proposed GP and the 85<sup>th</sup> percentile of the units per acre range given in the legend of the land use diagram. For the land use types not assigned a number of dwelling units per acre of new development, 1 unit per acre was assigned and flow per unit was assigned per the City of Wheatland General Plan Update Background Report and the General Plan Update Sewer Collection System Master Plan.
- For residential areas, number of EDUs were calculated for each area and the flow per unit was applied to the number of EDUs determined according to the Wheatland Regional Sewer BODR for residential land uses, and the General Plan Update Background Report and the General Plan Update Sewer Collection System Master Plan for all other land uses.
- A peaking factor of 3.3 was used across the board to calculate PWWF, and PWWF was used to size the pipes. A summary of the EDU per acre and flow assignments for a given land use type is provided below:

Land Use	EDU / acre	Units / acre used in calculations	Unit of Measure	EDU / unit	Flow / Unit (gpd)
VLDR	0.0-2.9 <sup>1</sup>	2.5 <sup>3</sup>	DU	1.0 <sup>4</sup>	260 <sup>7</sup>
LDR	3.0-4.0 <sup>2</sup>	3.9 <sup>3</sup>	DU	1.0 <sup>4</sup>	260 <sup>7</sup>
LMDR	4.1-6.0 <sup>2</sup>	5.7 <sup>3</sup>	DU	1.0 <sup>4</sup>	260 <sup>7</sup>
MDR	6.1-8.0 <sup>2</sup>	6.9 <sup>3</sup>	DU	1.0 <sup>4</sup>	260 <sup>7</sup>
HDR	8.1-16.0 <sup>2</sup>	14.8 <sup>3</sup>	DU	0.71 <sup>4</sup>	190 <sup>7</sup>
EMP	N/A	1.0	AC	5.0 <sup>5</sup>	1750 <sup>5</sup>
COM	N/A	1.0	AC	5.0 <sup>4</sup>	1750 <sup>4</sup>
ES	N/A	1.0	AC	0.02 <sup>4</sup>	2500 <sup>6</sup>
MS	N/A	1.0	AC	0.029 <sup>4</sup>	2500 <sup>6</sup>
HS	N/A	1.0	AC	0.034 <sup>4</sup>	2000 <sup>6</sup>
CC	N/A	1.0	AC	N/A	1750 <sup>6</sup>

<sup>1</sup>Assumed based on upper limit of 3.0 EDU/acre for Low Density Residential

<sup>2</sup>In accordance with the General Plan Land Use Diagram

<sup>3</sup>85<sup>th</sup> percentile of range provides for EDU/acre

<sup>4</sup>From Chapter 5, Table 5-4 of 2004 Wheatland General Plan Update Background Report

<sup>5</sup>Assumed same as commercial land use

<sup>6</sup>From calculations used in 2005 General Plan Update Sewer Collection Master Plan

<sup>7</sup>From Basis of Design Report-Wheatland Regional Sewer Pipeline Project, April 2021





Once peak wet weather flows were determined, preliminary trunk main layouts were determined. Service Areas C and D (south and north of the current City) would be routed to the Malone Lift Station as this provides a closer connection point for the areas. All other service would be routed to the Jasper Lane pump station. Smaller pump/lift stations would be used overcome localized topography. It is assumed that pipes will be placed in major thoroughfares and arterials. The layout of these major streets was identified in the accompanying traffic impact fee memo for transportation infrastructure. It is assumed that developments will construct their own on-site and off-site infrastructure up to the tie in locations available on these major roadways. The figure indicates the anticipated location of the City mains constructed under the impact fee program. In the new service areas west of Jasper Lane, the pipe layout was determined loosely based on the 2005 Master Plan Update with modifications, such as the flow being sent towards the east to be conveyed to a regional treatment plant rather than being conveyed to the west towards a new City treatment plant.

## Results

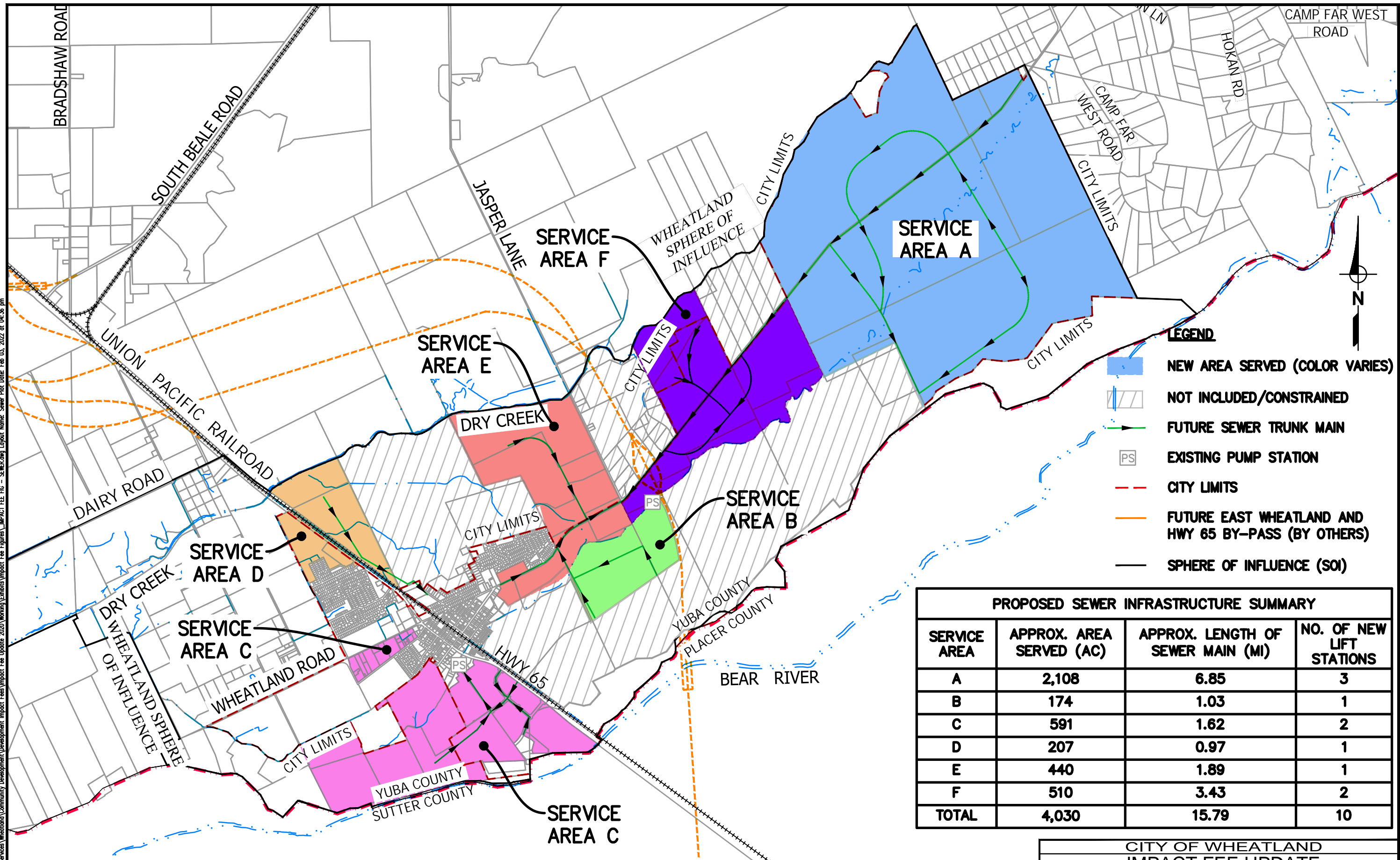
A conceptual layout of the service areas, sewer facility locations, and a summary of the infrastructure required is provided on the figure on the last page of this memo. Table S-1 below provides a summary of infrastructure components and associated costs.

<b>TABLE S-1 SEWER INFRASTRUCTURE COST ESTIMATE</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total</b>
<b>Construction Cost</b>					
1	8-inch Sanitary Sewer	LF	11,800	\$ 140	\$ 1,652,000
2	10-inch Sanitary Sewer	LF	6,400	\$ 160	\$ 1,024,000
3	12-inch Sanitary Sewer	LF	3,200	\$ 180	\$ 576,000
4	15-inch Sanitary Sewer	LF	19,800	\$ 210	\$ 4,158,000
5	18-inch Sanitary Sewer	LF	9,400	\$ 240	\$ 2,256,000
6	21-inch Sanitary Sewer	LF	12,100	\$ 280	\$ 3,388,000
7	24-inch Sanitary Sewer	LF	8,300	\$ 310	\$ 2,573,000
8	27-inch Sanitary Sewer	LF	3,600	\$ 340	\$ 1,224,000
9	30-inch Sanitary Sewer	LF	5,100	\$ 365	\$ 1,861,500
10	36-inch Sanitary Sewer	LF	3,600	\$ 385	\$ 1,386,000
11	Lift Stations	EA	10	\$ 600,000	\$ 6,000,000
12	Upgrade City PS on Jasper Ln	LS	1	\$ 1,300,000	\$ 1,300,000
13	Upgrade City PS at Rancho Rd	LS	1	\$ 1,300,000	\$ 1,300,000
14	Forcemain Jasper PS to OPUD PS	MI	8.8	\$ 1,500,000	\$ 13,200,000
15	Contingency	%	20%	\$ 8,380,000	\$ 8,380,000
<b>Sub-Total (Construction Cost)</b>					<b>\$ 50,279,000</b>
<b>Soft Costs</b>					
12%	Engineering, Environmental, Permitting				\$ 6,034,000
8%	Construction Management, Inspection & Testing				\$ 4,023,000
<b>Sub-Total Soft Costs</b>					<b>\$ 10,057,000</b>
<b>TOTAL ESTIMATED SEWER IMPACT COSTS</b>					<b>\$ 60,336,000</b>



ORIGINAL PLOT DATE: DATE

Xref: Wheatland Drop-off Sewer.dwg, 2005 MP Water Layout.dwg, Wheatland Water.dwg  
 Images: Wheatland Logo Large Oct 2015.jpg, Wheatland Logo Oct 2015.jpg  
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 Layout Name: Sewer Plot Date: Feb 03, 2022 at 04:36 pm

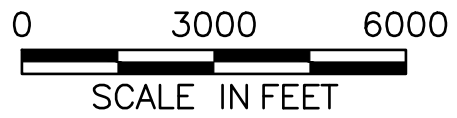


- LEGEND**
- NEW AREA SERVED (COLOR VARIES)
  - NOT INCLUDED/CONSTRAINED
  - FUTURE SEWER TRUNK MAIN
  - PS EXISTING PUMP STATION
  - CITY LIMITS
  - FUTURE EAST WHEATLAND AND HWY 65 BY-PASS (BY OTHERS)
  - SPHERE OF INFLUENCE (SOI)

PROPOSED SEWER INFRASTRUCTURE SUMMARY			
SERVICE AREA	APPROX. AREA SERVED (AC)	APPROX. LENGTH OF SEWER MAIN (MI)	NO. OF NEW LIFT STATIONS
A	2,108	6.85	3
B	174	1.03	1
C	591	1.62	2
D	207	0.97	1
E	440	1.89	1
F	510	3.43	2
<b>TOTAL</b>	<b>4,030</b>	<b>15.79</b>	<b>10</b>

CITY OF WHEATLAND  
 IMPACT FEE UPDATE  
 SCHEMATIC SEWER LAYOUT  
 FEBRUARY 2022

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## Memorandum

**Date:** May 20, 2022  
**To:** Tim Raney – City of Wheatland Community Development Director  
**From:** Dane Schilling – City Engineer  
**Subject:** Water Infrastructure Estimate for the 2022 City of Wheatland Development Impact Fee Update

### Introduction

This memo has been prepared to support the City of Wheatland's 2022 Impact Fee Update. The purpose of this memo is to identify the costs required to expand the City's existing infrastructure to meet the needs of anticipated growth within areas identified for future development, excluding areas designated Urban Reserve (see growth areas on the attached schematic layout). The last thorough analysis of the City's water infrastructure needs was completed in 2005. The following documents were used as a basis of preparing this memo:

- *General Plan Update Background Report* (July 2004)
- *General Plan Update Master Water Plan Technical Report* (September 2005)
- *City of Wheatland General Plan Land Use Diagram* (June 2006)
- *City of Wheatland Proposed General Plan Land Use Diagram* (January 2021)
- *Wheatland Employment Zone Feasibility* (June 7, 2021)

This memo represents an estimate of costs for future City municipal water infrastructure based on the best information available to date. This estimate should be thoroughly updated as new and more detailed information becomes available through subsequent studies. There have been no master plan updates, modeling, preliminary design, or technical studies performed to support the results of this memo, other than the preliminary analysis described herein. This memo should in no way be considered an update to the City's master plan and it is highly encouraged that the City perform master plan updates in the near future.

The 2005 Master Plan Update accounted for supply of water within the City limits and modeled the water supply system extension to development areas outside of the developed areas at that time. The analysis was split up into four quadrants of the City and modeled flows to ensure the system would meet maximum day demand, peak hour demand, and fire flow and storage requirements. Due to the significant changes in future service area, the results of the 2005 Master Water Plan Technical Report are no longer applicable and cannot be re-used as-is to determine the expected water demand, infrastructure, and costs associated with the City's planning horizon. Therefore, this memo details the methodology used in determining the water infrastructure

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needed to serve the future City service areas, and ultimately identify the costs associated with development within the City. The changes to the City of Wheatland service areas are summarized below:

- In February 2011, FEMA published new Flood Insurance Rate Maps (FIRMs) which mapped a large portion of the western area of the 2006 General Plan as a special flood hazard area, thereby greatly reducing the likelihood of development in this area within the General Plan. This resulted in areas in the western portion of the City being identified as unavailable for development due to flooding and have since been designated as urban reserve. These areas no longer require water infrastructure to serve them.
- In 2014 the City annexed roughly 4,500-acres into the City in an area east of the City.
- In addition, some of the newly annexed areas and areas within the City's sphere of influence were designated for agricultural purposes and these areas are not expected to develop in the next 20 years.

In summary, the results of this memo account for the revised service area but do not provide a master plan level of analysis for determining size or placement of wells, water storage tanks, water transmission mains, distribution mains or other supporting infrastructure. The City does not have a water model and no modeling was performed in the preparation of this memo.

## Methodology

The following assumptions were made in the preparation of this memo:

- As stated in the City's 2006 water master plan update, the existing single zone looped water system serving the City service area as it exists today is adequate for the existing service area and small in-fill projects only.
- The existing City water system was not evaluated, and it is assumed for this memo that no modifications, upgrades, or additions are needed to continue to serve the existing service area.
- Additional service areas described in this memo and shown on the accompanying figure are intended to expand the City's system to accommodate new development. Service areas C and D will act as an extension of the existing single zone looped City system. Service areas A, B, E and F are assumed to function as independent zones in the larger system.
- Developments that are currently in progress, such as Caliterra Ranch that are currently entitled are addressing their own water system expansion needs and do not need to be considered in this update.

## Assumptions

The size, location and cost of new water infrastructure was estimated based on gross acreage in each service area. In order to accomplish this step, this memo assumed the following:

- Supply Wells: The 2005 Water Master Plan Update proposed an additional 18 supply wells at 800 gpm each to serve 4 designated quadrants of the City, with each quadrant





receiving a new 1.5-million-gallon (MG) storage tank and high flow booster pump. At the time, the General Plan Update added approximately 3,500 acres of water demand area to the existing City which results in an average of 1 additional well per 250 acres of additional area served.

- Although the proposed tanks are assumed to serve each new service area independently, it would be more cost effective for construction and operation to consolidate storage in fewer but larger tanks of 3 to 5-MG each. For this memo the conservative assumption of multiple 1.5-MG tanks was applied.
- Since no modeling was performed, this study also assumes that on average, one 800 gpm well will serve approximately 250 acres of new service area. This assumption was applied and then the number of wells was further refined to consider topography, ground water conditions, proximity to adjacent zones and proximity to proposed mains.
- It was assumed that groundwater in the proposed service areas is readily available, and that water quality is similar to that being supplied at the existing City wells.
- Wells are assumed to be located throughout the proposed service areas. However, it is possible that groundwater in some of these areas will not be as plentiful as others. If that is the case, wells may need to be constructed in specific locations, possibly outside of a given service area, where groundwater is more accessible.
- New service areas described in this memo and shown on the accompanying figure are intended to be proportioned to the target 20-year growth.

### *Fire Flow*

The fire flow demand and storage requirements were modified by the Wheatland Fire Authority in by a May 9, 2019, memo that reduces the requirement to provide enough flow at any given hydrant to cover two residential fires or one commercial fire, whichever is greater. A single commercial fire requires storage of 3,500 gpm for 4 hours, which results in a minimum tank size of 840,000 gallons. The storage requirements used in the 2005 master plan update were for one commercial plus one residential fire, which calculates to a minimum tank size of 1.5 million gallons (MG). Because the Wheatland Fire Authority memo did not specifically state a reduction in the storage requirement, this memorandum assumes that each new tank will be a minimum of 1.5 MG.

### *Water Meters*

In addition to water supply and storage, the City will need to expand the coverage of its Automated Meter Infrastructure (AMI) system. The City is currently in the process of replacing all of its water meters and endpoints with new meters and endpoints. The City is also installing a fixed network AMI system to automate the meter reading process. The fixed network will need to be expanded as development continues to extend beyond the current service area. The current City service area is covered by one collector unit and one repeater unit. It is assumed that a similar area (500 acres) can be covered by the same amount of infrastructure – one collector and one repeater. At a minimum, it is expected that one collector and one repeater will be installed in each service area with the addition of repeaters in each service area at one additional repeater per additional 250 acres to extend the coverage area of each collector. This estimate can and will vary based on trees, terrain, and other obstructions. It is possible that in the western portion of the City, coverage



can be extended by the addition of repeaters only. The collectors should be installed in the most central location to the area served. In some cases, it may be required to obtain land to install a tower for the collector if attaching the collectors on the new tanks won't be sufficient to establish radio communications. Costs estimates in this memo assume that collectors will be installed on towers built specifically for the AMI system on City owned land and that repeaters will be installed on light poles or at well or tank sites. The cost of the individual meters and endpoints is assumed to be the responsibility of the developer.

### Conclusions

A summary of the length of transmission pipe, number of wells, number of tanks, and AMI collectors and AMI repeaters required is provided in Table W-1. A summary of estimated costs is included on Table W-2. A schematic drawing of the service areas and water main locations is attached.

<b>TABLE W-1 WATER INFRASTRUCTURE SUMMARY</b>						
<b>Service Area<sup>1</sup></b>	<b>Approximate Area Served (ac)</b>	<b>Approximate Length of New Water Main (mi)</b>	<b>No. of New Wells</b>	<b>No. of New Tanks</b>	<b>No. of AMI Collectors</b>	<b>No. of AMI Repeaters</b>
A	2,108	6.27	3	3	4	7
B	174	0.77	2	0	1	1
C	591	2.59	1	0	1	1
D	207	1.35	1	1	1	1
E	440	3.27	3	2	1	1
F	510	3.07	2	1	1	1
<b>Total</b>	<b>4,030</b>	<b>17.32</b>	<b>12</b>	<b>7</b>	<b>9</b>	<b>12</b>

<sup>1</sup>Service areas are shown on the attached Schematic Water Layout exhibit.

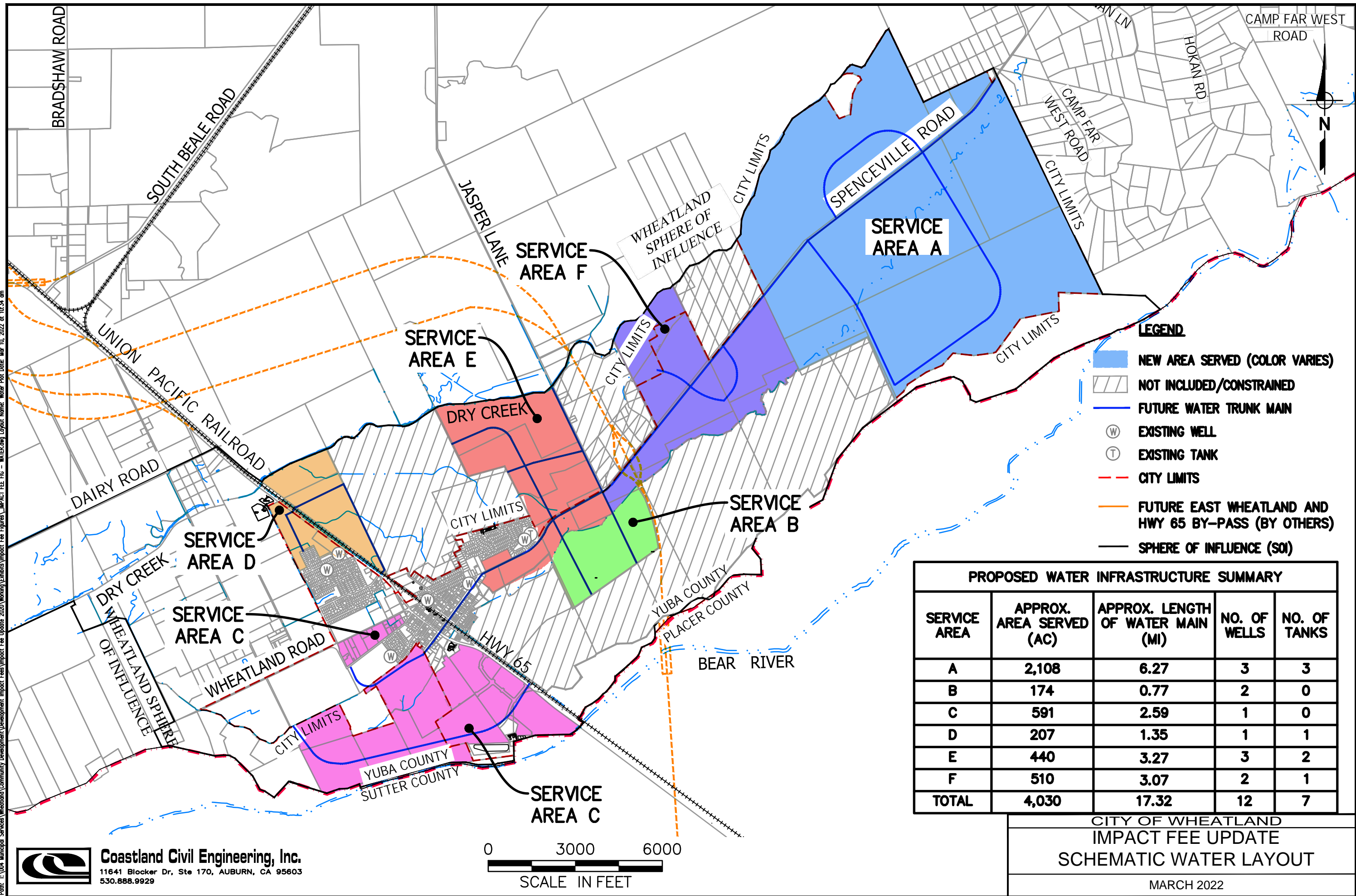


<b>TABLE W-2 WATER IMPROVEMENTS COST ESTIMATE</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total</b>
<b>Construction Cost</b>					
1	New Water Main (6"-14")	LF	91,450	\$ 160	\$ 14,631,936
2	New Well (800 GPM)	EA	12	\$ 1,000,000	\$ 12,000,000
3	New Tank (1.5 MG)	EA	7	\$ 2,400,000	\$ 16,800,000
4	AMI Collector and Tower	EA	9	\$ 125,000	\$ 1,125,000
5	AMI Repeater	EA	12	\$ 50,000	\$ 600,000
6	Contingency	%	30%	\$13,547,000	\$ 13,547,000
<b>Sub-Total Construction Costs</b>					<b>\$ 58,704,000</b>
<b>Soft Costs</b>					
	Engineering, Environmental, Permitting		12%		\$ 7,044,500
	Construction Management, Inspection & Testing		8%		\$ 4,696,300
<b>Sub-Total Soft Costs</b>					<b>\$ 11,740,800</b>
<b>TOTAL ESTIMATED WATER IMPROVEMENTS (Rounded)</b>					<b>\$ 70,500,000</b>



ORIGINAL PLOT DATE: DATE

Xref: Wheatland\_Sewer.dwg, 2023, MP, Water, Layout.dwg, Wheatland, Water.dwg, Wheatland\_Bmp.dwg  
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CITY OF WHEATLAND  
 IMPACT FEE UPDATE  
 SCHEMATIC WATER LAYOUT

MARCH 2022





## Memorandum

**Date:** May 20, 2022  
**To:** Tim Raney – City of Wheatland Community Development Director  
**From:** Dane Schilling – City Engineer  
**Subject:** Storm Drainage Infrastructure Estimate for the 2022 City of Wheatland Development Impact Fee Update

### Introduction

This memo has been prepared to support the City of Wheatland's 2022 Impact Fee Update. The purpose of this memo is to identify the costs required to expand the City's existing infrastructure to meet the needs of anticipated growth within areas identified for future development, excluding areas designated Urban Reserve (see growth areas on the attached schematic layout). The City last completed a thorough analysis of storm drainage infrastructure needs with the *Internal Source Drainage Report, 2005*. The following documents were used as a basis of preparing this memo:

- *General Plan Update Background Report* (July 2004)
- *General Plan Update Internal Source Drainage Report* (November 2005)
- *General Plan Update Internal Source Drainage Cost Allocation Report* (July 2006)
- *City of Wheatland General Plan Land Use Diagram* (June 2006)
- FEMA Flood Insurance Rate Maps (FIRM) Panels 06115C0445D (Feb 17 2011)
- FEMA Letter of Map Revision (LOMR) 11-09-0886P, Bear River Levee (Feb 21, 2011)
- *City of Wheatland Proposed General Plan Land Use Diagram* (January 2021)
- *Wheatland Employment Zone Feasibility* (June 7, 2021)

This memo represents an estimate of costs for future City storm drainage infrastructure based on the best information available to date. This estimate should be thoroughly updated as new and more detailed information becomes available through subsequent studies. There have been no master plan updates, modeling, preliminary designs, or technical studies performed to support the results of this memo, other than the preliminary analysis described herein. This memo should in no way be considered an update to the City's master plan and it is highly encouraged that the City perform master plan updates in the near future.

The 2005 *General Plan Update Internal Source Drainage Report* assessed multiple options for handling future "internal drainage" generated by development areas. A cost allocation report was then prepared based on the Internal Drainage Report's Alternative 4: "The Five Watershed Plan". The Five Watershed Plan divided the existing City and future buildout areas into five drainage watersheds, primarily based on topography, that functioned as independent standalone systems.

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Each of the five watersheds included a storm water detention facility with a pumping plant discharging to either Dry Creek or the Bear River, conveyance piping and parallel channel systems. This alternative proposed parallel existing drainage corridors around the City with new channels that provide sufficient capacity for the ultimate buildout condition.

Since adoption of the 2006 General Plan and subsequent impact fees, three significant events occurred that will alter the expected course of growth in Wheatland. These changes mean that portions of the 2005 GPU Internal Source Drainage Report are no longer applicable and other areas east of the report study area were added, and therefore should not be relied upon to determine the expected drainage layout, runoff volume, storage requirements, infrastructure, and costs associated with the City's growth. The changes observed to the City of Wheatland service area are summarized below:

- In February 2011, FEMA published new Flood Insurance Rate Maps (FIRMs) which mapped a large portion of the western area of the 2006 General Plan as a special flood hazard area, thereby greatly reducing the likelihood of development in this area within the General Plan. This resulted in areas in the western portion of the City being identified as unavailable for development due to flooding and have since been designated as urban reserve. These areas no longer require drainage infrastructure to serve them.
- In 2014 the City annexed approximately 4,500-acres into the City in an area east of the City.
- In addition, some of the newly annexed areas and areas within the City's sphere were designated for agricultural purposes and these areas are not expected to develop in the next 20 years.

In summary, the results of this memo account for the revised and expanded service area but do not provide a master plan level of analysis for determining size or placement of ditches/canals, trunk lines, detention basins and pumping plants.

## Methodology

The following assumptions were made in for the preparation of this memo:

- The purpose of this analysis is to roughly estimate overall costs of City storm drain infrastructure and not to determine actual sizes the facilities in any given area. Therefore, this memo assumes that land uses in the study area are comparable to the land uses assumed in the infrastructure costs from the 2005 Internal Drainage Report and Cost Allocation Report.
- Pipe and canal sizing was not determined for this estimate.
- Detention basin sizing was proportionally estimated based on the Internal Drainage Cost Allocation report as described in the *Design Assumptions* section below and costs were adjusted for inflation to 2022 dollars.
- The existing City service area requires minor upgrades to serve infill areas within the existing service area limits.
- The existing City storm drain system was not evaluated and it is assumed that no major projects are needed to continue to serve the existing service area. However, the Central



City shed area (see Shed G on the attached exhibit) includes a major expansion to the water shed and upgrades or additions to the existing North detention basin will be needed.

- Additions described in this memo and shown on the accompanying figure are intended to be proportioned to the target 20-year growth/population.
- Developments that are approved and currently in construction, such as Caliterra Ranch Villages 1 and 2, have addressed their own storm drain system requirements and are not considered in this update.
- Since the existing studies are based on centralized detention and pumping for each watershed, the basins will need to be constructed before a significant portion of any watershed is developed.

### Assumptions

The next step was to calculate the sizing and identify locations of proposed infrastructure. In order to accomplish this step, this memo assumes the following:

- Detention Basins: The 2005 GPU assumes that each watershed would have its own detention basin and capacity to pump into either Dry Creek or the Bear River. That assumption is carried through in this fee update, and now a total of nine zones, seven detention basins and one modified basin are anticipated.
- Since no modeling or drainage analysis was performed, this study assumes that on average, 1 acre of detention basin footprint for every 30 acres of watershed and 1 acre-foot of storage for every 4 acres of watershed will be needed. These ratios were determined based on the table provided in section 5.2.4 of the Internal Source Drainage Report.
- The Internal Source Drainage Cost Allocation Report provided a cost estimate for detention and pumping of \$59,436,546 for the five watersheds in 2005. The Internal Source Drainage Report considered a total drainage demand area of 3,949 acres (not including Urban Reserve), which gives an average cost of \$15,051 per acre of watershed.
- The Internal Source Drainage Cost Allocation Report identified a total of \$94,851,895 in internal drainage infrastructure costs to cover approximately 3,949 acres of drainage demand areas. Assuming that \$59,436,546 of this is for detention and pumping, that results in \$35,413,349 for channels, piping, and other improvements.
- For the current analysis, the average of \$15,000 per acre of watershed was used to estimate the cost of detention and pumping was applied to the proposed 4,497 acres identified on the attached exhibit.
- Since the topography of the current study area contains greater relief and more existing natural channels than in the 2006 General Plan, it was assumed that 50% less channel improvements were needed. Therefore, the unit cost for channels and other improvements was reduced by 50% in this analysis.
- The Internal Source Drainage Report also included conservative allowances for contingencies and inflation which are reflected in the higher than expected cost per acre of watershed and per EDU. Therefore, the contingency was reduced from 30% to 20% and additional inflation was not applied in the cost estimate presented in this memo.



### Water Quality

Existing drainage courses would be considered waters of the state and therefore developing areas which release waters to them would be required to treat storm water prior to discharge from drainage basis. In some areas, where all new systems are being installed, regional stormwater quality treatment facilities may be used at the regional detention facilities. Use of regional detention facilities for water quality purposes is not guaranteed and should be evaluated on an individual watershed basis in the near future.

### Conclusions

A summary of the watershed areas and detention basin sizing is provided in Table SD-1. A summary of estimated costs is provided on Table SD-2. A conceptual drawing of the service areas and drainage facilities is attached.

<b>TABLE SD-1 STORM DRAIN INFRASTRUCTURE SUMMARY</b>				
<b>Watershed Location</b>	<b>Watershed Area (ac)</b>	<b>Approx. Basin Size (ac)</b>	<b>Approx. Basin Pumping (cfs)</b>	<b>Approx. Basin Volume (ac-ft)</b>
<b>Shed A</b>	634	21	32	159
<b>Shed B</b>	1,467	49	73	367
<b>Shed C</b>	287	10	14	72
<b>Shed D</b>	174	6	9	44
<b>Shed E</b>	107	4	5	27
<b>Shed F</b>	625	21	31	156
<b>Shed G</b>	612	20	31	153
<b>Shed H</b>	400	13	20	100
<b>Shed I</b>	191	6	10	48
<b>Total:</b>	<b>4,497</b>	<b>150</b>	<b>225</b>	<b>1,124</b>
Notes: 1) Service areas are shown on the attached exhibit. 2) Assumes 1 acre of basin footprint for every 30 acres of watershed. 3) Assumes 1 acre-foot of storage for every 4 acres of watershed.				



<b>TABLE SD-2</b>					
<b>STORM WATER INFRASTRUCTURE COST ESTIMATE</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total</b>
<b>Construction Cost</b>					
1	Detention Basins & Outlet Piping	acre	4,497	\$ 15,000	\$ 67,455,000
2	Channels and Other Costs	acre	4,497	\$ 3,100	\$ 13,940,700
3	Contingency	%	20%	\$ 16,279,140	\$ 16,279,140
<b>Sub-Total Construction Cost</b>					<b>\$ 97,675,000</b>
<b>Other Costs</b>					
	Engineering Design & Environmental		12%		\$ 11,721,000
	Construction Management, Inspection & Testing		8%		\$ 7,814,000
<b>Sub-Total Other Costs</b>					<b>\$ 19,535,000</b>
<b>TOTAL ESTIMATED COST (Rounded)</b>					<b>\$117,210,000</b>

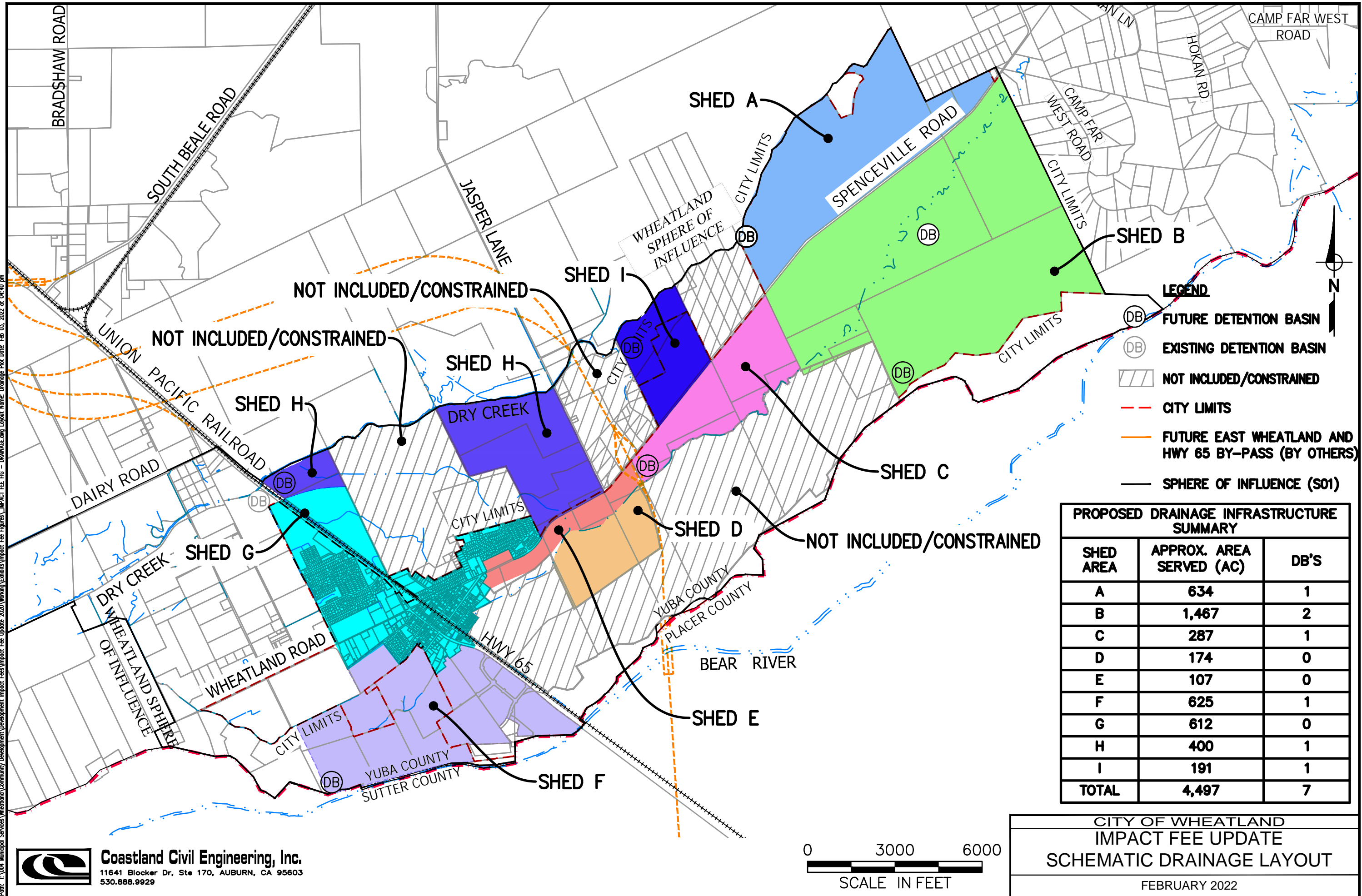




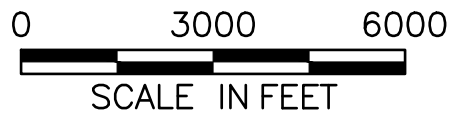
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 Name: Drainage Plot Date: Feb 03, 2022 at 04:40 pm



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CITY OF WHEATLAND  
 IMPACT FEE UPDATE  
 SCHEMATIC DRAINAGE LAYOUT  
 FEBRUARY 2022

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