Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

8911 N. Capital of Texas Hwy. Bldg. 2, Suite 2300
Austin, Texas 78759
512.338.4212
Fax: 512.338.4942

**MEMORANDIUM**

DATE: September 25, 2017

TO: Tom Mountz, P.E., D.WRE, CFM - RPS
Jason Devaney - RPS

FROM: Brian Reis, PE, CFM

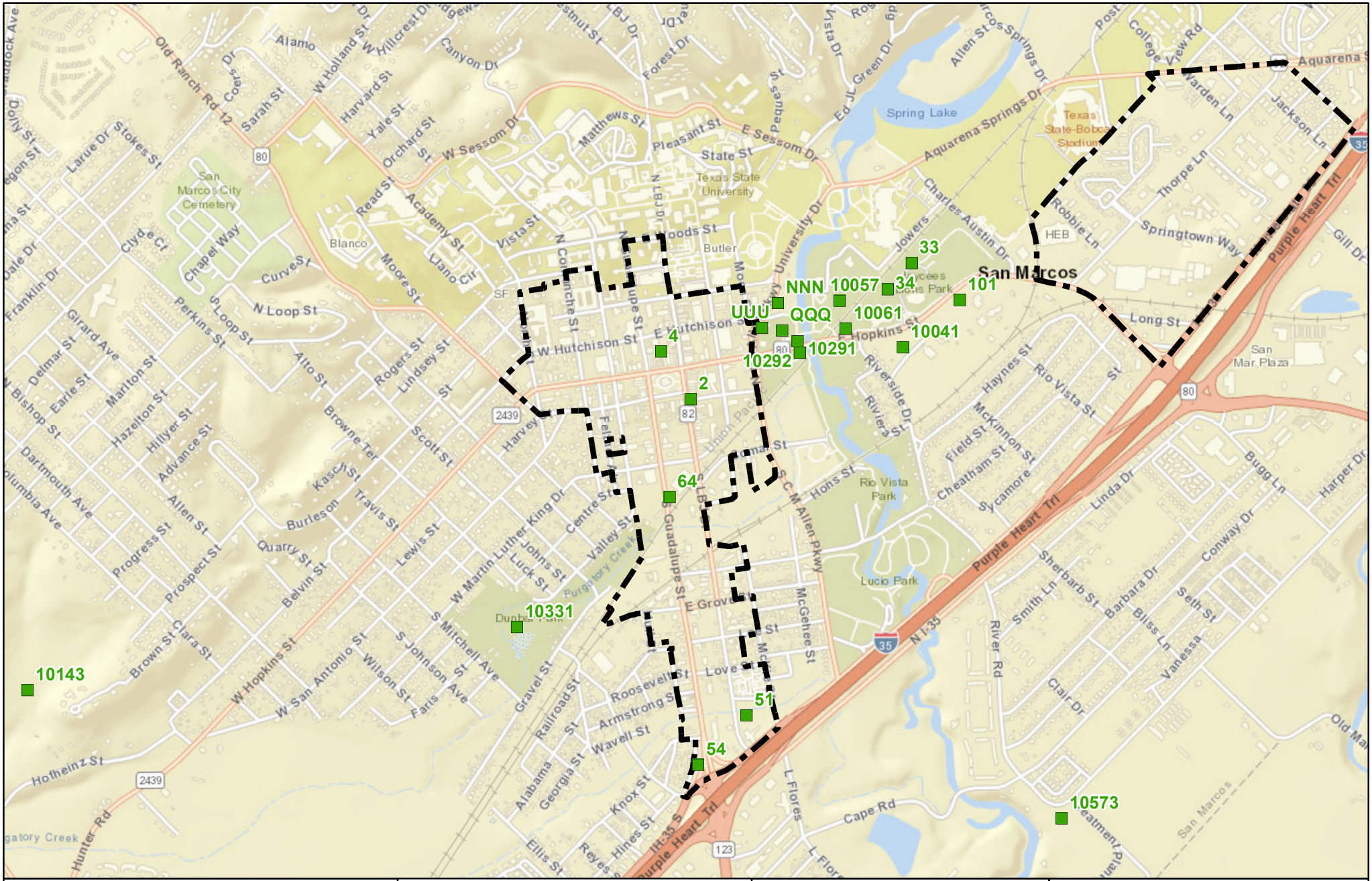
SUBJECT: City of San Marcos Stormwater Management Fund (Fee in Lieu of Water Quality)
LAN Project No. 120-12026-000

The attached calculations have been prepared in support of the City of San Marcos 'fee in lieu of water quality' program. As a result of the Comprehensive Planning Process and the ongoing revision to the Land Development Code (LDC), the City has included retrofit water quality improvements in the capital improvement plan (CIP, project ID 358). The first generation study of this included the "Downtown Smart Code Water Quality Plan" (SmartC) dated July 2015 and the Water Quality Protection Plan (WQPP) dated November 2015 (updated January 2016). The City's new LDC will include a stormwater management fund for areas within a designated 'urban infill boundary' (UIB) allowing development to pay a fee in lieu of water quality.

This method of analysis utilized the computed total area of the UIB with a breakdown of right-of-way (ROW), private property, and City/park land. The total area within the UIB is 383.5 acres, with 0.3 acres of City/park, 111.9 acres of ROW, and 271.3 acres of private property. The UIB is shown on the attached location map (Exhibit 1).

Table 1 shows cost and source information for the various water quality controls, or projects, identified by the City shown in Exhibit 1. From this total cost, an estimated cost per total area breakdown by City/park land, ROW, and private was found to cost $35,885per acre. At the request of the City, this calculation was also computed without three (3) of the water quality controls at 10143-Purgatory Creek Greenspace, 10573-Wastewater Treatment Plant and 10331-Dunbar Park and was found to cost $14,629 per acre. Table 2 shows this estimated cost per total area breakdown for both scenarios.

pw:\\ladpw.ladco.int:projectwise\Documents\Projects\120-12026-000\4-0-Production-Working\4-4-Reports\170925_TMountz_WQ_Fee_in_lieu.docx




# SAN MARCOS STORMWATER MANAGEMENT FUND LOCATION MAP EXHIBIT 1

**Legend**

- URBAN INFILL BOUNDARY (UIB)
- WATER QUALITY RETROFIT SITES

0 1,500 3,000

Feet

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

Project No. 120-12026-000

N:\120\120-12026-000\9-0-Non-Projectwise_Data\9-01-GIS\MXD\StormwaterManagementFund.mxd

## Table 1 Estimated Cost

| Project | | Scenario 1 | Scenario 2 | Ref |
|---|---|---|---|---|
| **Water Quality Protection Plan Projects** | | | | |
| 10061 | The Big Ditch | $ 1,100,000 | $ 1,100,000 | 1 |
| 10331 | Dunbar Park | $ 567,313 | | 3 |
| 10573 | Wastewater Treatment Plant | $ 985,000 | | 1 |
| 10041 | Veterans Memorial Park 1 | $ 2,700,000 | $ 2,700,000 | 1 |
| 10292 | Hopkins Channel Pond 1 | $ 52,825 | $ 52,825 | 3 |
| 10291 | Hopkins Channel Pond 2 | $ 91,130 | $ 91,130 | 3 |
| 10143 | Purgatory Creek Greenspace | $ 6,600,000 | | 1 |
| NNN | Hutchinson | $ 50,000 | $ 50,000 | |
| QQQ | SM Plaza Retrofit (SM Plaza MTD) | $ 25,000 | $ 25,000 | 3 |
| 10057 | City Park, under construction, treats TxSt runoff | $ 983,500 | $ 983,500 | 1 |
| **Downtown Smart Code Projects** | | | | |
| 2 | San Antonio St at LBJ, *inlet retrofit-Filterra System* | $ 25,800 | $ 25,800 | 4 |
| 4 | Hutchinson, LBJ, Guad, Hopkins Block, *Green Alley* | $ 106,000 | $ 106,000 | 4 |
| 33 | City Library Parking Lot, *rain garden* | $ 46,000 | $ 46,000 | 4 |
| 34 | City Activity Center Parking Lot, *rain garden* | $ 66,700 | $ 66,700 | 4 |
| 51 | LBJ at IH35 Truck Stop Parking Lot, *rain garden* | $ 75,900 | $ 75,900 | 4 |
| 54 | Guad St & IH35, *convert concrete channel to green* | $ 110,000 | $ 110,000 | 4 |
| 64 | Guadelupe and LBJ Commercial, *rain garden* | $ 65,000 | $ 65,000 | 4 |
| 101 | City Hall at Hopkins St, *rain garden* | $ 80,000 | $ 80,000 | 3 |
| **Other Projects** | | | | |
| 100 | CM Allen Parkway Reconstruction | $ 33,000 | $ 33,000 | 2 |
| | **Total** | $ 13,763,168 | $ 5,610,855 | |

## Table 2 - Cost Per Acre

| | Area | | Scenario 1 | | Scenario 2 | |
|---|---|---|---|---|---|---|
| | Acres | Percent | Total | Per Acre | Total | Per Acre |
| Total | 383.54 | 100.0% | $ 13,763,168 | $ 35,885 | $ 5,610,855 | $ 14,629 |
| City Parks | 0.34 | 0.1% | $ 12,201 | | $ 4,974 | |
| Right-of-Way | 111.87 | 29.2% | $ 4,014,407 | | $ 1,636,560 | |
| Private Property | 271.33 | 70.7% | $ 9,736,560 | | $ 3,969,321 | |

Scenario 1 includes all water quality projects
Scenario 2 does not include water quality projects at Purgatory Creek Greenbelt, wastewater treatment plant or Dunbar Park

**References**

1 Water Quality Protection Plan fror the City of San Marcos (John Gleason LLC) on January 18, 2016
2 Email from Greg Schwarz (City of San Marcos) to Brian Reis (RPS) on October 19, 2016
3 319 Grant Water Quality Retrofit Field Trip (Complete Watershed Solutions LLC) on September 3, 2015
4 City of San Marcos Downtown Smart Code Water Quality Plan Phase 2 Reports (RPS) on July 1, 2015