

CITY OF BRENTWOOD DEVELOPMENT FEE PROGRAM



2024 UPDATE

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INTRODUCTION

Development impact fees are monetary exactions charged by local agencies for the purpose of mitigating the cost of public facilities that are necessary to serve future development. *California Government Code, §66000 et seq.* (“Mitigation Fee Act”) sets guidelines for establishing impact fees, including identifying the fee’s purpose and a reasonable relationship between the need for the public facility, the amount of the fee and the type of development project upon which the fee is imposed. It is the intent that this report substantiates the adoption of the City of Brentwood’s Development Impact Fee Program and Fee Schedule.

PROGRAM OVERVIEW

As residential and non-residential growth increases the demand on the City’s infrastructure, the Development Fee Program is implemented to mitigate these impacts. The Program evaluates planned capital improvements, estimates costs to provide the additional infrastructure and allocates the costs proportionately based upon the demand imposed by the various types of new development.

The *City of Brentwood General Plan (2014)* (“General Plan”) establishes guidelines for planning and development decisions within the City. The Circulation, Community Facilities and Services and Infrastructure Chapters of the General Plan include goals and policies for ensuring the facilities meet the needs of development that is identified. Infrastructure Master Plans, most recently the 2017 Water and Wastewater Master Plans, model user demands and identify specific infrastructure that is necessary to serve the public. The City’s Capital Improvement Program further provides estimated costs and schedule of the planned facilities.

The Development Fee Program, codified in Brentwood Municipal Code Chapter 16.130 (Facility Fees and Charges) augments the General Plan, Infrastructure Master Plans and Capital Improvement Program to make certain the required facilities are adequately funded and costs are apportioned to the various types of development in the form of development impact fees. In circumstances where planned infrastructure will not only serve new development, but also existing residents and utility customers, the cost of the project has been reduced proportionately by the volume of this existing service population (residents and non-residential jobs and businesses) to ensure they are contributing a share equal to their demand. Adjustment to the fees may be made annually by the Engineering News Record Construction Cost Index to ensure revenue is available when construction of the facilities are necessary. These fees are ordinarily collected at issuance of building permit to new development and in the amount in effect at the time of issuance. It is important to note that this Program is **NOT** inclusive of all fees necessary and required during the development process and does **NOT** include fees for City processing, plan checking, inspection, etc. nor does it include fees imposed by outside agencies such as Brentwood Union and Liberty Union High School Districts, East Contra Costa Regional Fee and Financing Authority and Contra Costa County Flood Control and Water Conservation District.

Infrastructure within the City is developed in two ways: It is constructed by the development community in conjunction with their private development project, or it is constructed by the City as part of the Capital Improvement Program. In both situations, the costs of these public improvements are used to generate the fees called for in this document.

FEE SUMMARY

Table 1 summarizes the City’s development impact fees for each facility category and type of land use identified in the General Plan. Subsequent chapters of the program more specifically identify the facilities, cost of facilities, demand factors by land use and cost allocation methodology to develop the fees.

TABLE 1

CITY OF BRENTWOOD DEVELOPMENT FEE PROGRAM* SCHEDULE OF FEES JULY 1, 2024 0% ENR						
Fee Category	RESIDENTIAL per Unit		NON-RESIDENTIAL per Building SF			
	Single Family	Multi-Family	Commercial	Office	Industrial/ Institutional	
Administration	\$ 871.39	\$ 511.42	\$ 0.4703	\$ 0.6175	\$ 0.3689	
Community Facilities	\$ 858.88	\$ 504.07	\$ 0.0122	\$ 0.0160	\$ 0.0096	
Park and Trail	\$ 13,076.44	\$ 9,664.80				
Roadway	\$ 14,566.61	\$ 9,031.30	\$ 5.4279	\$ 6.5113	\$ 4.0204	
Wastewater	\$ 7,890.25	\$ 5,831.68	\$ 1.7936	\$ 2.1198	\$ 1.4721	
Water	\$ 16,290.34	\$ 6,682.22	\$ 1.6777	\$ 2.0648	\$ 1.4339	
<i>City Water fee if in CCWD LV Service Area***</i>	\$ 15,707.23	\$ 6,443.03	\$ 1.6176	\$ 1.9909	\$ 1.3826	
Solid Waste**	\$ 365.38	\$ 148.34	\$ 0.6200	\$ 0.6200	\$ 0.6200	
TOTAL	\$ 53,919.30	\$ 32,373.83	\$ 10.00	\$ 11.95	\$ 7.92	
***See "Areas of Additional Fees Area 3" for outside agency fees to be collected in addition to City fee *City Council Resolution 2021-20 **City Council Resolution 2023-77						

LAND USE CATEGORIES AND PROJECTIONS

Land use, dwelling unit density, dwelling unit occupancy and service population assumptions are based upon the *City of Brentwood Municipal Code and 2014 General Plan including General Plan Amendments since General Plan adoption*. Land use categories are described below:

Land Use Categories

- **Single-Family Residential (SFR)**
The single-family residential category includes residential development with a mid-range density of 8 units or less per acre. This category also includes single dwellings on individual legal parcels.
- **Multi-Family Residential (MFR)**
The multi-family residential category includes residential development with a mid-range density greater than 8 units per acre.
- **Commercial**
The commercial category includes non-residential development with retail and service activities, including, but not limited to, restaurants, gas stations and convenience centers.
- **Office**
The office category includes non-residential development with professional and administrative office activities, including, but not limited to legal, financial, medical and dental activities.
- **Industrial**
The industrial category includes industrial and manufacturing activities. This category also includes institutional and semi-public facilities.

Individual Circumstances

Some development may include a combination of the above land use and/or activities. In such cases, fees will be calculated and imposed for each land use category included as a part of the development.

Pursuant to the Mitigation Fee Act, for development or land uses that do not clearly fall within the previously listed categories, the City Engineer will calculate fees through a reasonable interpretation of the Mitigation Fee Act and the City's Fee program.

Growth Projections

Residential and employee population growth projections, shown in Table 2, are established by the General Plan. Projections include future land use and development within the Brentwood City limits, Sphere of Influence and Planning Area.

TABLE 2

GROWTH PROJECTIONS*		
Land Use	Remaining Dwelling Units/Bldg SF	Additional Population
Residential		Residents
Single Family	4,547	14,640
Multi-Family	5,924	14,098
	<u>10,471</u>	<u>28,738</u>
Non-Residential		Employees
Commercial	4,942,520	10,405
Office	2,782,997	7,522
Industrial/Institutional	5,138,516	8,288
	<u>12,864,033</u>	<u>26,215</u>
Total Additional Service Population		54,953

* 2014 General Plan: including Amendments and excluding permits issued thru 6-30-20

ADMINISTRATION

City staff time and resources are necessary to administer the Development Fee Program, in addition to managing the planning, design and construction of the Capital Improvement Program and facilities identified in this report. Staff positions assigned to the Capital Improvement Program (Table 5) and Development Fee Program (Table 4) management are identified, along with allotted time. Position rates are as outlined in the *City of Brentwood 2020-21 Cost Allocation Plan* and include city-wide and departmental overhead expenses.

Total Development Fee Program administrative expenses are allocated proportionately to future development on a service population basis. Occupancy per residential unit and estimated future employee population are pursuant to the General Plan.

Table 3 summarizes the Administration Fee per residential dwelling unit and per non-residential building square footage.

Capital Improvement Program management expenses are distributed to the individual fee categories proportionate to each category's share of total program facility costs (Table 6).

TABLE 3

ADMINISTRATION COST SHARE				
Land Use	Service Population	% of Program Administration	Share of Program Administration	Cost per DU/ Bldg SF
Residential				
Single Family	14,640	27%	\$ 2,632,565	\$ 737.86
Multi-Family	14,098	26%	\$ 2,535,050	\$ 433.05
Non-Residential				
Commercial	10,405	19%	\$ 1,871,041	\$ 0.3982
Office	7,522	14%	\$ 1,352,507	\$ 0.5229
Industrial/Institutional	8,288	15%	\$ 1,490,303	\$ 0.3124
	54,953			
Total Cost to Program			\$ 9,881,467	

TABLE 4

ADMINISTRATION			
Position	Position Cost*	% of Position Time	Annual Cost to Program
Director of Public Works/City Engineer	\$ 898,164.00	10%	\$ 89,816
Assistant Director of Public Works/Engineering	\$ 775,224.00	10%	\$ 77,522
Senior Analyst, Public Works	\$ 582,894.00	35%	\$ 204,013
Project Services Specialist, Public Works	\$ 454,752.00	10%	\$ 45,475
Community Development Specialist	\$ 451,296.00	20%	\$ 90,259
Director of Finance and Information Systems	\$ 493,740.00	10%	\$ 49,374
Accounting Manager	\$ 328,842.00	10%	\$ 32,884
Accountant II, Finance	\$ 249,696.00	10%	\$ 24,970
Accounting Technician, Finance	\$ 328,842.00	15%	\$ 49,326
Park/Maintenance Manager	\$ 483,606.00	5%	\$ 24,180
SUBTOTAL			\$ 687,821
Program Buildout		Years	\$ 15
Fee Account Beginning Balance (6-30-20)			\$ (435,841)
Total Cost to Program			\$ 9,881,467

* Includes Departmental and Citywide Overhead Per FY 2020-21 Cost Allocation Plan

TABLE 5

CAPITAL IMPROVEMENT PROGRAM MANAGEMENT				
Position	Position Cost*	% of Position Time	Annual Cost to Program	
Director of Public Works/City Engineer	\$ 898,164.00	10%	\$	89,816
Assistant Director of Public Works/Engineering	\$ 775,224.00	40%	\$	310,090
Engineering Manager	\$ 683,154.00	50%	\$	341,577
Project Services Specialist, Public Works	\$ 454,752.00	60%	\$	272,851
Technical Assistant II, Public Works	\$ 372,402.00	70%	\$	260,681
Technical Assistant I, Public Works	\$ 345,654.00	15%	\$	51,848
Senior Construction Inspector, Public Works	\$ 510,894.00	20%	\$	102,179
Construction Inspector II, Public Works	\$ 472,230.00	50%	\$	236,115
Engineering Technician	\$ 438,696.00	30%	\$	131,609
Associate Engineer	\$ 510,876.00	90%	\$	459,788
Senior Analyst, Public Works	\$ 582,894.00	5%	\$	29,145
Parks Planner	\$ 422,604.00	15%	\$	63,391
SUBTOTAL			\$	2,349,090
Years to Program Buildout			\$	15
Total Cost to Program			\$	35,236,350

* Includes Departmental and Citywide Overhead Per FY 2020-21 Cost Allocation Plan

TABLE 6

CAPITAL IMPROVEMENT PROGRAM MANAGEMENT DISTRIBUTION				
Facility Category	Total Facility Cost	% of Project Management	Share of Project Management	
Community Facilities				
public safety component	\$ 100,926.95	0%	\$	12,268
community amenity component	\$ 1,949,224.56	1%	\$	236,944
Parks and Trails	\$ 63,267,660.36	22%	\$	7,690,681
Roadway	\$ 92,349,259.98	32%	\$	11,225,778
Wastewater	\$ 61,277,286.28	21%	\$	7,448,736
Water	\$ 70,928,718.09	24%	\$	8,621,943
	\$ 289,873,076.22			
Total Cost to Program			\$	35,236,350

COMMUNITY FACILITIES

Various facilities are identified in the Parks, Trails and Recreation Master Plan Capital Improvement Program to implement goals included within the General Plan, specifically:

- Community Services and Facilities Goal 3:
Maintain a safe community through the provision of high quality police services and crime prevention measures.
- Community Services and Facilities Goal 5:
Enhance the quality of life for all city residents through the provision of cultural and social resources including quality schools, libraries, medical and other community services and facilities.

To appropriately evaluate costs for the types of facilities that serve the future service population, the Community Facilities Fee has been divided into two components; 1) Public Safety that provides facilities to serve the population at large, and 2) Community Amenity to fund facilities utilized by residents. The specific facilities, cost and timing are identified in the Capital Improvement Program and summarized in Table 8. Total capital facility costs are allocated on a cost per unit of demand over the estimated service population of each future land use, including residents and non-residential job development, and adjusted on a percentage of current vs. General Plan service population build-out.

Table 7 summarizes the Public Safety and Community Amenity components of the Community Facilities Fee per residential dwelling unit and the Public Safety component of the Community Facilities Fee per non-residential building square footage.

TABLE 7

COMMUNITY FACILITIES COST SHARE				
Land Use	Service Population	% of Service Population	Cost Share	Cost per DU/Bldg SF
Public Safety Component				
Residential				
Single Family	14,640	27%	\$ 68,408	\$ 19.17
Multi-Family	14,098	26%	\$ 65,875	\$ 11.25
Non-Residential				
Commercial	10,405	19%	\$ 48,620	\$ 0.0103
Office	7,522	14%	\$ 35,146	\$ 0.0136
Industrial/Institutional	8,288	15%	\$ 38,726	\$ 0.0081
Total Service Population	54,953		\$ 256,775	
Community Amenity Component				
Residential				
Single Family	14,640	51%	\$ 2,526,364	\$ 708.09
Multi-Family	14,098	49%	\$ 2,432,783	\$ 415.58
Total Service Population	28,738		\$ 4,959,148	

TABLE 8

COMMUNITY FACILITIES			
Facility Description		Public Safety Component Cost	Community Amenity Component Cost
Police Substation		\$ 250,000	
	existing service population share	\$ (149,073)	
Youth Center Rehabilitation			\$ 1,200,000
	existing population share		\$ (832,566)
Windsor Way Recreational Facility			\$ 2,000,000
	existing population share		\$ (1,387,610)
Senior Center Development Growth			\$ 3,500,000
	existing population share		\$ (2,428,318)
Event Center Phases I - III			\$ 14,300,000
	existing population share	\$ -	\$ (9,921,412)
	existing funding	\$ -	\$ (4,480,869)
Subtotal Construction Costs		\$ 100,927	\$ 1,949,225
Administration			Cost
Engineering Design	12%	\$ 12,111	\$ 233,907
Financing	10%	\$ 10,093	\$ 194,922
Construction Contingency	10%	\$ 10,093	\$ 194,922
CIP Project Management		\$ 12,268	\$ 236,943.56
Public Information	0.25%	\$ 252	\$ 4,873
Municipal Service Center debt service		\$ 80,241	\$ 1,549,716
Outstanding Reimbursement Obligations (6-30-20)			\$ -
Fee Account Beginning Balance (6-30-20)		\$ 30,789	\$ 594,639
TOTAL FACILITY COSTS		\$ 256,775	\$ 4,959,148

FIRE

The Fire Facility Fee was calculated on the per capita existing facility standard of the East Contra Costa Fire Protection District, formerly East Diablo Fire Protection District *“East Diablo Fire Protection District Facilities Financing Plan and Impact Fee Study (Hausrath Economics Group Study 1998)”*. The *“City of Brentwood Fire Mitigation Fee Study (2004)”* further identified the need for an additional fire station to serve new development and increased the existing Fire Fee by a factor necessary to provide adequate funds. These studies and fees have been previously approved and adopted by City Council Resolutions 98-85 (5-26-1998) and 2004-32 (2-10-2004), are not a part of this study, and are listed for reference only. The City previously collected these fees as part of a regional effort that was coordinated by the Fire Protection District. While that regional effort has ceased, the fees continue to be collected for future City use to meet the City’s demand for this critical infrastructure

The Citygate Associates *“Deployment Performance and Headquarters Staffing Adequacy Study (June 2016)”* confirms the need for four fire stations within the city limits of Brentwood to meet public safety response times at industry level standards. The City Engineer has determined that maintaining fees at amounts adopted by previous studies (including inflationary increases) mentioned above is adequate to support the stations necessary to serve new development.

Pursuant to Resolution 2020-101, payment of the East Contra Costa Fire Protection District Development Impact Fee will provide a credit against the City’s Fire Impact Fee for each residential unit or non-residential building. If the City’s Fire Impact Fee for a particular development is higher than the amount of the East Contra Costa Fire Protection District Development Impact Fee, payment of the East Contra Costa Fire Protection District Development Impact Fee shall be deemed to fully satisfy payment of the City’s Fire Impact Fee.

PARK AND TRAIL FACILITIES

The General Plan outlines goals and policies to ensure high quality parks, trails and recreation facilities city wide. The following specific policies set forth park acreage standards for new development:

- Community Services and Facilities Policy 2-2:
Achieve and maintain overall citywide ratio of 5 acres of park land per 1,000 residents.
- Community Services and Facilities Policy 2-3:
*Park acreage should be provided in accordance with the following standards:
Neighborhood Park – 3 acres per 1,000 residents
Community Park – 2 acres per 1,000 residents*

Through this facility demand standard, future park acreage has been identified pursuant to the General Plan new development population (Table 10). The average per acre park construction cost is determined using approximate current industry materials and infrastructure construction costs for improvements which are consistent with city-wide park design standards and typical park amenities as approved by the Parks and Recreation Commission during Conceptual Park Plan Review (Tables 11A and 11B). Future trail segments are identified in the Parks, Trails and Recreation Master Plan.

Table 9 summarizes the Park and Trail Facilities Fee per residential dwelling unit. Park and trail total facility costs are allocated proportionately to future residential development on a population volume basis. Non-residential development is not allocated a cost share as they do not contribute to the facility demand standard of 5 acres per 1,000 residents.

TABLE 9

PARK AND TRAIL COST SHARE					
Land Use	Remaining Dwelling Units	Additional Population	% of Additional Population	Cost Share	Cost per DU/Bldg SF
Residential					
Single Family	4,547	14,640	51%	\$ 50,345,424	\$ 11,072.59
Multi-Family	5,924	14,098	49%	\$ 48,480,545	\$ 8,183.75
Total Additional Population		28,738	100%	\$ 98,825,969	

TABLE 10

PARK AND TRAIL FACILITIES				
Facility Description				Cost
Park Construction	5 Acres per 1,000 residents	103.58 Acres	\$454,667 per Acre	\$ 47,095,187
	less approved construction 40.11 Ac			
Pedestrian/Bicycle Trails		58,080 LF	\$95.00 per LF	\$ 5,517,600
Pedestrian Bridge/Undercrossing		3	\$1,000,000 EA	\$ 3,000,000
Sand Creek Sports Park/Recreational Facility			\$ 25,000,000.00	\$ 25,000,000
			less existing population share	(\$17,345,127)
Subtotal Construction Costs				\$ 63,267,660
Administration				Cost
Land Acquisition		103.58 Acres	\$150,000 per Acre	\$ 15,537,250
Land Acquisition	less existing park acreage	-57.04 Acres	\$150,000 per Acre	\$ (8,556,000)
Engineering Design			12%	\$ 7,592,119
Financing			10%	\$ 6,326,766
Construction Contingency			10%	\$ 6,326,766
CIP Project Management				\$ 7,690,681
Public Information			0.25%	\$ 158,169
Master Plan Updates				\$ 200,000
Outstanding Reimbursement Obligations (6-30-20)				\$ 1,807,134
Fee Account Beginning Balance (6-30-20)				\$ (1,524,577)
TOTAL FACILITY COSTS				\$ 98,825,969

TABLE 11

AVERAGE PARK CONSTRUCTION COST (PER ACRE)			
Item	Quantity	Unit Price	Cost
LAND DEVELOPMENT			
Demolition	1 AC	\$2,000 per AC	\$ 2,000.00
Clearing and Grubbing	1 AC	\$1,500 per AC	\$ 1,500.00
Grading	1 AC	\$10,000 per AC	\$ 10,000.00
Fine Grading	1 AC	\$9,583 per AC	\$ 9,583.20
Drainage	1 AC	\$1,500 per AC	\$ 1,500.00
UTILITIES			
Electrical Meter Pedestal	1 EA	\$2,000 EA	\$ 2,000.00
Water Service - NP	1 EA	\$1,000 EA	\$ 1,000.00
Water Service - Potable	1 EA	\$1,000 EA	\$ 1,000.00
Backflow Preventer	1 EA	\$1,200 EA	\$ 1,200.00
HARDSCAPE AND FENCING			
Concrete Path (6' wide x 300 LF))	1,800 SF	\$5.00 per SF	\$ 9,000.00
Concrete Areas	400 SF	\$5.00 per SF	\$ 2,000.00
Mow Band (1' wide)	100 LF	\$6.00 per LF	\$ 600.00
Mow Band at Fence (2' wide)	200 LF	\$8.00 per LF	\$ 1,600.00
Concrete Two-Rail Fencing	200 LF	\$30.00 per LF	\$ 6,000.00
IRRIGATION			
Irrigation Controller	1 EA	\$14,000 EA	\$ 14,000.00
Booster Pump	1 EA	\$35,000 EA	\$ 35,000.00
Irrigation	36,800 SF	\$2.00 per SF	\$ 73,600.00
PLANTING			
Soil Preparation	36,800 SF	\$.18 per SF	\$ 6,624.00
Turf	18,400 SF	\$.25 per SF	\$ 4,600.00
Ground Cover	3,000 SF	\$.45 per SF	\$ 1,350.00
Shrub (5 Gal)	80 EA	\$39.00 EA	\$ 3,120.00
Tree (15 Gal)	16 EA	\$165.00 EA	\$ 2,640.00
Tree (24" Box)	10 EA	\$425.00 EA	\$ 4,250.00
AMENITIES			
Drinking Fountain	1 EA	\$3,000 EA	\$ 3,000.00
Trash/Recycle Receptacles	3 EA	\$1,000 EA	\$ 3,000.00
Picnic Table	2 EA	\$2,500 EA	\$ 5,000.00
Park Bench	3 EA	\$1,500 EA	\$ 4,500.00
Bicycle Rack	1 EA	\$1,000 EA	\$ 1,000.00
Shade Structure	2 EA	\$20,000 EA	\$ 40,000.00
Play Area/Structure or Court (4,000 SF	1 EA	\$200,000 EA	\$ 200,000.00
Park Monument	1 EA	\$4,000 EA	\$ 4,000.00
COST PER ACRE			\$ 454,667

ROADWAY FACILITIES

The Circulation Element of the General Plan provides a framework for roadway transportation facilities (Tables 13-15) and guides development of the City's transportation system. Once necessary future roadways are identified, roadway design standards are further guided by The City of Brentwood Standard Plans and Specifications (Tables 16, 17A-G), with street sections necessary to serve additional traffic demand resulting from increased development.

Table 12 summarizes traffic demand generated as a result of additional development and allocates the cost of roadway facilities proportionately, based upon total peak hour trip generation volume, for each land use. Commercial trip generation volume is adjusted for traffic trips that were not originated by the commercial development and are a result of pass-by traffic. Commercial, Office and Industrial trip generation volume serving local residential development is allocated to residential traffic volume.

TABLE 12

ROADWAY COST SHARE					
Land Use	Remaining Dwelling Units/Bldg SF	Peak Hour Trips**	% of Traffic Generation	Cost Share	Cost per DU/Bldg SF
Residential					
Single Family	4,547	4,547	36%	\$ 56,082,710	\$ 12,334.41
Multi-Family	5,924	3,673	29%	\$ 45,302,806	\$ 7,647.33
Non-Residential					
Commercial	4,942,520	1,842	14%	\$ 22,716,364	\$ 4.60
Office	2,782,997	1,244	10%	\$ 15,343,999	\$ 5.51
Industrial/Institutional	5,138,516	1,418	11%	\$ 17,493,035	\$ 3.40
Total Traffic Trips		12724	100%	\$ 156,938,914	

**ITE Trip Generation 9th Edition

TABLE 13

ROADWAY FACILITIES				
Facility Description		Unit Cost		Cost
New Roadways				
Residential 2-Lane Collector (60' RoW)	2,605 LF	\$	672	\$ -
Industrial/Commercial Street (64' RoW)	LF	\$	30	\$ -
Modified 2-Lane Collector (96' RoW)	13,148 LF	\$	234	\$ 3,074,660
4-Lane Arterial (140' RoW)	21,695 LF	\$	534	\$ 11,575,150
Widened Roadways				
Residential 2-Lane Collector (60' RoW)	33,801 LF	\$	539	\$ -
4-Lane Arterial (140' RoW)	26,415 LF	\$	638	\$ 16,862,279
4-Lane Arterial (140' RoW) CIP	12,907 LF	\$	1,413	\$ 18,232,325
6-Lane Arterial (164' RoW) CIP	3,162 LF	\$	1,503	\$ 4,753,510
Crossings with other Utility Districts/Agencies/Creeks				
Railroad Undercrossing	1	\$30,262,000 per xing	\$	30,262,000
		existing service population share		(\$18,044,995)
Railroad At-Grade Crossing	1	\$2,000,000 per xing	\$	2,000,000
Structures over EBMUD/CCWC	2	\$150,000 per xing	\$	300,000
Structures Bridges	3	\$2,500,000 per xing	\$	7,500,000
Traffic Signals				
3-way	5.5	\$270,000 each	\$	1,485,000
4-way	7	\$300,000 each	\$	2,100,000
Priority Area 1 Traffic Mitigation*			\$	3,010,000
Overhead to Underground Utility Conversion - CIP Only	16,069 LF	\$450.00 per LF	\$	7,231,050
Soundwall - CIP Only	16,069 LF	\$20.00 per SF	\$	1,928,280
Bus Turnout and Shelter	5	\$16,000 EA	\$	80,000
Subtotal Construction Costs			\$	92,349,260
Administration				
Land Acquisition	131.67 Acres	\$200,000 per Acre	\$	26,333,223
Engineering Design		12%	\$	11,081,911
Financing		10%	\$	9,234,926
Traffic Control		2%	\$	1,846,985
Construction Contingency		10%	\$	9,234,926
CIP Project Management			\$	11,225,778
Public Information		0.25%	\$	230,873
General Plan Update			\$	10,000
Existing Roadway Bond Debt Service			\$	2,857,803
Outstanding Reimbursement Obligations (6-30-20)			\$	731,036
Fee Account Beginning Balance (6-30-20)			\$	(8,197,808)
TOTAL FACILITY COSTS			\$	156,938,914

* see PA-1 Specific Plan Mitigation Measures November 2018

TABLE 14

ROADWAY PROJECTS			
NEW ROADWAYS*			
Roadway Section	Description	Limits	Length
4-Lane Arterial (140' RoW)	American Avenue East Sand Creek Road Heidorn Ranch Road Jeffery Way Hillcrest Avenue Neroly Road (landscaped parkway) Sand Creek Road	Existing terminus - Balfour Rd. City limits - Sellers Ave. Future Sand Creek Rd. - Old Sand Creek Rd. Empire Ave. - Amber Ln. Balfour Rd. - Sand Creek Rd. Evergreen Ct. - Brentwood Blvd. Heidorn Ranch Rd. - SR 4	4,300 LF 1,850 LF 500 LF 1,835 LF 7,250 LF 3,660 LF 2,300 LF <hr/> 21,695 LF 40 AC
Modified 2-Lane Collector (96' RoW)	PA-1 A Street PA-1 B Street PA-1 C Street Amber Lane Empire Avenue John Muir Parkway Lone Tree Way	Heidorn Ranch Rd. - B Street Old Sand Creek Rd. - A Street Heidorn Ranch Rd. - SR 4 Jeffery Way - Sand Creek Rd. SR 4 - CCWD Foothill Dr. - Ventura Dr. Brentwood Blvd. - Delta Rd.	625 LF 2,375 LF 1,460 LF 1,458 LF 745 LF 1,985 LF 4,500 LF <hr/> 13,148 LF 11 AC
Industrial/Commercial Street (64' RoW)			<hr/> 00 AC
Residential 2-Lane Collector (60' RoW)	Grant Street Sycamore Avenue	Minnesota Ave. - O'Hara Ave. City limits - Sellers Ave.	750 LF 1,855 LF <hr/> 2,605 LF 4 AC
Crossings with other Utility Districts/Agencies/Creeks	Empire Avenue Grant Street Jeffery Way Sand Creek Road	CCWD Railroad EBMUD Sand Creek	
WIDENED ROADWAYS*			
6-Lane Arterial (164' RoW)	CIP Lone Tree Way	Fairview Ave. - O'Hara Ave.	3,162 LF 8 AC
4-Lane Arterial (140' RoW)	Balfour Road CIP Brentwood Boulevard North CIP Brentwood Boulevard North CIP Brentwood Boulevard South Empire Avenue Heidorn Ranch Road CIP Lone Tree Way Marsh Creek Road O'Hara Avenue O'Hara Avenue Shady Willow Lane	Deer Valley Rd. - W. Country Club Dr. Lone Tree Way - Delta Rd. Havenwood Ave. - Lone Tree Way Fir St. - Chestnut St. Lone Tree Way - City Limits Old Sand Creek Rd. - C Street O'Hara Ave. - Brentwood Blvd. SR 4 - Walnut Blvd. North of Lone Tree Way Second St. - Sand Creek Rd. Sand Creek - Empire Ave.	7,415 LF 2,664 LF 3,676 LF 1,500 LF 3,110 LF 3,700 LF 5,067 LF 7,095 LF 1,455 LF 2,200 LF 1,440 LF <hr/> 39,322 LF 72 AC
Modified 2-Lane Collector (96' RoW)	Lone Tree Plaza Drive	Heidorn Ranch Rd. - SR 4	1,440 LF 1,440 LF <hr/> 1 AC
Residential 2-Lane Collector (60' RoW)	Deer Valley Road Delta Road Delta Road Sellers Avenue Sunset Road	South SPA H - North SPA 2 Brentwood Blvd - Marsh Creek Marsh Creek - Sellers Ave. Chestnut St. - Delta Rd. City limits - Sellers Ave.	13,605 LF 3,850 LF 1,422 LF 13,114 LF 1,810 LF <hr/> 33,801 LF 26 AC
Crossings with other Utility Districts/Agencies/Creeks	Brentwood Boulevard Delta Road Lone Tree Way	Marsh Creek Marsh Creek Railroad	

*2014 General Plan Circulation Element

TABLE 15

ROADWAY PROJECTS			
TRAFFIC SIGNALS			
Intersection Location	Signal Type	Cost Share	Fee Program Share
Balfour Road/Deer Valley Road	3-way	City/Antioch	50%
Balfour Road/Hillcrest Avenue	3-way	City	100%
Balfour Road/American Avenue	3-way	City	100%
Balfour Road/Sellers Avenue	4-way	City	100%
Brentwood Boulevard/Guthrie Lane	4-way	City	100%
Brentwood Boulevard/Neroly Road/Delta Road	4-way	City/Oakley	50%
Brentwood Boulevard between Lone Tree Way/Delta Road	4-way	City	100%
East Sand Creek Road/Sellers Avenue	3-way	City	100%
Heidorn Ranch Road/Prewett Ranch Road	4-way	City/Antioch	50%
Jeffrey Way/Amber Lane	3-way	City	100%
Lone Tree Way/between Smith Road and Tilton Lane	3-way	City	100%
Oak Street/Garin Parkway	4-way	City	50%
Sand Creek Road/Capital Parkway/Bridle Gate Drive	4-way	City	100%
Sand Creek Road/Heidorn Ranch Road	4-way	City/Antioch	50%
Walnut Boulevard/Continente Avenue	4-way	City	100%

TABLE 16

ROADWAY UNIT COSTS	
Item	Unit Price
Land	\$200,000 per AC
Clearing and Grubbing	\$1,500 per AC
Earthwork	\$5.00 per CY
Erosion Control/SWPPP	\$5,000 per AC
Green Infrastructure	\$15.00 per SF
Shoulder Backing	\$25.00 per CY
Pavement AC 5"	\$.50 per SF/IN
Pavement Class II AB 20"	\$.20 per SF/IN
Geofabric	\$.50 per SF
Pavement Overlay (2" thick)	\$1.00 per SF
Grind and Overlay (2" thick)	\$2.00 per SF
Pavement/Concrete Removal	\$1.50 per SF
Curb and Gutter	\$25.00 per LF
Median Curb	\$25.00 per LF
Sidewalk	\$25.00 per LF
Curb Access	\$3,000 EA
Storm Drain Line (24" avg)	\$70.00 per LF
Storm Drain Inlet - Type A	\$3,000 EA
Signing	\$2,000 per Mile
Striping	\$11,500 per Mile
Standard Street Light (LED)	\$10,000 EA
Decorative Street Light (LED)	\$10,000 EA
Fiber Optic Conduit (2-4")	\$20.00 per LF
Fiber Optic Conduit (2-2")	\$20.00 per LF
Overhead to Underground Utility Conversion	\$450.00 per LF
Traffic Signal 3-way	\$270,000 EA
Traffic Signal 4-way	\$300,000 EA
Soundwall	\$20.00 per SF
Parkway Landscaping and Irrigation	\$5.00 per SF
Median Landscaping and Irrigation	\$5.00 per SF
Irrigation Controller	\$14,000 EA
Bus Turnout w/Concrete pad	\$6,000 EA
Bus Shelter	\$10,000 EA
Structure over EBMUD/CCWD	\$150,000 EA
Railroad Undercrossing	\$30,262,000 EA
Railroad At-Grade Crossing	\$2,000,000 EA
Structure Bridges	\$2,500,000 EA

TABLE 17 A

ROADWAY CONSTRUCTION COSTS					
RESIDENTIAL COLLECTOR STREET STANDARD ST-4 60' RIGHT-OF-WAY - 500 LINEAR FEET					
Item	Unit Cost	New Road		Widen Road	
		Quantity	Cost	Quantity	Cost
Clearing and Grubbing	\$1,500 per AC	0.69	\$ 1,035.00	0.39	\$ 585.00
Earthwork	\$5.00 per CY	1,667.00	\$ 8,335.00	1,025.00	\$ 5,125.00
Erosion Control/SWPPP	\$5,000 per AC	0.69	\$ 3,450.00	0.69	\$ 3,450.00
Green Infrastructure	\$15.00 per SF	1,040.00	\$ 15,600.00	1,040.00	\$ 15,600.00
Pavement AC	\$.50 per SF/IN	18,500.00	\$ 46,250.00	7,500.00	\$ 18,750.00
Pavement Class II AB	\$.20 per SF/IN	18,500.00	\$ 74,000.00	7,500.00	\$ 30,000.00
Geofabric	\$.50 per SF	20,000.00	\$ 10,000.00	9,000.00	\$ 4,500.00
Pavement Overlay (2" thick)	\$1.00 per SF	-	\$ -	11,000.00	\$ 11,000.00
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	2,000.00	\$ 3,000.00
Curb and Gutter	\$25.00 per SF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Sidewalk	\$25. per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Storm Drain Line (24" avg)	\$70.00 per LF	582.00	\$ 40,740.00	582.00	\$ 40,740.00
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00
Striping	\$11,500 per Mile	0.10	\$ 1,150.00	0.10	\$ 1,150.00
Decorative Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00
Fiber Optic Conduit (2-2")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00
Parkway Landscaping and Irrigation	\$5.00 per SF	3,460.00	\$ 17,300.00	3,460.00	\$ 17,300.00
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00
TOTAL COST			\$ 336,060.00		\$ 269,400.00
LINEAR FOOT PRICE			\$ 672		\$ 539
DEVELOPMENT RESPONSIBILITY			\$ 672		\$ 539

TABLE 17B

ROADWAY CONSTRUCTION COSTS					
INDUSTRIAL/COMMERCIAL STREET STANDARD ST-3 64' RIGHT-OF-WAY - 500 LINEAR FEET					
Item	Unit Cost	New Road		Widen Road	
		Quantity	Cost	Quantity	Cost
Clearing and Grubbing	\$1,500 per AC	0.73	\$ 1,095.00	0.44	\$ 660.00
Earthwork	\$5.00 per CY	1,778.00	\$ 8,890.00	1,056.00	\$ 5,280.00
Erosion Control/SWPPP	\$5,000 per AC	0.73	\$ 3,650.00	0.44	\$ 2,200.00
Green Infrastructure	\$15.00 per SF	1,000.00	\$ 15,000.00	1,000.00	\$ 15,000.00
Pavement AC	\$.50 per SF/IN	20,500.00	\$ 51,250.00	7,500.00	\$ 18,750.00
Pavement Class II AB	\$.20 per SF/IN	20,500.00	\$ 82,000.00	7,500.00	\$ 30,000.00
Geofabric	\$.50 per SF	22,000.00	\$ 11,000.00	9,000.00	\$ 4,500.00
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	4,000.00	\$ 6,000.00
Curb and Gutter	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Sidewalk	\$25. per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Storm Drain Line (24" avg)	\$70.00 per LF	590.00	\$ 41,300.00	590.00	\$ 41,300.00
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00
Striping	\$11,500 per Mile	0.10	\$ 1,150.00	0.10	\$ 1,150.00
Standard Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00
Fiber Optic Conduit (2-2")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00
Parkway Landscaping and Irrigation	\$5.00 per SF	3,500.00	\$ 17,500.00	3,500.00	\$ 17,500.00
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00
TOTAL COST			\$ 351,035.00		\$ 260,540.00
LINEAR FOOT PRICE			\$ 702		\$ 521
DEVELOPMENT RESPONSIBILITY			\$ 672		\$ 539
LINEAR FOOT REIMBURSEMENT PRICE			\$ 30		\$ (18)

TABLE 17C

ROADWAY CONSTRUCTION COSTS					
COLLECTOR STREET STANDARD ST-2 96' RIGHT-OF-WAY - 500 LINEAR FEET					
Item	Unit Cost	New Road		Widen Road	
		Quantity	Cost	Quantity	Cost
Clearing and Grubbing	\$1,500 per AC	1.10	\$ 1,650.00	0.80	\$ 1,200.00
Earthwork	\$5.00 per CY	2,667.00	\$ 13,335.00	1,944.00	\$ 9,720.00
Erosion Control/SWPPP	\$5,000 per CY	1.10	\$ 5,500.00	0.80	\$ 4,000.00
Green Infrastructure	\$15.00 per SF	1,020.00	\$ 15,300.00	1,020.00	\$ 15,300.00
Pavement AC	\$50 per SF/IN	17,500.00	\$ 43,750.00	13,500.00	\$ 33,750.00
Pavement Class II AB	\$20 per SF/IN	17,500.00	\$ 70,000.00	13,500.00	\$ 54,000.00
Geofabric	\$.50 per SF	20,000.00	\$ 10,000.00	15,000.00	\$ 7,500.00
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	2,000.00	\$ 3,000.00
Curb and Gutter	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Median Curb	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Sidewalk	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Storm Drain Line (24" avg)	\$70.00 per LF	615.00	\$ 43,050.00	615.00	\$ 43,050.00
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00
Striping	\$11,500 per Mile	0.20	\$ 2,300.00	0.20	\$ 2,300.00
Standard Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00
Fiber Optic Conduit (2-4")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00
Parkway Landscaping and Irrigation	\$5.00 per SF	13,480.00	\$ 67,400.00	13,480.00	\$ 67,400.00
Median Landscaping and Irrigation	\$5.00 per SF	7,500.00	\$ 37,500.00	7,500.00	\$ 37,500.00
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00
TOTAL COST			\$ 452,985.00		\$ 421,920.00
LINEAR FOOT PRICE			\$ 906		\$ 844
DEVELOPMENT RESPONSIBILITY			\$ 672		\$ 539
LINEAR FOOT REIMBURSEMENT PRICE			\$ 234		\$ 305

TABLE 17D

ROADWAY CONSTRUCTION COSTS					
ARTERIAL STREET STANDARD ST-1 140' RIGHT-OF-WAY - 500 LINEAR FEET					
Item	Unit Cost	New Road		Widen Road	
		Quantity	Cost	Quantity	Cost
Clearing and Grubbing	\$1,500 per AC	1.61	\$ 2,415.00	1.31	\$ 1,965.00
Earthwork	\$5.00 per CY	3,555.00	\$ 17,775.00	2,895.00	\$ 14,475.00
Erosion Control/SWPPP	\$5,000 per AC	1.61	\$ 8,050.00	1.31	\$ 6,550.00
Green Infrastructure	\$15.00 per SF	1,500.00	\$ 22,500.00	1,500.00	\$ 22,500.00
Pavement AC	\$.50 per SF/IN	29,500.00	\$ 73,750.00	25,500.00	\$ 63,750.00
Pavement Class II AB	\$.20 per SF/IN	29,500.00	\$ 118,000.00	25,500.00	\$ 102,000.00
Geofabric	\$.50 per SF	32,000.00	\$ 16,000.00	27,000.00	\$ 13,500.00
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	13,000.00	\$ 19,500.00
Curb and Gutter	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Median Curb	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Sidewalk	\$25. per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Storm Drain Line (24" avg)	\$70.00 per LF	662.00	\$ 46,340.00	662.00	\$ 46,340.00
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00
Striping	\$11,500 per Mile	0.20	\$ 2,300.00	0.20	\$ 2,300.00
Standard Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00
Fiber Optic Conduit (2-4")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00
Parkway Landscaping and Irrigation	\$5.00 per SF	23,000.00	\$ 115,000.00	23,000.00	\$ 115,000.00
Median Landscaping and Irrigation	\$5.00 per SF	7,500.00	\$ 37,500.00	7,500.00	\$ 37,500.00
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00
TOTAL COST			\$ 602,830.00		\$ 588,580.00
LINEAR FOOT PRICE			\$ 1,206		\$ 1,177
DEVELOPMENT RESPONSIBILITY			\$ 672		\$ 539
LINEAR FOOT REIMBURSEMENT PRICE			\$ 534		\$ 638

TABLE 17E

ROADWAY CONSTRUCTION COSTS						
ARTERIAL STREET STANDARD ST-1 140' RIGHT-OF-WAY - 500 LINEAR FEET CITY CAPITAL IMPROVEMENT PROGRAM CONSTRUCTED						
Item	Unit Cost	New Road		Widen Road		
		Quantity	Cost	Quantity	Cost	
Clearing and Grubbing	\$1,500 per AC	1.61	\$ 2,415.00	1.31	\$ 1,965.00	
Earthwork	\$5.00 per CY	3,555.00	\$ 17,775.00	2,895.00	\$ 14,475.00	
Erosion Control/SWPPP	\$5,000 per AC	1.61	\$ 8,050.00	1.31	\$ 6,550.00	
Green Infrastructure	\$15.00 per SF	1,500.00	\$ 22,500.00	1,500.00	\$ 22,500.00	
Pavement AC	\$.50 per SF/IN	29,500.00	\$ 73,750.00	25,500.00	\$ 63,750.00	
Pavement Class II AB	\$.20 per SF/IN	29,500.00	\$ 118,000.00	25,500.00	\$ 102,000.00	
Geofabric	\$.50 per SF	32,000.00	\$ 16,000.00	27,000.00	\$ 13,500.00	
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	13,000.00	\$ 19,500.00	
Curb and Gutter	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00	
Median Curb	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00	
Sidewalk	\$25. per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00	
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00	
Storm Drain Line (24" avg)	\$70.00 per LF	662.00	\$ 46,340.00	662.00	\$ 46,340.00	
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00	
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00	
Striping	\$11,500 per Mile	0.20	\$ 2,300.00	0.20	\$ 2,300.00	
Standard Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00	
Fiber Optic Conduit (2-4")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00	
Parkway Landscaping and Irrigation	\$5.00 per SF	23,000.00	\$ 115,000.00	23,000.00	\$ 115,000.00	
Median Landscaping and Irrigation	\$5.00 per SF	7,500.00	\$ 37,500.00	7,500.00	\$ 37,500.00	
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00	
TOTAL COST			\$ 602,830.00		\$ 588,580.00	
LINEAR FOOT PRICE			\$ 1,206		\$ 1,177	
Contingency		20%	\$ 241		\$ 235	
LINEAR FOOT PRICE			\$ 1,447		\$ 1,413	

TABLE 17F

ROADWAY CONSTRUCTION COSTS						
ARTERIAL STREET 164' RIGHT-OF-WAY - 500 LINEAR FEET						
Item	Unit Cost	New Road		Widen Road		
		Quantity	Cost	Quantity	Cost	
Clearing and Grubbing	\$1,500 per AC	1.88	\$ 2,820.00	1.58	\$ 2,370.00	
Earthwork	\$5.00 per CY	4,556.00	\$ 22,780.00	3,833.00	\$ 19,165.00	
Erosion Control/SWPPP	\$5,000 per AC	1.88	\$ 9,400.00	1.58	\$ 7,900.00	
Green Infrastructure	\$15.00 per SF	1,500.00	\$ 22,500.00	1,500.00	\$ 22,500.00	
Pavement AC	\$.50 per SF/IN	41,500.00	\$ 103,750.00	29,500.00	\$ 73,750.00	
Pavement Class II AB	\$.20 per SF/IN	41,500.00	\$ 166,000.00	29,500.00	\$ 118,000.00	
Geofabric	\$.50 per SF	44,000.00	\$ 22,000.00	31,000.00	\$ 15,500.00	
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	13,000.00	\$ 19,500.00	
Curb and Gutter	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00	
Median Curb	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00	
Sidewalk	\$25. per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00	
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00	
Storm Drain Line (24" avg)	\$70.00 per LF	710.00	\$ 49,700.00	710.00	\$ 49,700.00	
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00	
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00	
Striping	\$11,500 per Mile	0.20	\$ 2,300.00	0.20	\$ 2,300.00	
Standard Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00	
Fiber Optic Conduit (2-4")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00	
Parkway Landscaping and Irrigation	\$5.00 per SF	23,000.00	\$ 115,000.00	23,000.00	\$ 115,000.00	
Median Landscaping and Irrigation	\$5.00 per SF	7,500.00	\$ 37,500.00	7,500.00	\$ 37,500.00	
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00	
TOTAL COST			\$ 696,950.00		\$ 626,385.00	
LINEAR FOOT PRICE			\$ 1,394		\$ 1,253	
DEVELOPMENT RESPONSIBILITY			\$ 672		\$ 539	
LINEAR FOOT REIMBURSEMENT PRICE			\$ 722		\$ 714	

TABLE 17G

ROADWAY CONSTRUCTION COSTS					
ARTERIAL STREET 164' RIGHT-OF-WAY - 500 LINEAR FEET CITY CAPITAL IMPROVEMENT PROGRAM CONSTRUCTED					
Item	Unit Cost	New Road		Widen Road	
		Quantity	Cost	Quantity	Cost
Clearing and Grubbing	\$1,500 per AC	1.88	\$ 2,820.00	1.58	\$ 2,370.00
Earthwork	\$5.00 per CY	4,556.00	\$ 22,780.00	3,833.00	\$ 19,165.00
Erosion Control/SWPPP	\$5,000 per AC	1.88	\$ 9,400.00	1.58	\$ 7,900.00
Green Infrastructure	\$15.00 per SF	1,500.00	\$ 22,500.00	1,500.00	\$ 22,500.00
Pavement AC	\$.50 per SF/IN	41,500.00	\$ 103,750.00	29,500.00	\$ 73,750.00
Pavement Class II AB	\$.20 per SF/IN	41,500.00	\$ 166,000.00	29,500.00	\$ 118,000.00
Geofabric	\$.50 per SF	44,000.00	\$ 22,000.00	31,000.00	\$ 15,500.00
Pavement/Concrete Removal	\$1.50 per SF	-	\$ -	13,000.00	\$ 19,500.00
Curb and Gutter	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Median Curb	\$25.00 per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Sidewalk	\$25. per LF	1,000.00	\$ 25,000.00	1,000.00	\$ 25,000.00
Curb Access	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Storm Drain Line (24" avg)	\$70.00 per LF	710.00	\$ 49,700.00	710.00	\$ 49,700.00
Storm Drain Inlet - Type A	\$3,000 EA	4.00	\$ 12,000.00	4.00	\$ 12,000.00
Signing	\$2,000 per Mile	0.10	\$ 200.00	0.10	\$ 200.00
Striping	\$11,500 per Mile	0.20	\$ 2,300.00	0.20	\$ 2,300.00
Standard Street Light (LED)	\$10,000 EA	2.00	\$ 20,000.00	2.00	\$ 20,000.00
Fiber Optic Conduit (2-4")	\$20.00 per LF	500.00	\$ 10,000.00	500.00	\$ 10,000.00
Parkway Landscaping and Irrigation	\$5.00 per SF	23,000.00	\$ 115,000.00	23,000.00	\$ 115,000.00
Median Landscaping and Irrigation	\$5.00 per SF	7,500.00	\$ 37,500.00	7,500.00	\$ 37,500.00
Irrigation Electrical Box	\$14,000 EA	1.00	\$ 14,000.00	1.00	\$ 14,000.00
TOTAL COST			\$ 696,950.00		\$ 626,385.00
LINEAR FOOT PRICE			\$ 1,394		\$ 1,253
Contingency		20%	\$ 279		\$ 251
LINEAR FOOT PRICE			\$ 1,673		\$ 1,503

WASTEWATER FACILITIES

Wastewater and non-potable water facilities that are necessary to serve new development through build-out of the City are identified in the “City of Brentwood Sewer Master Plan (August 2017)” and the “Recycled Water Feasibility Study (2013)”, including facilities that are necessary to meet the California State Water Resources Control Board regulatory requirements. Facility costs (Table 19) and timing is outlined in the City’s Capital Improvement Program.

Table 18 allocates the cost of the facilities by demand (daily wastewater generation) volume of the various land uses.

TABLE 18

WASTEWATER COST SHARE					
Land Use	Remaining Dwelling Units/Bldg SF	Wastewater Generation*	% of Wastewater Generation	Cost Share	Cost per DU/Bldg SF
Residential					
Single Family	4,547	1,010,182	39%	\$ 30,378,135.30	\$ 6,681.14
Multi-Family	5,924	972,763	37%	\$ 29,252,878.07	\$ 4,938.03
Non-Residential					
Commercial	4,942,520	249,622	10%	\$ 7,506,626.05	\$ 1.52
Office	2,782,997	166,111	6%	\$ 4,995,278.00	\$ 1.79
Industrial/Institutional	5,138,516	212,991	8%	\$ 6,405,045.29	\$ 1.25
Total Wastewater Generation		2,611,669	100%	\$ 78,537,962.72	

*2017 Wastewater Master Plan in gallons per capita per day

TABLE 19

WASTEWATER FACILITIES						
Facility Description						Cost
Wastewater Treatment Plant and Biosolids Expansion to 6.4 MGD						\$ 79,137,520
<i>existing service population share</i>						<i>(\$24,532,631)</i>
Tertiary Filters						\$2,500,000
WWTP Barscreen						\$500,000
Administration building						\$2,500,000
<i>existing service population share</i>						<i>(\$1,490,731)</i>
Collection Lines	Depth		Full Cost	Program Share		
	8 inch	avg 10 ft	608 LF	\$50.00 per LF	\$	-
	10 inch	avg 10 ft	706 LF	\$55.00 per LF	\$5.00 per LF	\$ 3,530
	10 inch	> 15 ft	3,553 LF	\$83.00 per LF	\$33.00 per LF	\$ 115,473
	12 inch	avg 10 ft	1,110 LF	\$60.00 per LF	\$10.00 per LF	\$ 11,100
	12 inch	> 10 ft	3,228 LF	\$75.00 per LF	\$25.00 per LF	\$ 80,700
CIP	12 inch	> 10 ft	156 LF	\$94.00 per LF	\$	\$ 14,625
	15 inch	avg 10 ft	1,982 LF	\$65.00 per LF	\$15.00 per LF	\$ 29,730
	15 inch	> 10 ft	1,013 LF	\$81.25 per LF	\$31.00 per LF	\$ 31,656
Crossings with other Utility Districts or Agencies			3 EA	\$200,000 per xing	\$	600,000
NONPOTABLE WATER FACILITIES						
NonPotable Water Distribution System						\$ 4,400,000
<i>existing service population share</i>						<i>(\$2,623,686)</i>
Subtotal Construction Costs						\$ 61,277,286
Administration						Cost
Land Acquisition						\$ -
\$150,000 per Acre						
Engineering Design						\$ 7,353,274
12%						
Financing						\$ 6,127,729
10%						
Construction Contingency						\$ 6,127,729
10%						
CIP Project Management						\$ 7,448,736
Public Information						\$ 153,193
0.25%						
Master Plan Updates						\$ 50,000
Existing Wastewater Treatment Plant Debt Service						\$ 3,719,397
Outstanding Reimbursement Obligations (6-30-20)						\$ 7,189
Fee Account Beginning Balance (6-30-20)						\$ (13,726,570)
TOTAL FACILITY COSTS						\$ 78,537,963

WATER FACILITIES

Additional water facilities to serve new development through build-out of the City are identified in the “City of Brentwood Water Master Plan (June 2017)” (Table 21). Facility projections include peak hour and peak day demand factors identified in the Water Master Plan, as well as sufficient fire flow capacity requirements.

New development located within the Contra Costa Water District (“CCWD”) Los Vaqueros Service Area shall contribute to the City planned water facilities as identified in Table 22 and at the revised rate identified in Table 20B. As a part of the CCWD planning area, funding for City/CCWD future shared facilities within this area is through an additional fee collected by the City and provided to the CCWD pursuant to the “Second Amendatory Agreement between the Contra Costa Water District and City of Brentwood (July 2009)” The additional fee area is outlined in the “Areas of Additional Fees” Section.

Table 20 allocates the cost of the facilities by estimated daily demand volume of the various land uses.

TABLE 20A

WATER COST SHARE					
Land Use	Remaining Dwelling Units/Bldg SF	Water Demand GPD*	% of Water Demand	Cost Share	Cost per DU/Bldg SF
Residential					
Single Family	4,547	2,635,257	55%	\$ 62,719,202	\$ 13,793.99
Multi-Family	5,924	1,408,374	29%	\$ 33,519,337	\$ 5,658.23
Non-Residential					
Commercial	4,942,520	295,008	6%	\$ 7,021,202	\$ 1.42
Office	2,782,997	204,444	4%	\$ 4,865,778	\$ 1.75
Industrial/Institutional	5,138,516	262,142	5%	\$ 6,238,998	\$ 1.21
Total Water Generation		4,805,226	100%	\$ 114,364,516	

*2017 Water Master Plan

TABLE 20B

WATER COST SHARE CCWD LOS VAQUEROS SERVICE AREA						
Land Use	Remaining Dwelling Units/Bldg SF	Water Demand GPD*	% of Water Demand	Cost Share	Cost per DU/Bldg SF	
Residential						
Single Family	4,547	2,635,257	55%	\$ 60,474,193	\$ 13,300.24	
Multi-Family	5,924	1,408,374	29%	\$ 32,319,526	\$ 5,455.69	
Non-Residential						
Commercial	4,942,520	295,008	6%	\$ 6,769,881	\$ 1.37	
Office	2,782,997	204,444	4%	\$ 4,691,609	\$ 1.69	
Industrial/Institutional	5,138,516	262,142	5%	\$ 6,015,675	\$ 1.17	
Total Water Generation		4,805,226	100%	\$ 110,270,885		

*2017 Water Master Plan

TABLE 21

WATER FACILITIES				
Facility Description				Cost
Water Treatment Plant Expansion 15 MGD				\$ 53,560,000
<i>existing service population share</i>				(\$10,712,000)
Water Distribution System Blending Facility				\$ 8,495,000
<i>existing service population share</i>				(\$5,085,502)
Underground Water System Corrosion Mitigation				\$ 300,000
<i>existing service population share</i>				(\$178,888)
Storage Reservoirs				
Zone 1.4 - 4.0 MG				\$ 8,741,816
Zone 2.4 - 3.0 MG				\$ 7,649,089
Pump Stations				
Zone 2.4 - 6.5 MG				\$ 1,966,909
Zone 3.4 - .8 MG				\$ 546,364
Distribution Lines				
		Full Cost	Program Share	
8 inch		\$70.00 per LF		
10 inch		\$80.00 per LF	\$10.00 per LF	
12 inch	52,720 LF	\$90.00 per LF	\$20.00 per LF	\$ 1,054,400
16 inch	22,515 LF	\$117.00 per LF	\$47.00 per LF	\$ 1,058,205
20 inch	16,082 LF	\$147.00 per LF	\$77.00 per LF	\$ 1,238,314
24 inch	15,802 LF	\$176.00 per LF	\$106.00 per LF	\$ 1,675,012
Crossings with other Utility Districts/Agencies/Creeks				
Caltrans Undercrossing	1		\$200,000 per xing	\$ 200,000
Structures over EBMUD/ECCID	1		\$200,000 per xing	\$ 200,000
Creek Crossing	1		\$200,000 per xing	\$ 200,000
Subtotal Construction Costs				\$ 70,928,718
Administration				
				Cost
Land Acquisition	4.0 Acres	\$150,000 per Acre		\$ 600,000
Permanent Long-Term Water Conveyance Canal Replacement				\$ 1,743,335
<i>existing service population share</i>				(\$1,039,537)
Los Vaqueros Reservoir Future Expansion/Capacity Rights				\$ 8,000,000
<i>existing service population share</i>				(\$4,770,338)
Engineering Design			12%	\$ 8,511,446
Financing			10%	\$ 7,092,872
Construction Contingency			10%	\$ 7,092,872
CIP Project Management				\$ 8,621,943
Public Information			0.25%	\$ 177,322
Master Plan Updates				\$ 50,000
Existing Water Bond Debt Service				\$ 12,135,494
Outstanding Reimbursement Obligations (6-30-20)				\$ 70,263
Fee Account Beginning Balance (6-30-20)				\$ (4,849,874)
TOTAL FACILITY COSTS				\$ 114,364,516

TABLE 22

WATER FACILITIES CCWD LOS VAQUEROS SERVICE AREA					
Facility Description					Cost
Water Treatment Plant Expansion 15 MGD					\$ 53,560,000
<i>existing service population share</i>					<i>(\$10,712,000)</i>
Surface and Treated Potable Water Blending Infrastructure					\$ 8,495,000
<i>existing service population share</i>					<i>(\$5,065,502)</i>
Storage Reservoirs					
Zone 1.4 - 4.0 MG					\$ 8,741,816
Zone 2.4 - 3.0 MG					\$ 7,649,089
Pump Station					
Zone 2.4 - 6.5 MG					\$ 1,966,909
Zone 3.4 - .8 MG					\$ 546,364
Distribution Lines					
		Full Cost		Program Share	
8 inch			\$70.00 per LF		
10 inch			\$80.00 per LF	\$10.00 per LF	\$ -
12 inch	52,720 LF		\$90.00 per LF	\$20.00 per LF	\$ 1,054,400
16 inch	22,515 LF		\$117.00 per LF	\$47.00 per LF	\$ 1,058,205
20 inch	16,082 LF		\$147.00 per LF	\$77.00 per LF	\$ 1,238,314
24 inch	15,802 LF		\$176.00 per LF	\$106.00 per LF	\$ 1,675,012
Crossings with other Utility Districts/Agencies/Creeks					
Caltrans Undercrossing	1			\$200,000 per xing	\$ 200,000
Structures over EBMUD/ECCID	1			\$200,000 per xing	\$ 200,000
Creek Crossing	1			\$200,000 per xing	\$ 200,000
Subtotal Construction Costs					\$ 70,807,606
Administration					Cost
Land Acquisition	4 Acres	\$150,000 per Acre			\$ 600,000
Engineering Design			12%		\$ 8,496,913
Financing			10%		\$ 7,080,761
Construction Contingency			10%		\$ 7,080,761
CIP Project Management					\$ 8,621,943
Public Information			0.25%		\$ 177,019
Master Plan Updates					\$ 50,000
Existing Water Bond Debt Service					\$ 12,135,494
Outstanding Reimbursement Obligations (6-30-20)					\$ 70,263
Fee Account Beginning Balance (6-30-20)					\$ (4,849,874)
TOTAL FACILITY COSTS					\$ 110,270,885

REIMBURSEMENT PROCEDURE

As provided for in Brentwood Municipal Code Section 16.130.040, reimbursement, in the form of credits applied to facility fees pursuant to a reimbursement agreement, shall be provided to new development that is conditioned to construct a public facility which exceeds the need for the facility that is attributable to and related to the development. Credits provided will be at an equivalent value to the cost of the facility, or portion of, as identified in the Program and are specific to the fee category for which the additional improvements have been constructed (i.e, roadway credits cannot be applied to water fees).

New Development construction and financial responsibility, for which reimbursement will **not** be provided, includes the portion of facilities and infrastructure necessary to serve their development and is specifically referenced as the following:

- Roadway Frontage: Residential Collector Street (Standard ST-4) 60' width
- Wastewater: 8" or smaller collection line
- Water: 8" or smaller distribution line
- Parks (land): ½ Acre or smaller and/or less than 100' in any dimension, or any area that is unusable* as a Park or Recreational facility as determined by the Director of Parks and Recreation
- Parks (improvements): improvements constructed on any land area as described above

In addition, improvements which are identified as necessary for a project to mitigate environmental or other impacts are **not** eligible for reimbursement.

In the event frontage improvements that are a development's responsibility have been previously constructed, either through the City's Capital Improvement Program or earlier development, the new development's responsibility shall be contributed as payment to the City at a value as identified in this Program, or actual costs incurred, whichever is greater.

Future development that constructs infrastructure over the capacity that is necessary to serve their development that benefits other properties, and that is **not** identified in this Program as Master Planned Infrastructure eligible for reimbursement, may submit a request for formation of a Benefit District by the City for reimbursement by future benefitting properties. Upon submittal of a request and analysis of the improvements and costs by the City Engineer, supporting reports may be presented to the City Council with recommendation for Benefit District formation. Benefit District formation costs shall be the responsibility of the requesting party and may be recovered through the Benefit District reimbursement.

**Unusable may include, but is not limited to, the following examples; land encumbered with underground/overhead utilities and/or easements, passive/natural open space areas, restrictive access easements, or other structures or encumbrances that may limit amenities and/or use.*

AREAS OF ADDITIONAL FEES

Additional fees are applicable to certain geographic areas of the City (see Figure 1) as a result of infrastructure and facilities previously planned and/or constructed that serve new development. Details of these fees may be found in the individual Benefit District Reports and Agreement supporting the fee.

- Area 1: Diablo Water District Deannexation Area
“Agreement Concerning Detachment of Land From Diablo Water District and Annexation Thereof to The City of Brentwood and Further Amendment of the September 18, 1996 Agreement (October, 2000)”
- Area 2: Ironhouse Sanitary District Deannexation Area
“Agreement Concerning Deannexation of Certain Areas Within The Ironhouse Sanitary District and Annexation to The City of Brentwood (September, 2000)”
- Area 3: Contra Costa Water District Los Vaqueros Service Area
“Second Amendatory Agreement between the Contra Costa Water District and City of Brentwood (July 2009)”
Rate pursuant to CCWD Code of Regulations Section 5.20.010F

Figure 1 Areas of Additional Fees

