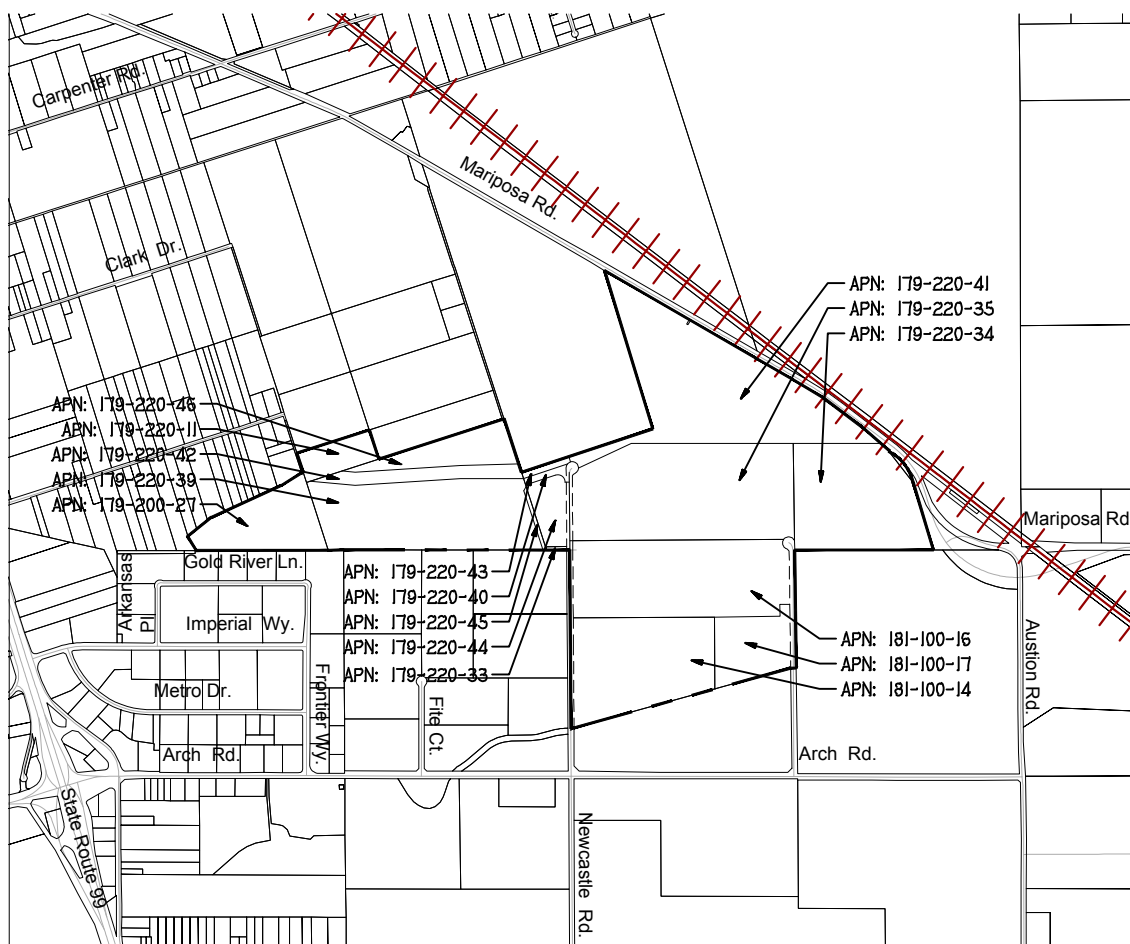


# CITY OF STOCKTON NORTH NEWCASTLE STORM PUMP STATION AND BASIN ASSESSMENT DISTRICT NO. 20-1

STOCKTON, SAN JOAQUIN COUNTY  
STATE OF CALIFORNIA

June, 2020



**SIEGFRIED**

3428 Brookside Road Stockton, California 95219  
209-943-2021 www.siegfriedeng.com Fx: 209-942-0214

■ CIVIL  
■ STRUCTURAL  
■ LANDSCAPE  
■ ARCHITECTURE  
■ SURVEYING  
■ PLANNING  
■ ATHLETIC FACILITY  
DESIGN



**ENGINEER'S REPORT**

**CITY OF STOCKTON NORTH NEWCASTLE STORM PUMP STATION AND BASIN  
ASSESSMENT DISTRICT  
NO. 20-1**

(Pursuant to Municipal Improvement Act of 1913)

PREPARED BY

**SIEGFRIED ENGINEERING, INC.**  
CONSULTING CIVIL ENGINEERS  
STOCKTON, CALIFORNIA

June 25, 2020

**ENGINEER'S REPORT**

FOR THE 2021-2022  
CITY OF STOCKTON NORTH NEWCASTLE STORM PUMP STATION AND BASIN  
ASSESSMENT DISTRICT  
NO. 20-1

(Pursuant to Municipal Improvement Act of 1913)

The undersigned respectfully submits the enclosed Engineer's Report as directed by the City Council.

DATED: \_\_\_\_\_, 2020.

SIEGFRIED ENGINEERING, INC.  
Engineer of Work

BY \_\_\_\_\_  
Paul J. Schneider, R.C.E. 62498

I HEREBY CERTIFY that the Engineer's Report, together with the Assessment District Boundary Map, Assessment Diagram, and Assessment Roll thereto attached, was filed with me on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

City Clerk, City of Stockton,  
San Joaquin County, California

BY \_\_\_\_\_

I HEREBY CERTIFY that the enclosed Engineer's Report, together with the Assessment District Boundary Map, Assessment Diagram, and Assessment Roll thereto attached, was approved and confirmed by the City of Stockton, California on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

City Clerk, City of Stockton,  
San Joaquin County, California

BY \_\_\_\_\_

I HEREBY CERTIFY that the enclosed Engineer's Report, together with the Assessment District Boundary Map, Assessment Diagram, and Assessment Roll thereto attached, was filed with the Auditor of the County of San Joaquin on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

City Clerk, City of Stockton,  
San Joaquin County, California

BY \_\_\_\_\_

**PURPOSE**

This Engineer's Report is prepared pursuant to and in compliance with the requirements of the Municipal Improvement Act of 1913 (Division 12 of the Streets and Highways Code, beginning with Section 10000) authorizing local agencies to impose assessments on beneficial properties to finance the construction of public improvements. (Section 10100 and 10100.5) and the maintenance and repair of improvements constructed pursuant to the Act (Section 10100.8)

This Engineer's Report is prepared to create the City of Stockton North Newcastle Storm Pump Station and Basin Assessment District No. 20-1, hereinafter referred to as Assessment District, for the purpose of levying and collecting assessments each fiscal year to pay for the cost of annual maintenance, repair, and capital improvement projects (CIP) of the stormwater basin and pump station at Newcastle Road and North Little Johns Creek.

**ASSESSMENT DISTRICT BOUNDARY**

The Assessment District consists of the parcels which are identified to have land area within the stormwater tributary area flowing into the basin and pump station. The tributary area is identified as "Watershed N3" on Appendix SD-3 in the report entitled "Stormwater Drainage Master Plan for Arch Road Industrial Park North (Opus Logistic Center), Stockton, CA" (Master Plan) prepared by Kier and Wright, Civil Engineers, Pleasanton, CA dated November 15, 2007. The parcels with land area within Watershed N3 are identified by using the San Joaquin County Assessor's Book 179, at Pages 200 and 220, and Book 181, at Page 100. See Exhibit C for the Assessment District boundary.

**DESCRIPTION OF WORK**

The work to be approved by the Assessment District is for continuous maintenance and repair of a stormwater basin and pump station as shown in the plans and specifications entitled "Improvement Plans for the City of Stockton, Newcastle Road & North Little Johns Creek, Storm Pump Station" (Improvement Plans) dated August 9, 2019.

The Assessment District shall establish, either directly or by subcontract, an entity for the continuous maintenance and repair of the stormwater basin and pump station to be known as the District Maintenance Manager. The District Maintenance Manager shall be responsible for

- establishing the annual budget,
- keeping account of the maintenance, repair, and administration costs,
- managing and performing the maintenance and repair of the stormwater basin, pump station, and all appurtenances, whether directly or by subcontract, and
- paying all maintenance, repair, administration, and utility and other incidental expenses.

The District Maintenance Manager shall provide annually to the City of Stockton the description of the expected maintenance, repair, and administration work, the annual budget, including the cost of updating annually the Engineer's Report.

### **SPECIAL BENEFIT ASSESSMENT**

The Assessment District is levying an assessment against all the properties in the Assessment District for the cost of maintenance and repair of a stormwater basin and pump station which confer a special benefit to the assessed properties. The special benefit is a particular and distinct benefit which the assessed properties receive from the stormwater basin and pump station and which is over and above general benefits conferred to properties in the Assessment District or to the general public at large. The stormwater basin and pump station are designed to have the capacity to handle the terminal discharge of stormwater into North Little Johns Creek from a defined tributary area identified as Watershed N3 in the Master Plan. All lands within Watershed N3 are included in the design capacity of the stormwater basin and pump station and are considered to receive a special benefit from the stormwater basin and pump station with the exception of parcels designated as part of the waterway or designated for conservation. All developable parcels with lands within Watershed N3 are assessed for their proportional share of the Assessment District costs for the annual maintenance and repair of the stormwater basin and pump station. The Assessment against each parcel in the Assessment District is tabulated in Exhibit A.

### **TOTAL ASSESSMENT**

The Total Assessment of the Assessment District is the total annual cost for the continuous maintenance and repair of the stormwater basin and pump station as estimated and tabulated in Exhibit B.

### **ASSESSMENT DIAGRAM**

Each parcel in the Assessment District is assigned an Assessment Diagram Number as shown in Exhibit C, Assessment District Boundary Map and Assessment Diagram. Also, each parcel in

the Assessment District is included in Exhibit A, Assessment Roll with its corresponding Assessment Diagram, Assessor's Parcel Number, Area, Assessment Benefit Factor, and Assessment.

### **CRITERIA TO SPREAD THE ASSESSMENT**

The design capacity of the stormwater basin and pump station is based upon the Master Plan calculation of the total stormwater flow from Watershed N3 in accordance with the Rational Formula

$$\text{Stormwater Flow } Q = CIA.$$

The Master Plan calculation applies uniform Runoff Coefficient  $C = 0.84$  and Rainfall Intensity  $I = 3.12$  throughout Watershed N3. This implies that the Master Plan presumes that all the parcels in Watershed N3 will be developed with the same land use. The incremental Stormwater Flow  $Q$  from each parcel will vary in proportion to the contributory area of the parcel. Therefore, the area of a parcel is used to quantify a parcel's proportional share of the total special benefit received by all the parcels in Watershed N3 from the stormwater basin and pump station. A parcel's proportional share of the total special benefit is defined as the Assessment Benefit Factor,  $f$ , and is calculated by the formula

$$\text{Assessment Benefit Factor, } f = \frac{\text{area of parcel}}{\text{total developable area of Assessment District.}}$$

The total assessment is spread among the parcels in the Assessment District in proportion to the incremental special benefit a parcel receives from the stormwater basin and pump station and is calculated by the formula

$$a = f \times A$$

$a$  = assessment against a parcel

$f$  = Assessment Benefit Factor

$A$  = Total Assessment of the Assessment District

### **DETERMINATION OF AREAS**

The area of each Assessment District parcel as shown in the Assessor's Maps have been compared to the areas shown in record Maps of Survey, Parcel Maps, and Lot Line Adjustment

Maps of the parcels within the Assessment District. It is determined that the areas shown in the Assessor's Maps are generally consistent with areas shown in the record maps.

The areas of the basin, creek, and conservation parcels are determined by calculation from a record parcel map. The criteria is that the storm basin facility, creek, and conservation area do not contribute to the tributary area of the storm flows into the basin and is not conferred a special benefit.

### **Maximum Assessment**

A cost of living adjustment factor for each fiscal year may be applied for the Assessment District. The maximum assessment amount for each fiscal year may be increased in an amount equal to the greater of: 1) three percent (3%); or 2) the percentage increase of the Consumer Price Index (CPI) for San Francisco–Oakland–San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period of time. For each Fiscal Year, the maximum assessment is determined using the escalator of 3%. If it is determined appropriate, an amount that is less than the maximum assessment may be levied as the actual annual assessment.

Also, in keeping with the provisions of Article XIII D of the California Constitution, annual assessments established from the preceding fiscal year may not be increased above the cost of living adjustment factor approved herein without an election approval by the properties in the Assessment District.

**SIEGFRIED ENGINEERING, INC.**

**Engineer of Work**

BY

Paul J. Schneider, R.C.E. 62498



SHEET 1 OF 1

FISCAL YEAR 2021-2022

CITY OF STOCKTON NORTH NEWCASTLE STORM PUMP STATION AND BASIN  
ASSESSMENT DISTRICT NO. 20-1

ASSESSMENT DIAGRAM NUMBER	ASSESSOR'S PARCEL NUMBER	DEVELOPABLE AREA, ACRES	ASSESSMENT BENEFIT FACTOR, f	ASSESSMENT, a
1	179-200-27	20.76	0.05614	\$4,388.29
2	179-220-11	7.46	0.02017	\$1,576.91
3	179-220-33	0.29	0.00078	\$61.30
4	179-220-34	42.41	0.11469	\$8,964.71
5	179-220-35	61.84	0.16724	\$13,071.86
6	179-220-39	54.65	0.14779	\$11,552.02
7	179-220-40 <sup>3</sup>	0.74	0.00199	\$155.65
8	179-220-41	67.72	0.18314	\$14,314.79
9	179-220-42 <sup>2</sup>	0.00	0.00000	\$0.00
10	179-220-43 <sup>2</sup>	0.00	0.00000	\$0.00
11	179-220-44 <sup>2</sup>	0.00	0.00000	\$0.00
12	179-220-45 <sup>2</sup>	0.00	0.00000	\$0.00
13	179-220-46	6.03	0.01631	\$1,274.63
14	181-100-14	39.42	0.10660	\$8,332.68
15	181-100-16	52.76	0.14268	\$11,152.51
16	181-100-17	15.70	0.04246	\$3,318.70
	<b>TOTALS</b>	<b>369.78</b>	<b>1.00</b>	<b>\$78,164.05</b>

Note:

1. See Exhibit B for Budget and CIP Analysis
2. Denotes a parcel that is either owned by the City or part of Little John's Creek
3. APN 179-220-40 will have 8,435sf dedicated to the City for the pump station
4. Parcels 179-220-33, 39, and 40 total 55.87ac less the 8,435sf dedication



## ESTIMATED ANNUAL COST



CITY OF STOCKTON NORTH NEWCASTLE STORM PUMP STATION AND BASIN ASSESSMENT DISTRICT NO. 20-1

19226

ESTIMATE OF CIP IMPROVEMENTS

06/24/2020

## EXHIBIT B - BUDGET AND CIP ANALYSIS

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST (\$)	ITEM COST (\$)	FREQUENCY	ANNUAL COST
1	WEED CONTROL AND DISCING	SF	281000	\$0.05	\$14,050	1 year	\$14,050.00
2	DECORATIVE METAL FENCE	LF	1200	\$140	\$168,000	40 years	\$4,200
3	ACCESS ROAD	LF	2200	\$90	\$198,000	30 years	\$6,600
4	INSPECTION, MAINTINANCE, AND GRAFFITI REMOVAL	LS	1	\$5,000	\$5,000	1 year	\$5,000
5	RETAINING WALL	LF	160	\$450	\$72,000	50 years	\$1,440
6	STORM PIPE CLEANING AND REPAIR	LF	550	\$3.50	\$1,925	2 years	\$962.50
7	WATER AND SEWER SERVICE MAINT.	LS	1	\$1,500	\$1,500	2 years	\$750.00
8	PAVEMENT SLURRY SEAL	SF	6365	\$1.10	\$7,002	7 years	\$1,000.21
9	CHAIN LINK FENCE AND GATES	LF	600	\$85	\$51,000	25 years	\$2,040
10	EROSION REPAIR	SF	281000	\$0.05	\$14,050	3 year	\$4,683.33
11	BASIN OUTFALL	EA	3	\$100,000	\$300,000	40 years	\$7,500
12	PUMP STATION PUMPS	EA	4	\$25,000	\$100,000	20 year	\$5,000
13	PUMP STATION MISC. REPAIRS	LS	1	\$5,000	\$5,000	2 year	\$2,500
14	OUTFALL PIPING AND EROSION PROTECTION REPAIR AT CREEK	LS	1	\$10,000	\$10,000	5 year	\$2,000.00
15	ADMINISTRATIVE COSTS - PUBLICITY AND ADVERTISING	LS	1	\$68	\$68	1 year	\$68.00
16	ATTORNEY FEES	LS	1	\$750	\$750	1 year	\$750.00
17	COUNTY ADMINISTRATION	LS	1	\$120	\$120	1 year	\$120.00
18	ANNUAL ENGINEER'S REPORT	LS	1	\$4,000	\$4,000	1 year	\$4,000.00
19	PROFESSIONAL SERVICES	LS	1	\$1,000	\$1,000	1 year	\$1,000.00
20	CITY ADMINISTRATION	LS	1	\$5,000	\$5,000	1 year	\$5,000.00
21	CONTINGENCY (10%)	LS	1	\$9,500	\$9,500	1 year	\$9,500.00
Total Annual Cost							\$78,164.05

## GENERAL NOTES:

- 1 ALL QUANTITIES ARE ESTIMATED AND SHALL BE VERIFIED AS PROGRAM ELEMENTS ARE IMPLEMENTED
- 2 ALL COSTS ARE IN 2020 DOLLARS
- 3 ALL COSTS INCLUDE 15% CONTINGENCY, 10% DESIGN, 10% CM AND INSPECTION, AND 10% PROJECT MANAGEMENT

EXHIBIT C  
ASSESSMENT DISTRICT BOUNDARY MAP  
& ASSESSMENT DIAGRAM

CITY OF STOCKTON NORTH NEWCASTLE STORM PUMP  
STATION AND BASIN ASSESSMENT DISTRICT NO. 20-1

STOCKTON, SAN JOAQUIN COUNTY  
STATE OF CALIFORNIA

June, 2020



CIVIL  
STRUCTURAL  
LANDSCAPE  
ARCHITECTURE  
SURVEYING  
PLANNING  
ATHLETIC FACILITY  
DESIGN

**SIEGFRIED**

3428 Brookside Road Stockton, California 95219  
209-943-2021 www.siegfriedeng.com Fx: 209-942-0214

FILED IN THE OFFICE OF THE CITY CLERK OF THE CITY OF STOCKTON  
THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

CITY CLERK OF THE CITY OF STOCKTON

RECORDED IN THE OFFICE OF THE SUPERINTENDENT OF STREETS  
THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

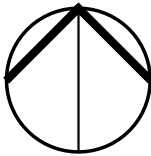
SUPERINTENDENT OF STREETS OF THE CITY OF STOCKTON

AN ASSESSMENT WAS LEVIED BY THE CITY COUNCIL OF THE CITY OF STOCKTON COUNTY OF SAN JOAQUIN, STATE OF CALIFORNIA, ON THE LOTS, PIECES AND PARCELS OF LAND SHOWN ON THE AMENDED ASSESSMENT DIAGRAM. SAID ASSESSMENT WAS LEVIED ON \_\_\_\_\_. SAID AMENDED ASSESSMENT DIAGRAM AND THE ASSESSMENT ROLL WERE RECORDED IN THE OFFICE OF THE SUPERINTENDENT OF STREETS OF SAID CITY ON THE \_\_\_\_\_. REFERENCE IS MADE TO THE ASSESSMENT ROLL RECORDED IN THE OFFICE OF THE SUPERINTENDENT OF STREETS FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL. OF LAND SHOWN ON THIS AMENDED ASSESSMENT DIAGRAM.


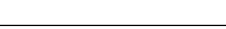
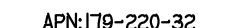

CITY CLERK OF THE CITY OF STOCKTON

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, AT THE HOUR OF \_\_\_\_\_ O'CLOCK \_\_\_\_ M, IN THE BOOK \_\_\_\_\_ OF MAPS OF ASSESSMENT DISTRICTS AT PAGE \_\_\_\_\_, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF SAN JOAQUIN, STATE OF CALIFORNIA.

COUNTY RECORDER OF THE COUNTY OF SAN JOAQUIN, STATE OF CALIFORNIA



LEGEND:

- ASSESSMENT DISTRICT BOUNDARY
- PARCEL LINES
- APN NUMBER
- MAINTENANCE DISTRICT ASSESSMENT NUMBER

NOTES:

PARCEL MAP 26-119 19-20