

# **CITY OF LOS ALTOS**

## **STORMWATER FEE REPORT**

SEPTEMBER 2018

PURSUANT TO THE ARTICLES XIIIC & D OF THE CALIFORNIA CONSTITUTION, AND THE GOVERNMENT CODE SECTIONS 38900 – 38901 ET AL.

ENGINEER OF WORK: SCIConsultingGroup 4745 MANGELS BOULEVARD FAIRFIELD, CALIFORNIA 94534 PHONE 707.430.4300 FAX 707.430.4319 WWW.SCI-CG.COM

### **CITY OF LOS ALTOS**

#### CITY COUNCIL

Jean Mordo, Mayor Lynette Lee Eng, Vice Mayor Jeannie Bruins, Councilmember Jan Pepper, Councilmember Mary Prochnow, Councilmember

## CITY MANAGER

Chris Jordan

## PUBLIC WORKS DEPARTMENT

Susanna Chan, Director

# CITY ATTORNEY

Christopher Diaz

## ENGINEER OF WORK

Jerry Bradshaw, SCI Consulting Group



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## OVERVIEW

The City of Los Altos ("City") has engaged SCI Consulting Group to study, make recommendations, and assist in the implementation of a funding approach for its municipal separate storm sewer system<sup>1</sup> ("MS4") including capital improvements, maintenance and operations, and compliance to all state and federal regulations associated with the National Pollutant Discharge Elimination System<sup>2</sup> ("NPDES").

The City completed a Stormwater Master Plan in 2016 to better understand the condition and capacity of this critical infrastructure system. The most recent comprehensive master plan for the storm drain system had been in 1966 – 50 years earlier. Since that time, the City has grown substantially, and the runoff characteristics have changed. In addition, the City's MS4 is now subject to an NPDES permit including a completely revamped approach to how stormwater management is integrated with all other aspects of the natural and built environments. The 2016 Master Plan outlined a Capital Improvement Program ("CIP") that identified \$29 million of needed improvements to the current storm drainage system. This Master Plan lays the foundation for review of the storm drain system, development of funding strategies, public opinion surveys, and this Fee Report.

In 2017, the City embarked on a two-phase project to determine the feasibility of implementing a dedicated, sustainable revenue stream to fund the City's storm drainage needs. Phase 1 included exploring potential funding sources, estimating user rate ranges for various budget scenarios, and conducting a public opinion survey of Los Altos residents and property owners to determine storm drain program priorities and willingness to pay. Phase 1 is complete, and the City Council has embarked on Phase 2, implementation of a funding mechanism. This Fee Report is the first task of Phase 2.

## **CITY'S FACILITIES**

The City operates and maintains a storm drainage system, as empowered to do so per Government Code Sections 38900 and 38901, and it is comprised of an integrated system of storm drain pipes, culverts, ditches, dry wells and creeks. The City incorporated in 1952 and experienced most of its residential growth between 1950 and 1980. As the community grew, the storm drainage system was developed along with the neighborhoods and the business district while still maintaining many native creek segments. This development pattern resulted in Los Altos preserving its rural tone, and its storm drainage infrastructure is reflective of this rural character. This is evident by the many streets built without traditional suburban curbs and gutters as well as the large number of open creek segments still running



<sup>&</sup>lt;sup>1</sup> In this report, the terms "storm sewer," "storm drainage," and "stormwater" are used interchangeably, and are considered to be synonymous.

<sup>&</sup>lt;sup>2</sup> Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to state governments by EPA to perform many permitting, administrative, and enforcement aspects of the program.

through the City's neighborhoods. Much of the City's storm drainage system is made up of pipes under City streets.

On average, the industry-standard life expectancy of a storm drain system is approximately 60 years. The majority of the City's storm drain pipes were installed approximately 50 or more years ago, and the system is approaching the end of its useful life. Moreover, some of the drainage system has inadequate capacity.

### STORMWATER FUNDING BACKGROUND

The City historically has funded its storm drainage activity primarily through the General Fund. As a result, the capital expenditures have been very limited, and operations and maintenance activities have been kept to a minimum level of service, mostly responding to storm-related emergencies and basic regulatory compliance.

The scale and projected needs of the MS4 in a time of competing demands on the General Fund point toward the need for developing a separate, dedicated and sustainable funding stream. As with many other municipalities in California, the City is considering developing a separate financial entity, or enterprise fund, to track revenues and expenditures separately from other City functions – similar to an independent utility. This would also enable the City to better set goals and track progress toward those goals. The Fee Report would be the first step in that process, should the City decide to proceed.

This Report relies mainly on the 2016 Stormwater Master Plan for estimating the fiscal needs of the Capital Improvement Plan ("CIP") and Operations and Maintenance ("O&M") needs.

## LEGAL REQUIREMENTS OF STORMWATER FEE

This Report calculates the Stormwater Fee as a property-related fee. Property-related fees are subject to the requirements of Articles XIIIC and D of the State Constitution, which were approved by voters in 1996 through Proposition 218, as well as the Proposition 218 Omnibus Implementation Act (Government Code Sections 53750 – 53758).



### FACILITIES AND SERVICES

The City operates and maintains a municipal separate storm sewer system (MS4) within the City's boundaries. The MS4 is made up of man-made drainage systems including, but not limited to, curbs and gutters, ditches, culverts, pipelines, manholes, catch basins (inlets), dry wells and outfall structures. The natural creek system that runs throughout the City serves as the backbone of the City's MS4; however, maintenance of those creeks is the responsibility of the Santa Clara Valley Water Department and is not considered part of the City's MS4 in this financial analysis. The service area for the City's MS4 is the entire City.

The primary storm drainage service provided by the City is the collection, conveyance, and overall management of the stormwater runoff from improved parcels. By definition, all improved parcels that shed stormwater into the City's MS4, either directly or indirectly utilize, or are served by, the City's storm drainage system. The need and necessity of this service are derived from property improvements, which historically have increased the amount of stormwater runoff from the parcel by constructing impervious surfaces such as rooftops, pavement areas, and certain types of landscaping that restrict or retard the percolation of water into the soil lens beyond the conditions found in the natural, or unimproved, state. To the extent that a property is in a natural condition or includes features that contain all increased runoff resulting from the property's development, that property is exempted from any MS4 service. As such, open space land (in a natural condition) and agricultural lands that demonstrate stormwater absorption equal to or greater than natural conditions are typically exempt.

The 2016 Stormwater Master Plan contains a thorough set of maps and lists of various elements within the MS4. Those descriptions are the basis for this Report.



#### FINANCIAL NEEDS AND REVENUE REQUIREMENTS

#### STORMWATER MASTER PLAN NEEDS SUMMARY

#### CAPITAL IMPROVEMENT PROGRAM NEEDS

The 2016 Stormwater Master Plan identified a CIP totaling \$29 million worth of improvements and repairs, with \$3.8 million categorized as High-Priority and \$11.5 million as Moderate-Priority. These amounts have been adjusted in the three following ways:

- Increased 7.1% for inflation<sup>3</sup>,
- Increased 7% for program management costs<sup>4</sup> (not included in the 2016 Master Plan), and
- Reduced to account for four High-Priority projects that have been funded through other sources.

The adjusted CIP is summarized in Table 1 below. More detailed information about the High- and Moderate-Priority projects is contained in Appendix A.

| CIP Category        | High<br>Priority | Γ  | Moderate<br>Priority | Low<br>Priority  | Overall Cost  |
|---------------------|------------------|----|----------------------|------------------|---------------|
| Conveyance          | \$<br>1,600,000  | \$ | 9,360,000            | \$<br>9,180,000  | \$ 20,140,000 |
| System Extension    | -                |    | 510,000              | 3,860,000        | 4,370,000     |
| Dry Wells           | -                |    | -                    | 1,900,000        | 1,900,000     |
| Problem Areas       | 1,130,000        |    | 3,210,000            | 840,000          | 5,180,000     |
| Total Capital Needs | \$<br>2,730,000  | \$ | 13,080,000           | \$<br>15,780,000 | \$ 31,590,000 |

#### TABLE 1 – CAPITAL IMPROVEMENT PROGRAM COSTS

#### **OPERATIONS AND MAINTENANCE PROGRAM NEEDS**

Operations and Maintenance ("O&M") needs include staff costs for day-to-day maintenance and engineering needs as well as the costs associated with regulatory compliance. The City currently budgets 0.5 full-time-equivalent (FTE) maintenance worker and 0.5 FTE engineer positions to operate and manage the MS4. The Master Plan also recommends increasing the net 1.0 FTE to at least 1.7 FTE in addition to other costs to meet the operational needs as well as the regulatory requirements in the State's Construction General Permit and the EPA's NPDES permit. In summary, the Master Plan estimates costs of \$490,000. These are summarized in Table 2 below. Again, these amounts have been adjusted for inflation<sup>5</sup> from the Master Plan year (2016).



 <sup>&</sup>lt;sup>3</sup> Based on the Engineering News Record's Construction Cost Index increase for two years.
 <sup>4</sup> Program management is projected to be in the form of contracted staff augmentation. This is estimated at one-half fulltime equivalent at \$200 per hour for a duration of 5 years.
 <sup>5</sup> A 6.6% increase was estimated based on the San Francisco Bay Area Consumer Price Index for two years.

| Category          | Cost          |
|-------------------|---------------|
| Engineering Staff | \$<br>213,000 |
| Maintenance Staff | 181,000       |
| Permit and Fees   | 107,000       |
| Equipment         | 21,000        |
| TOTAL Annual Cost | \$<br>522,000 |

#### ANNUAL REVENUE REQUIREMENT

Based upon the 2016 Master Plan, annual revenues must include costs for O&M, CIP and establishing and maintaining an operational reserve<sup>6</sup>. In order to determine an annual Stormwater Fee amount, the financial needs must be expressed as an annual revenue requirement. For O&M needs, the cost estimates are already expressed in an annual format and can be assumed to increase at a predictable rate over time. The same applies for an operational reserve. However, the CIP needs are expressed as a series of lump sum present values and must be converted into an annual cost in order to form the basis for an annual Stormwater Fee. The user rates will vary depending on the financing approach taken. Since the City has not yet determined the precise financing approach to be used, this Report evaluates some alternatives for consideration.

#### DEBT-DRIVEN APPROACH

A typical way to fund capital projects is to incur debt to raise funds immediately to build the projects first and pay for them over time through debt payments. This accomplishes two critical objectives: Deficiencies in the infrastructure are addressed immediately, and the property owners paying the rates do not have to wait 10, 20 or 30 years to benefit from their years of paying for the improvements.

This requires several assumptions and must include the interplay between revenues, O&M costs and reserve amounts. One constraint on the overall analysis is that, due to the requirement to put rate increases to a ballot measure, revenues for a stormwater program are typically set at an initial level and increase at a predictable indexed rate<sup>7</sup> over the life of the fee structure. For that reason, long-term debt – which is typically structured with a level annual debt service – complicates a 30-year plan. Shorter-term (10-year or less) debt issuances can level this out somewhat but can increase debt issuance costs. In some cases,

<sup>&</sup>lt;sup>6</sup> Operation reserves equal to 20% of annual operating costs (or O&M costs) are recommended.

<sup>&</sup>lt;sup>7</sup> Formulaic escalation such as annual increases based on the Consumer Price Index are allowed under the law, provided they are included in the original ballot measure.

long-term debt service can be structured to increase over time to better match the fiscal reality of an enterprise fund.

#### PAY AS YOU GO APPROACH

Another option is a pay-as-you-go ("PAYGo") approach whereby capital projects are constructed as sufficient revenues are collected. While this avoids incurring debt or its associated costs, construction costs invariably increase over time – sometimes at rates higher than debt interest costs. One additional drawback to this approach is that not all projects are built at the beginning of the 30-year period, but rather construction is spread over that entire time. The costs of this factor are difficult to quantify – they are more qualitative.

#### HYBRID APPROACH

There are myriad ways to finance a complex CIP such as this. The single, long-term debt issuance is one extreme, and the PAYGo is the other extreme. A more likely scenario may be a hybrid option where the High-Priority CIP may be completed on a PAYGo plan (first five years) and a series of 10-year debt issuances combined with a modest PAYGo set of projects (years 6 - 25) and PAYGo for the remaining five years. This also provides a hybrid project delivery schedule – one that may better resemble the real-world capabilities of a small city to deliver a multi-million dollar set of projects.

#### COMPARISON OF APPROACHES

A comparative analysis was performed using a 30-year forecast horizon<sup>8</sup>. User rates were calculated to fund the O&M costs and complete the High-, and Moderate-Priority projects. Assumptions included the following:

- Only the High- and Moderate-Priority projects were included<sup>9</sup>,
- User rate increases based on the Consumer Price Index were assumed to increase 2.6% annually<sup>10</sup>,
- O&M costs were assumed to increase 3.0% annually<sup>11</sup>,
- Capital costs (for uncompleted projects) were assumed to escalate at 2.6% annually<sup>12</sup>,
- Debt issuance costs are assumed to be 2% of net proceeds<sup>13</sup>,
- A debt reserve is maintained equaling one year's debt service,
- Interest on debt is assumed to be 5%<sup>14</sup>, and



<sup>&</sup>lt;sup>8</sup> A 30-year financing horizon matches the financial analysis contained in the 2016 Master Plan.

<sup>&</sup>lt;sup>9</sup> Including the Low-Priority projects, increased user rates were far outside the range found acceptable in the community survey performed by SCI Consulting Group in 2018.

<sup>&</sup>lt;sup>10</sup> The average CPI since 1990 is 2.7%, but with an annual cap of 3% some of that will not be realized. Used 2.6% as default.

<sup>&</sup>lt;sup>11</sup> Typical assumed inflation value for personnel, materials, equipment and utility costs.

<sup>&</sup>lt;sup>12</sup> Equal to the average Construction Cost Index (Engineering News Record) since 1990.

<sup>&</sup>lt;sup>13</sup> From the Los Altos Stormwater Master Plan.

<sup>&</sup>lt;sup>14</sup> From the Los Altos Stormwater Master Plan.

• An operating reserve is maintained at 20% of O&M costs.

Table 3 below shows the comparative results of the three approaches. Details of these calculations are contained in Appendix B.

| Approach                          | Long-T | erm Debt | P/ | AYGo | н  | ybrid |
|-----------------------------------|--------|----------|----|------|----|-------|
| Beginning Rate * (average SFR**)  | \$     | 129      | \$ | 86   | \$ | 88    |
| Ending Rate * (average SFR**)     | \$     | 185      | \$ | 181  | \$ | 185   |
| Cummulative Revenue*** (millions) | \$     | 59.2     | \$ | 49.4 | \$ | 51.7  |

| TABLE 3 – COMPARISON OF | ALTERNATIVE FINANCING APPROACHES |
|-------------------------|----------------------------------|
|-------------------------|----------------------------------|

\* Beginning and ending rates are computed by dividing the revenue of each year (shown in Appendix B, Tables 9, 10 and 11) by the total number of SFEs (or 12,880)

\*\* SFR stands for Single Family Residential

\*\*\* Cummulative revenue is the sum of revenues shown in Appendix B, Tables 9, 10 and 11

#### **RECOMMENDED REVENUE REQUIREMENTS**

It is preferable to establish a financial program that provides for stable user rates while funding O&M, CIP and operating reserves at the most efficient and understandable level. The long-term debt approach starts at a higher rate and requires more cumulative revenue overall. In addition, the user rate would be structured in a bifurcated manner resulting in more confusion to the rate payer. The PAYGo and hybrid approaches produced almost identical results with both employing a steady and understandable rate progression. The hybrid approach represents the most versatile structure, allowing the City to maneuver the financial marketplace most easily. For that reason, the revenue requirements for this Report will be based on the hybrid approach.

The combined High/Moderate CIP is estimated in 2018 dollars to cost \$15,810,000. From the hybrid analysis, that translates into an initial annual revenue requirement of \$611,000. The initial annual revenue requirement for O&M (including NPDES permit compliance costs) is \$522,000 from Table 2 above. The total revenue requirement for Fiscal Year 2018-19 is \$1,133,000. Table 4 below summarizes the revenue requirements.

| Element               | Cost             | Anr | nual Revenue<br>Req't | % of Annual<br>Rev Req't |
|-----------------------|------------------|-----|-----------------------|--------------------------|
| CIP - High / Moderate | \$<br>15,810,000 | \$  | 611,000               | 54%                      |
| 0 & M                 | \$<br>522,000    | \$  | 522,000               | 46%                      |
| TOTAL                 |                  | \$  | 1,133,000             |                          |

#### TABLE 4 – ANNUAL REVENUE REQUIREMENTS FOR FY 2018-19

## RATE STRUCTURE ANALYSIS

Proposition 218 states that the amount of a fee upon any parcel shall not exceed the proportional costs of the service attributable to the parcel. It also states that no fee may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property. As noted earlier, all properties that shed stormwater into the City's MS4 are served by that system. In compliance with Proposition 218, the Stormwater Fee will only be imposed on properties that shed water into the City's MS4 system. Additionally, the amount of use attributed to each parcel is proportionate to the amount of stormwater runoff contributed by the parcel, which is, in turn, proportionate to the amount of impervious surface area on a parcel (such as building roofs and pavements).

## SINGLE-FAMILY RESIDENTIAL PARCELS AS BENCHMARK

The most widely used method of setting storm drainage rates<sup>15</sup> is to use the average or median single-family residential parcel<sup>16</sup> ("SFR") as the basic unit of measure, or benchmark, which is called the single-family equivalent, or "SFE." Since the metric for this fee structure is impervious surface area, a benchmark amount of impervious surface area ("ISA") must be established.

Los Altos has a wide range of sizes of SFR parcels, which have varying levels of percentage of impervious area ("%IA"). Generally, smaller parcels tend to have a higher proportion of impervious area than larger parcels which tend to have a lower percentage of impervious area. (This can be best visualized by the fact that larger residential properties tend to have a larger *proportion of pervious* landscaping, and therefore a smaller *proportion of impervious* area.) Therefore, the range of SFR was broken into four size categories as shown in Table 5 below with the medium category containing the largest number of parcels. A random sample of 213 parcels in that size category was selected, and the ISA of each sample parcel was measured using aerial photographs. The median ISA is 5,171 square feet, which will be used as the benchmark (1 SFE) for all other size categories and other non-residential land uses.

5,171 square feet of ISA = SFE

This becomes the basis for calculating the SFEs for all other types of land uses. In order to accomplish this, a representative sample of each land use category was studied through aerial photographs to measure the actual ISA, which was, in turn, used to calculate the %IA

<sup>&</sup>lt;sup>15</sup> Stormwater Utility Survey, 2017, page 2, Western Kentucky University.

<sup>&</sup>lt;sup>16</sup> The SFR category also includes multiplex parcels of two, three or four units, since the lot development characteristics do not vary significantly from the SFR parcels of similar size. In all, this includes the 73 multiplex parcels in the City, which were distributed to the same four parcel size categories as the other SFRs. Any residential structure with five or more units is categorized as multi-family residential ("MFR"), which is calculated separately.

for each land use category (see Appendix C). The SFE per parcel is a simple ratio of the median ISA for each category to the ISA (5,171 sf) for the benchmark category of medium-sized parcels as shown in the following formula:

$$SFE \ per \ Parcel = \frac{Median \ ISA}{5,171}$$

#### **SPECIAL NOTES ON CONDOMINIUMS**

Condominium units are particularly difficult to categorize as they are often on very small individual parcels yet share larger common areas that are made up of landscaped (pervious) areas; parking lots and shared roofs (impervious); and other recreational uses (either pervious or impervious). The data for these variables is not readily available, so it is assumed that overall, their characteristics were most similar to the small lot makeup. Overall, condominium units are smaller than the average SFR, and may include two or more stories of residences in some cases. When combined with the various common areas (which were exempted from the SFE process), the overall effect would be less runoff impact than the median size SFR. Thus, the small SFR rate was used.

Table 5 below shows a summary of the SFEs for single-family residential parcels.

|            |           |          |              |           | # of      |          | Median      | SFE per |
|------------|-----------|----------|--------------|-----------|-----------|----------|-------------|---------|
| Lot Type   |           | Parcel   | Size Range   |           | Parcels * | Acres *  | ISA (sf) ** | Parcel  |
|            | Acres     | <u>s</u> | Square Fo    | ootage    |           |          |             |         |
| Small      | under     | 0.21     | under        | 9,000     | 871       | 138.59   | 4,231       | 0.82    |
| Medium     | 0.21 to   | 0.33     | 9,000 to     | 14,500    | 7,032     | 1,758.24 | 5,171       | 1.00    |
| Large      | 0.34 to   | 0.45     | 14,500 to    | 20,000    | 973       | 376.06   | 5,895       | 1.14    |
| Very Large | over      | 0.45     | over         | 20,000    | 519       | 322.75   | 6,910       | 1.34    |
| Condos     | Considere | ed to b  | e same as Sr | nall Lots | 1,053     | 37.86    | na          | 0.82    |
|            |           |          |              | TOTAL     | 10,448    | 2,633.50 |             |         |

#### TABLE 5 – SUMMARY OF SINGLE-FAMILY RESIDENTIAL PARCELS

\* # of Parcels and Acres do not factor into the basis of the SFE calculation; they are shown for informational purposes only.

\*\* From Table 12, Appendix C.

#### NON-SINGLE-FAMILY RESIDENTIAL PARCELS

Unlike the SFR parcels, the non-SFR parcels can vary widely in size as well as characteristics. For this reason, the parcels have been grouped into land use categories according their %IA characteristics (as shown in Appendix C) so that the SFE-per-acre can be computed for each category using the following formula:

 $\frac{(43,560 \text{ sf}/\text{acre}) \times \% IA}{5,171 \text{ sf}} = SFE \text{ per Acre}$ 

where 5,171 square feet is the amount of ISA in one SFE.

Table 6 below shows a summary of the non-single-family parcel SFEs for each non-SFR land use category.

| Land Use Category                | # of<br>Parcels * | Acres * | % Imperv<br>Area ** | SFE per<br>Acre |
|----------------------------------|-------------------|---------|---------------------|-----------------|
| Multi-Family (Apartments)        | 22                | 22.30   | 77.2%               | 6.50            |
| Commercial / Retail / Industrial | 216               | 78.84   | 88.6%               | 7.46            |
| Office                           | 303               | 67.26   | 77.2%               | 6.50            |
| Church / Institutional           | 25                | 64.70   | 60.1%               | 5.07            |
| School                           | 14                | 172.21  |                     |                 |
| Park                             | 14                | 32.07   | 5.0%                | 0.42            |
| Vacant (developed)               | 94                | 53.03   | 5.0%                | 0.42            |
| Open Space / Agricultural        | 98                | na      | Exer                | npt             |
| TOTAL                            | 786               | 490.41  | _                   |                 |

TABLE 6 – SUMMARY OF NON-SFR PARCELS

\* Aggregate # of Parcels and Acres do not factor into the basis of the SFE calculation; they are shown for informational purposes only.

\*\* %IA is from Table 12, Appendix C.

Each individual parcel's SFE is then calculated by multiplying the parcel size (in acres<sup>17</sup>) times the SFE/acre for that land use category, as shown in the following formula:

Parcel Size (acres) x SFE per Acre = SFE

#### DEVELOPED VACANT PARCELS

Developed vacant parcels are distinguished from undeveloped vacant land by one of several characteristics. Typically, a developed vacant parcel has been graded to be ready for building construction (possibly as part of the original subdivision or adjacent street grading). In some cases, the parcel was previously improved, but the improvement has been removed. Although developed vacant parcels may have significant vegetative cover, the underlying soil conditions resulting from grading work can usually cause some rainfall to runoff into the storm drainage system. The %IA for developed vacant parcels is reasonably assumed to be 5%, which is also used as a minimum value of imperviousness for any property. Vacant parcels that have significant impervious paving remaining from prior improvements may be classified as Commercial or some other classification best representing the %IA of the parcel.

<sup>&</sup>lt;sup>17</sup> Parcel size for non-SFR parcels is calculated to the tenth of an acre or portion thereof.

#### OPEN SPACE AND AGRICULTURAL PARCELS ARE EXEMPT

The City's MS4 was developed in response to land development over the past several decades. Tracts of land that have not yet been developed, or have been used primarily for agricultural purposes, have not created an impact on the Drainage system beyond the natural condition, and are therefore considered to receive no service from the MS4. In practical terms, these parcels generate no additional storm runoff beyond the natural condition. For these reasons, open space and agricultural parcels are exempt from the Stormwater Fee.

Los Altos is a City with some open space land that may be situated on portions of developed parcels. For parcels that have a significant portion that is considered open space (or agricultural), those open space portions have been taken into consideration in the calculations of the %IA and SFEs.

- For SFR parcels, these open space lands have been included in the sampled lot size when calculating the average %IA, which produced a lower %IA for the extralarge parcels, and, thus, a lower SFE and Fee to accommodate the open space areas.
- For non-SFR parcels the fees are calculated on individual acreage. However, the open space portion has been deducted from the parcel's acreage prior to all analysis including %IA as well as SFE and fee calculations.

#### LOW IMPACT DEVELOPMENT AND POTENTIAL INCENTIVE PROGRAMS

The current NPDES Permit requires certain properties to construct stormwater treatment and attenuation facilities, also known as low impact development ("LID"). These facilities are typically designed to capture a portion of the storm flows, retain them, and enable them to infiltrate into the ground. While this is intended to help filter pollutants from the water, it also can reduce the parcel's stormwater runoff quantity to some extent, which in turn can reduce a parcel's impact on the City's storm drainage system. In addition to NPDES-required LID, other parcel owners may elect to follow LID guidelines voluntarily.

For parcels utilizing LID, it may make sense for the City to reduce a parcel's user fee by an amount commensurate with its reduced impact on the City's MS4. However, data is not yet available to correlate a parcel's LID to its effect on the MS4. In the coming year, the City will be developing its Green Infrastructure Plan, which may include data that could support a fee reduction calculation. Such a fee reduction could in turn become an incentive for non-regulated parcels to voluntarily implement LID, thereby further reducing the City's overall MS4 burden.

#### STORMWATER FEE CALCULATION

The primary metric in this analysis is the SFE as illustrated above. To arrive at the fee amount for the various land use categories, the total SFEs must be divided into the revenue requirement to arrive at the rate per SFE. Using the analysis above, that calculation is represented by the following formula:

$$\frac{Annual Revenue Req't}{Total SFEs} = SFE Rate$$

Or, using numbers from the analysis:

$$\frac{\$1,133,000}{12,880.000} = \$88.00 \text{ per SFE}$$

This SFE rate amount is then multiplied by the SFEs per parcel or acre for the various land use categories to arrive at the Stormwater Fee Rate Schedule shown in Table 7 below.

| Land Use Category |            |       |            |    | SFE Rate |      |        | sed Fee<br>)18-19 |
|-------------------|------------|-------|------------|----|----------|------|--------|-------------------|
| Single-Fami       | y Resid    | entia | al *       |    |          |      |        |                   |
| Small             | Ur         | nder  | 9,000      | sf | 0.81822  | \$   | 72.00  | per parcel        |
| Medium            | 9,000      | to    | 14,500     | sf | 1.00000  | \$   | 88.00  | per parcel        |
| Large             | 14,500     | to    | 20,000     | sf | 1.14001  | \$   | 100.32 | per parcel        |
| Extra Larg        | ge o       | ver   | 20,000     | sf | 1.33630  | \$   | 117.59 | per parcel        |
| Condomi           | nium       |       |            |    | 0.81822  | \$   | 72.00  | per parcel        |
| Non-Single-       | Family F   | Resid | lential ** | k  |          |      |        |                   |
| Multi-Far         | nily Res   | iden  | tial       |    | 6.50420  | \$   | 572.37 | per acre          |
| Commerc           | cial / Ret | ail / | Industri   | al | 7.46487  | \$   | 656.91 | per acre          |
| Office            |            |       |            |    | 6.50420  | \$   | 572.37 | per acre          |
| Church /          | Instituti  | onal  |            |    | 5.06523  | \$   | 445.74 | per acre          |
| School            | School     |       |            |    | 4.17416  | \$   | 367.33 | per acre          |
| Park              |            |       |            |    | 0.42120  | \$   | 37.07  | per acre          |
| Vacant (d         | evelope    | ed)   |            |    | 0.42120  | \$   | 37.07  | per acre          |
| Open Spa          | ice / Agr  | icult | ural       |    | exe      | empt |        |                   |

#### TABLE 7 – PROPOSED 2018-19 STORMWATER FEE SCHEDULE

\* SFR category also includes duplex, triplex and four-plex units.

\*\* Non-SFR parcel size is calculated to the tenth of an acre or portion thereof.

The specific assumptions utilized in this Report, the specific CIP projects listed, and the division of revenues and expenses between the two primary categories (CIP and O&M) are used as a reasonable model of future revenue needs and are not intended to be binding on future use of funds.



#### ANNUAL COST INDEXING

The Stormwater fees are subject to an annual adjustment tied to the Consumer Price Index-U for the San Francisco, Oakland, Hayward Area as of December of each succeeding year (the "CPI"), with a maximum annual adjustment not to exceed 3%. Any change in the CPI in excess of 3% shall be cumulatively reserved as the "Unused CPI" and shall be used to increase the maximum authorized rate in years in which the CPI is less than 3%. The maximum authorized rate is equal to the maximum rate in the first fiscal year the Fee was approved adjusted annually by the lower of either 3% or the change in the CPI plus any Unused CPI as described above.

## COLLECTION, MANAGEMENT AND USE OF STORMWATER FUNDS

The City may collect the Stormwater Fees in the same manner as the annual property taxes on each parcel subject to the fee. The City shall also deposit into a separate account(s) all Stormwater Fee revenues collected and shall appropriate and expend such funds only for the purposes authorized by this Report. The specific assumptions utilized in this Report, the specific CIP projects listed, and the division of revenues and expenses between the two primary categories (CIP and O&M) are used as a reasonable model of future revenue needs and are not intended to be binding on future use of funds.

Dated: September 28, 2018

Engineer of Work

By

Jerry Bradshaw, License No. C48845



### APPENDIX A – LIST OF HIGH- AND MODERATE-PRIORITY CIP PROJECTS

Table 8 below lists the High- and Moderate-Priority projects from the 2016 Stormwater Master Plan that are used as the basis of the Stormwater Fee. The 2018 cost column includes an escalation factor of 7.1% plus an additional 7.0% added for program management costs not included in the 2016 Plan.

| Project Name             | Location             | Description                        | Project No.       | 2016 Cost       | 2018 Cost    |
|--------------------------|----------------------|------------------------------------|-------------------|-----------------|--------------|
| HIGH PRIORITY            |                      | Remedy Significant Floodin         | ng to Protect Pro | operty and Comr | nerce        |
| Milverton<br>Road        | 600 block            | 770' Pipe, Drywells, Inlets        | AD_PA_1002        | \$ 410,000      | ***          |
| Deodora                  |                      | 240' Pipe, Manhole                 | PS_CNV_001        | 220,000         | \$ 250,000   |
| Fremont                  |                      | 1,330' Pipe, Manhole               | PS_CNV_002        | 950,000         | 1,080,000    |
| Stonehaven               |                      | 280' Pipe, 3 Manholes              | PS_CNV_003        | 240,000         | 270,000      |
| Woods Lane               | Citation Dr          | 36" Trash Rack or Inlet            | PS_PA_1001        | 220,000         | 250,000      |
| Stonehaven               | 2100 block           | Improve Channel, New<br>Trash Rack | PS_PA_1002        | 770,000         | 880,000      |
| Windimer                 | Sierra Ventura<br>Dr | Ditch Improvements                 | PL_PA_1003        | 460,000         | ***          |
| Trash Capture<br>Devices | City-wide            | Install Trash Capture<br>Devices   | RC_10             | 400,000         | ***          |
| Green<br>Infrastructure  | Plan                 | GI Plan Development                | RC_02             | 150,000         | ***          |
|                          |                      | High Priority Subtota              | l                 | \$ 3,820,000    | \$ 2,730,000 |

#### TABLE 8 – HIGH AND MODERATE PRIORITY CAPITAL IMPROVEMENT PROJECTS

Table continues on following page

\*\*\* These projects have been previously funded by other sources, and are not included in the revenue needs for purposes of this report.



| Project Name   | Location      | Description  | Project No.   | 2016 Cost     | 2018 Cost    |  |  |
|----------------|---------------|--|---------------|---------------|--------------|--|--|
| MODERATE PRIO  | RITY          | Reduce Less Significant Flood Risks During More Extreme Events |               |               |              |  |  |
| Loucks         |               | 1,970' Pipe, 8 Manholes  | AD_CNV_001    | 1,720,000     | \$ 1,960,000 |  |  |
| Shasta St      |               | Concrete Pipe, Manhole   | AD_EX_015     | 450,000       | 510,000      |  |  |
| Summerhill     | S. El Monte   | 200' Pipe, 2 Inlets  | AD_PA_1000    | 200,000       | 230,000      |  |  |
| Edith          |               | 5,270' Pipe, 20 Manholes                                       | HA_CNV_002    | 410,000       | 470,000      |  |  |
| Renetta        |               | 580' Pipe, 2 Manholes  | HA_CNV_005    | 3,880,000     | 4,430,000    |  |  |
| Springer Rd    |               | 370 Pipe, 5 Manholes   | HA_PA_1000    | 240,000       | 270,000      |  |  |
| Sunshine Dr    |               | Reconstruct 2 Inlets   | HA_PA_1001    | 150,000       | 170,000      |  |  |
| Oakwood Ct     |               | Replace Drywell, 880' Pipe,<br>5 Inlets, 5 Manholes            | HA_PA_1002    | 490,000       | 560,000      |  |  |
| Payne Dr       |               | Replace 6 Drywells, 2,130'<br>Pipe, 6 Inlets, 9 Manholes       | PM_PA_1000    | 1,100,000     | 1,260,000    |  |  |
| Loma Prieta Ct |               | Lower Inlet  | PM_PA_1001    | 30,000        | 30,000       |  |  |
| Arboretum      |               | 1,570' Pipe, 21 Manholes                                       | PS_CNV_004    | 1,550,000     | 1,770,000    |  |  |
| Oak Ave        |               | 880' Pipe, 7 Manholes  | PS_CNV_005    | 640,000       | 730,000      |  |  |
| Dallas Ct      | 1600 block    | 1 Inlet, 1 Manholes  | PL_PA_1001    | 200,000       | 230,000      |  |  |
| Ranchita Dr    | Julie Ln      | Replace Inlet  | PS_PA_1004    | 110,000       | 130,000      |  |  |
| Cedar Pl       | Redwood Dr    | 480' Pipe, 2 Inlets, 3<br>Manholes                             | PS_PA_1005    | 140,000       | 160,000      |  |  |
| Foothill Exp   | El Cereno Ave | 1 Inlet  | ST_PA_1000    | 150,000       | 170,000      |  |  |
|                |               | Moderate Priority Subtotal                                     | 11,460,000    | \$ 13,080,000 |              |  |  |
|                |               | TOTAL COST   | \$ 15,280,000 | \$ 15,810,000 |              |  |  |

#### **APPENDIX B – FINANCING SCENARIOS**

|        |           | Revenues  | Expenses       |                |             |         | Remaining   | Capital Need    |
|--------|-----------|-----------|----------------|----------------|-------------|---------|-------------|-----------------|
| FY End | Begin Bal | Revenue   | <u>0&amp;M</u> | <u>Capital</u> | <u>Debt</u> | End Bal | <u>High</u> | <u>Moderate</u> |
| 2019   | -         | 1,133,440 | 522,000        | 507,040        |             | 104,400 | 2,730,000   | 13,080,000      |
| 2020   | 104,400   | 1,162,909 | 537,660        | 622,117        |             | 107,532 | 2,280,757   | 13,420,080      |
| 2021   | 107,532   | 1,193,145 | 553,790        | 636,129        |             | 110,758 | 1,701,764   | 13,769,002      |
| 2022   | 110,758   | 1,224,167 | 570,403        | 650,441        |             | 114,081 | 1,093,341   | 14,126,996      |
| 2023   | 114,081   | 1,255,995 | 587,516        | 397,325        |             | 385,235 | 454,416     | 14,494,298      |
| 2024   | 385,235   | 1,288,651 | 605,141        | 190,000        | 719,722     | 159,024 | 58,575      | 9,744,298       |
| 2025   | 159,024   | 1,322,156 | 623,295        | -              | 719,722     | 138,163 |             | 9,802,710       |
| 2026   | 138,163   | 1,356,532 | 641,994        | -              | 719,722     | 132,979 |             | 10,057,580      |
| 2027   | 132,979   | 1,391,802 | 661,254        | 11,000         | 719,722     | 132,805 |             | 10,319,077      |
| 2028   | 132,805   | 1,427,989 | 681,092        | 23,000         | 719,722     | 136,981 |             | 10,576,087      |
| 2029   | 136,981   | 1,465,116 | 701,524        | 40,000         | 719,722     | 140,851 |             | 10,827,468      |
| 2030   | 140,851   | 1,503,209 | 722,570        | 57,000         | 719,722     | 144,769 |             | 11,067,942      |
| 2031   | 144,769   | 1,542,293 | 744,247        | 74,000         | 719,722     | 149,093 |             | 11,297,226      |
| 2032   | 149,093   | 1,582,393 | 766,575        | 91,000         | 719,722     | 154,189 |             | 11,515,030      |
| 2033   | 154,189   | 1,623,535 | 789,572        | 106,000        | 719,722     | 162,430 |             | 11,721,055      |
| 2034   | 162,430   | 1,665,747 | 813,259        | -              | 852,011     | 162,907 |             | 5,271,055       |
| 2035   | 162,907   | 1,709,056 | 837,657        | 15,000         | 852,011     | 167,296 |             | 5,408,102       |
| 2036   | 167,296   | 1,753,492 | 862,786        | 33,000         | 852,011     | 172,990 |             | 5,533,323       |
| 2037   | 172,990   | 1,799,082 | 888,670        | 53,000         | 852,011     | 178,392 |             | 5,643,331       |
| 2038   | 178,392   | 1,845,858 | 915,330        | 74,000         | 852,011     | 182,910 |             | 5,735,680       |
| 2039   | 182,910   | 1,893,851 | 942,790        | 93,000         | 852,011     | 188,960 |             | 5,808,884       |
| 2040   | 188,960   | 1,943,091 | 971,074        | 114,000        | 852,011     | 194,966 |             | 5,864,497       |
| 2041   | 194,966   | 1,993,611 | 1,000,206      | 136,000        | 852,011     | 200,361 |             | 5,900,010       |
| 2042   | 200,361   | 2,045,445 | 1,030,212      | 157,000        | 852,011     | 206,583 |             | 5,913,874       |
| 2043   | 206,583   | 2,098,627 | 1,061,119      | 180,000        | 852,011     | 212,081 |             | 5,906,553       |
| 2044   | 212,081   | 4,473,868 | 1,092,952      | 3,374,407      |             | 218,590 |             | 5,875,443       |
| 2045   | 218,590   | 2,209,174 | 1,125,741      | 1,076,876      |             | 225,148 |             | 2,566,063       |
| 2046   | 225,148   | 2,266,612 | 1,159,513      | 1,100,345      |             | 231,903 |             | 1,527,907       |
| 2047   | 231,903   | 2,325,544 | 1,194,298      | 1,124,289      |             | 238,860 |             | 438,678         |
| 2048   | 238,860   | 2,386,009 | 1,230,127      | 1,148,716      |             | 246,025 |             | (703,437)       |

#### TABLE 9 – HYBRID APPROACH

Table Notes:

- Interest and escalation factors are as listed on Page 6 of this Report.
- 10-yr Debt issuance in FY 2023-24 is for \$4.75 million in proceeds.
- 10-yr Debt issuance in FY 2033-34 is for \$6.45 million in proceeds.
- Revenue in FY 2043-44 is spiked upward as the bond reserve fund (not shown) is transferred into the operating fund.

|        |           | Revenues  | Expenses       |                 |           |         | Remaining C | apital Needs    |
|--------|-----------|-----------|----------------|-----------------|-----------|---------|-------------|-----------------|
| FY End | Begin Bal | Revenue   | <u>0&amp;M</u> | <u>CIP High</u> | CIP Mod   | End Bal | <u>High</u> | <u>Moderate</u> |
| 2019   | -         | 1,107,680 | 522,000        | 481,280         | -         | 104,400 | 2,730,000   | 13,080,000      |
| 2020   | 104,400   | 1,136,480 | 537,660        | 595,688         |           | 107,532 | 2,307,187   | 13,420,080      |
| 2021   | 107,532   | 1,166,028 | 553,790        | 609,012         |           | 110,758 | 1,755,998   | 13,769,002      |
| 2022   | 110,758   | 1,196,345 | 570,403        | 622,619         |           | 114,081 | 1,176,807   | 14,126,996      |
| 2023   | 114,081   | 1,227,450 | 587,516        | 568,598         | 70,209    | 115,208 | 568,598     | 14,494,298      |
| 2024   | 115,208   | 1,259,364 | 605,141        |                 | 648,402   | 121,028 | -           | 14,799,115      |
| 2025   | 121,028   | 1,292,107 | 623,295        | -               | 665,181   | 124,659 |             | 14,518,631      |
| 2026   | 124,659   | 1,325,702 | 641,994        |                 | 679,968   | 128,399 |             | 14,213,640      |
| 2027   | 128,399   | 1,360,170 | 661,254        |                 | 695,064   | 132,251 |             | 13,885,548      |
| 2028   | 132,251   | 1,395,534 | 681,092        |                 | 710,475   | 136,218 |             | 13,533,436      |
| 2029   | 136,218   | 1,431,818 | 701,524        |                 | 726,207   | 140,305 |             | 13,156,358      |
| 2030   | 140,305   | 1,469,046 | 722,570        |                 | 742,266   | 144,514 |             | 12,753,334      |
| 2031   | 144,514   | 1,507,241 | 744,247        |                 | 758,658   | 148,849 |             | 12,323,356      |
| 2032   | 148,849   | 1,546,429 | 766,575        |                 | 775,389   | 153,315 |             | 11,865,380      |
| 2033   | 153,315   | 1,586,636 | 789,572        |                 | 792,465   | 157,914 |             | 11,378,330      |
| 2034   | 157,914   | 1,627,889 | 813,259        |                 | 809,892   | 162,652 |             | 10,861,098      |
| 2035   | 162,652   | 1,670,214 | 837,657        |                 | 827,678   | 167,531 |             | 10,312,537      |
| 2036   | 167,531   | 1,713,639 | 862,786        |                 | 845,827   | 172,557 |             | 9,731,466       |
| 2037   | 172,557   | 1,758,194 | 888,670        |                 | 864,347   | 177,734 |             | 9,116,665       |
| 2038   | 177,734   | 1,803,907 | 915,330        |                 | 883,245   | 183,066 |             | 8,466,878       |
| 2039   | 183,066   | 1,850,809 | 942,790        |                 | 902,527   | 188,558 |             | 7,780,808       |
| 2040   | 188,558   | 1,898,930 | 971,074        |                 | 922,199   | 194,215 |             | 7,057,116       |
| 2041   | 194,215   | 1,948,302 | 1,000,206      |                 | 942,269   | 200,041 |             | 6,294,425       |
| 2042   | 200,041   | 1,998,958 | 1,030,212      |                 | 962,744   | 206,042 |             | 5,491,312       |
| 2043   | 206,042   | 2,050,931 | 1,061,119      |                 | 983,631   | 212,224 |             | 4,646,310       |
| 2044   | 212,224   | 2,104,255 | 1,092,952      |                 | 1,004,936 | 218,590 |             | 3,757,909       |
| 2045   | 218,590   | 2,158,965 | 1,125,741      |                 | 1,026,667 | 225,148 |             | 2,824,550       |
| 2046   | 225,148   | 2,215,099 | 1,159,513      |                 | 1,048,831 | 231,903 |             | 1,844,628       |
| 2047   | 231,903   | 2,272,691 | 1,194,298      |                 | 1,071,436 | 238,860 |             | 816,487         |
| 2048   | 238,860   | 2,331,781 | 1,230,127      |                 | 1,094,488 | 246,025 |             | (261,577)       |

#### TABLE 10 - PAY-AS-YOU-GO APPROACH

#### Table Notes

• Interest and escalation factors are as listed on Page 6 of this Report.

|        |                  | Revenues           |                |           | Expe           | nses            |         |
|--------|------------------|--------------------|----------------|-----------|----------------|-----------------|---------|
| FY End | <u>Begin Bal</u> | <u>O&amp;M Rev</u> | <u>CIP Rev</u> | TOTAL Rev | <u>0&amp;M</u> | <u>Debt Pmt</u> | End Bal |
| 2019   | -                | 521,833            | 1,140,566      | 1,662,399 | 522,000        |                 | 104,400 |
| 2020   | 104,400          | 540,792            | 1,140,566      | 1,681,358 | 537,660        | 1,140,566       | 107,532 |
| 2021   | 107,532          | 557,016            | 1,140,566      | 1,697,581 | 553,790        | 1,140,566       | 110,758 |
| 2022   | 110,758          | 573,726            | 1,140,566      | 1,714,292 | 570,403        | 1,140,566       | 114,081 |
| 2023   | 114,081          | 590,938            | 1,140,566      | 1,731,504 | 587,516        | 1,140,566       | 117,503 |
| 2024   | 117,503          | 608,666            | 1,140,566      | 1,749,232 | 605,141        | 1,140,566       | 121,028 |
| 2025   | 121,028          | 626,926            | 1,140,566      | 1,767,492 | 623,295        | 1,140,566       | 124,659 |
| 2026   | 124,659          | 645,734            | 1,140,566      | 1,786,300 | 641,994        | 1,140,566       | 128,399 |
| 2027   | 128,399          | 665,106            | 1,140,566      | 1,805,672 | 661,254        | 1,140,566       | 132,251 |
| 2028   | 132,251          | 685,059            | 1,140,566      | 1,825,625 | 681,092        | 1,140,566       | 136,218 |
| 2029   | 136,218          | 705,611            | 1,140,566      | 1,846,177 | 701,524        | 1,140,566       | 140,305 |
| 2030   | 140,305          | 726,779            | 1,140,566      | 1,867,345 | 722,570        | 1,140,566       | 144,514 |
| 2031   | 144,514          | 748,583            | 1,140,566      | 1,889,148 | 744,247        | 1,140,566       | 148,849 |
| 2032   | 148,849          | 771,040            | 1,140,566      | 1,911,606 | 766,575        | 1,140,566       | 153,315 |
| 2033   | 153,315          | 794,171            | 1,140,566      | 1,934,737 | 789,572        | 1,140,566       | 157,914 |
| 2034   | 157,914          | 817,996            | 1,140,566      | 1,958,562 | 813,259        | 1,140,566       | 162,652 |
| 2035   | 162,652          | 842,536            | 1,140,566      | 1,983,102 | 837,657        | 1,140,566       | 167,531 |
| 2036   | 167,531          | 867,812            | 1,140,566      | 2,008,378 | 862,786        | 1,140,566       | 172,557 |
| 2037   | 172,557          | 893,847            | 1,140,566      | 2,034,412 | 888,670        | 1,140,566       | 177,734 |
| 2038   | 177,734          | 920,662            | 1,140,566      | 2,061,228 | 915,330        | 1,140,566       | 183,066 |
| 2039   | 183,066          | 948,282            | 1,140,566      | 2,088,848 | 942,790        | 1,140,566       | 188,558 |
| 2040   | 188,558          | 976,731            | 1,140,566      | 2,117,296 | 971,074        | 1,140,566       | 194,215 |
| 2041   | 194,215          | 1,006,032          | 1,140,566      | 2,146,598 | 1,000,206      | 1,140,566       | 200,041 |
| 2042   | 200,041          | 1,036,213          | 1,140,566      | 2,176,779 | 1,030,212      | 1,140,566       | 206,042 |
| 2043   | 206,042          | 1,067,300          | 1,140,566      | 2,207,865 | 1,061,119      | 1,140,566       | 212,224 |
| 2044   | 212,224          | 1,099,319          | 1,140,566      | 2,239,884 | 1,092,952      | 1,140,566       | 218,590 |
| 2045   | 218,590          | 1,132,298          | 1,140,566      | 2,272,864 | 1,125,741      | 1,140,566       | 225,148 |
| 2046   | 225,148          | 1,166,267          | 1,140,566      | 2,306,833 | 1,159,513      | 1,140,566       | 231,903 |
| 2047   | 231,903          | 1,201,255          | 1,140,566      | 2,341,821 | 1,194,298      | 1,140,566       | 238,860 |
| 2048   | 238,860          | 1,237,293          | 1,140,566      | 2,377,859 | 1,230,127      | 1,140,566       | 246,025 |

TABLE 11 – LONG-TERM DEBT APPROACH

Table Notes

- Interest and escalation factors are as listed on Page 6 of this Report.
- Debt Reserve Fund balance (not shown) is used to make 30th debt payment.
- Capital expenses are off-budget and are assumed expended in the first few years with minimal interest earnings.

#### APPENDIX C – PERCENTAGE OF IMPERVIOUS AREA SAMPLING RESULTS

For most land use categories, a sample of parcels was analyzed using aerial photography and other data to determine the average percentage of impervious area ("%IA"). Table 12 below shows the results of that analysis.

| Land Use Category   | # of<br>Parcels | # Parcels<br>Analyzed | Total Acres<br>Sampled | Total Acres<br>Impervious<br>Area | Imprervious<br>Area <sup>A</sup> |
|---|-----------------|-----------------------|------------------------|-----------------------------------|----------------------------------|
| Single-Family Residential                                 |                 |                       |                        |                                   |                                  |
| Small Under 9,000 sf                                      | 871             | 27                    | 4.20                   | 2.47                              | 4,231 sf                         |
| Medium 9,000 to 14,500 sf                                 | 7,032           | 213                   | 54.23                  | 25.64                             | 5,171 sf                         |
| Large 14,500 to 20,000 sf                                 | 973             | 40                    | 15.83                  | 5.64                              | 5,895 sf                         |
| Extra Large over 20,000 sf                                | 519             | 40                    | 29.30                  | 7.02                              | 6,910 sf                         |
| Condominium <sup>B</sup>                                  | 1,053           |                       | not san                | npled                             |                                  |
| Non-Single-Family Residential<br>Multi-Family Residential | 22              | 18                    | 9.61                   | 7.42                              | 77.21%                           |
| •   |                 |                       |                        |                                   |                                  |
| Commercial / Retail / Industrial                          | 216             | 41                    | 26.00                  | 23.04                             | 88.62%                           |
| Office <sup>C</sup>                                       | 303             |                       | not san                | npled                             |                                  |
| Church / Institutional                                    | 25              | 14                    | 60.32                  | 36.27                             | 60.13%                           |
| School  | 14              | 11                    | 144.88                 | 71.79                             | 49.55%                           |
| Park <sup>D</sup>   | 14              |                       | not san                | npled                             |                                  |
| Vacant (developed) <sup>D</sup>                           | 94              |                       | not san                | npled                             |                                  |
| TOTAL   | 11,136          | 404                   | 344.37                 | 179.29                            | na                               |

#### TABLE 12 – PERCENTAGE OF IMPERVIOUS AREA SAMPLING RESULTS

A For Residential, impervious area is the median value of all parcels analyzed. For Non-Residential, impervious area is expressed as a percentage of parcel area (Total IA/Total Acres sampled).

- B Condominium Not sampled as explained on Page 9 of this Report.
- C Office Parcels in the Office category tended to be very large or very small in size. Furthermore, many of the large parcels were subdivided into office condominiums. For these reasons, a statistical approach was not considered representative. The SFE / Acres of 6.5 found in Table 6 was estimated based on other municipalities of similar makeup.
- D Park and Vacant Park and Vacant parcels were estimated to have a 5% impervious area based on other similar municipalities.



#### APPENDIX D – STORMWATER RATES FROM OTHER MUNICIPALITIES

There have been relatively few voter-approved local revenue mechanisms in the past 15 years to support Stormwater programs in California. A summary of those efforts plus some others in process or being studied is shown in Table 13 on the following page, in roughly chronological order. Amounts are annualized and are for single family residences or the equivalent.

| Municipality                         | Status   | nnual<br>Rate | Year       | Mechanism   |
|--------------------------------------|--|---------------|------------|---|
| San Clemente                         | Successful   | \$<br>60.15   | 2002       | Balloted Property-Related Fee   |
| Carmel                               | Unsuccessful   | \$<br>38.00   | 2003       | Balloted Property-Related Fee   |
| Palo Alto                            | Unsuccessful   | \$<br>57.00   | 2003       | Balloted Property-Related Fee   |
| Los Angeles                          | Successful   | \$<br>28.00   | 2004       | Special Tax - G. O. Bond  |
| Palo Alto                            | Successful   | \$<br>120.00  | 2005       | Balloted Property-Related Fee   |
| Rancho Palos Verde                   | Successful , then recalled and reduced   | \$<br>200.00  | 2005, 2007 | Balloted Property-Related Fee   |
| Encinitas                            | Unsuccessful   | \$<br>60.00   | 2006       | Non-Balloted Property-Related<br>Fee adopted in 2004,<br>challenged, balloted and failed<br>in 2006 |
| Ross Valley                          | Successful, Overturned by<br>Court of Appeals, Decertified<br>by Supreme Court | \$<br>125.00  | 2006       | Balloted Property-Related Fee   |
| Santa Monica                         | Successful   | \$<br>87.00   | 2006       | Special Tax   |
| San Clemente                         | Successfully renewed   | \$<br>60.15   | 2007       | Balloted Property-Related Fee   |
| Solana Beach                         | Non-Balloted, Threatened by<br>lawsuit, Balloted, Successful                   | \$<br>21.84   | 2007       | Non-Balloted & Balloted<br>Property-Related Fee   |
| Woodland                             | Unsuccessful   | \$<br>60.00   | 2007       | Balloted Property-Related Fee   |
| Del Mar                              | Successful   | \$<br>163.38  | 2008       | Balloted Property-Related Fee   |
| Hawthorne                            | Unsuccessful   | \$<br>30.00   | 2008       | Balloted Property-Related Fee   |
| Santa Cruz                           | Successful   | \$<br>28.00   | 2008       | Special Tax   |
| Burlingame                           | Successful   | \$<br>150.00  | 2009       | Balloted Property-Related Fee   |
| Santa Clarita                        | Successful   | \$<br>21.00   | 2009       | Balloted Property-Related Fee   |
| Stockton                             | Unsuccessful   | \$<br>34.56   | 2009       | Balloted Property-Related Fee   |
| County of Contra Costa               | Unsuccessful   | \$<br>22.00   | 2012       | Balloted Property-Related Fee   |
| Santa Clara Valley Water<br>District | Successful   | \$<br>56.00   | 2012       | Special Tax   |
| City of Berkeley                     | Successful   | varies        | 2012       | Measure M - GO Bond   |
| County of LA                         | Deferred   | \$<br>54.00   | 2012       | NA  |
| San Clemente                         | Successful   | \$<br>74.76   | 2013       | Balloted Property-Related Fee   |
| Vallejo San & Flood                  | Successful   | \$<br>23.00   | 2015       | Balloted Property-Related Fee   |
| Culver City                          | Successful   | \$<br>99.00   | 2016       | Special Tax   |
| Palo Alto                            | Successful   | \$<br>163.80  | 2017       | Balloted Property-Related Fee<br>Reauthorization of 2005 Fee  |
| Town of Moraga                       | Unsuccessful   | \$<br>120.38  | 2018       | Balloted Property-Related Fee   |
| City of Berkeley                     | Successful   | \$<br>42.89   | 2018       | Balloted Property-Related Fee   |
| City of Los Altos                    | In Process   | NA            | NA         | Balloted Property-Related Fee   |
| County of San Joaquin                | Studying   | NA            | NA         | Balloted Property-Related Fee   |
| City of Sacramento                   | Studying   | NA            | NA         | Balloted Property-Related Fee   |
| City of Salinas                      | Studying   | NA            | NA         | NA  |
| City of Santa Clara                  | Studying   | NA            | NA         | Balloted Property-Related Fee   |
| County of San Mateo                  | Studying   | NA            | NA         | NA  |
| County of El Dorado                  | Studying   | NA            | NA         | NA  |
| County of Orange                     | Studying   | NA            | NA         | NA  |
| County of Ventura                    | Studying   | NA            | NA         | NA  |

## TABLE 13 – RECENT STORM DRAIN BALLOT MEASURES

In addition to the agencies listed above in Table 13 that have gone to the ballot for new or increased Stormwater Fees, there are several other municipalities throughout the State that have existing Stormwater Fees in place. Some of these rates are summarized in Table 14 below. Amounts are annualized and are for single family residences or the equivalent.

The City's proposed \$88 SFR rate is well within the range of Stormwater rates adopted by other municipalities.

| Municipality                                     | Annual<br>Rate | Type of Fee          |
|--|----------------|----------------------|
| Bakersfield                                      | \$ 200.04      | Property-Related Fee |
| Culver City                                      | \$ 99.00       | Special Tax          |
| Davis  | \$ 84.94       | Property-Related Fee |
| Elk Grove  | \$ 70.08       | Property-Related Fee |
|  | \$ 190.20      | Property-Related Fee |
| Hayward  | \$ 28.56       | Property-Related Fee |
| Los Angeles                                      | \$ 27.00       | Special tax          |
| Palo Alto  | \$ 136.80      | Property-Related Fee |
| Redding  | \$ 15.84       | Property-Related Fee |
| Sacramento (City)                                | \$ 135.72      | Property-Related Fee |
| Sacramento (County)                              | \$ 70.08       | Property-Related Fee |
| San Bruno  | \$ 46.16       | Property-Related Fee |
| San Clemente                                     | \$ 60.24       | Property-Related Fee |
| San Jose   | \$ 91.68       | Property-Related Fee |
| Santa Cruz                                       | \$ 109.08      | Special Tax          |
| Stockton *                                       | \$ 221.37      | Property-Related Fee |
| Vallejo Sanitation and Flood<br>Control District | \$ 23.64       | Property-Related Fee |
| West Sacramento                                  | \$ 144.11      | Property-Related Fee |
| Woodland   | \$ 5.76        | Property-Related Fee |

TABLE 14 – SAMPLE OF RATES FROM OTHER MUNICIPALITIES

\* This is the calculated average rate for the City of Stockton, which has 15 rate zones with rates ranging from \$3.54 to \$651.68 per year.