

# WET UTILITIES STUDY

Guadalupe Gardens Area, San Jose, CA Prepared for David J. Powers & Associates (John Hesler) 10/31/2023 HMH 6673.00

## Reference Documents:

1. Project Description for Subs May 2 2023.docx (DJP)

2. 17-049 SO#1 Figure 3 (Aerial).pdf (Location Map – DJP)

# INTRODUCTION

Based on the *Project Description* for the seven City-owned parcels (as listed in Table 1 of the Project Description Document referenced above), a <u>Commercial Office Use</u> (higher usage) was identified to study the wet utilities availability for these subject parcels. The proposed General Plan Amendment for the land use designation change to Combined Industrial Commercial (CIC) and rezoning to Planned Development (PD) will need to be formally evaluated when applications for these City Planning entitlements are submitted.

**Table A** has been prepared to identify the approximate maximum building size, occupants, and project usage for select wet utilities (e.g., domestic water, sanitary sewer). Also, conversations with Public Utility Officials/Representatives have been pursued to determine any 'known deficiencies.' Comments received have been summarized below.

## Domestic Water Usage (San Jose Water Company)

Jake Walsh, Assistant Chief Engineer Planning, was contacted, and he provided preliminary information about existing capacity and known deficiencies. <u>In terms of domestic water usage, there appears to be no concern about the water supply (Cambrian Zone) in this area.</u> However, design improvements will most likely be required to address the existing condition of the pipelines and potential replacement as well as specific fire prevention requirements.

A *Water Service Assessment* (WSA) will need to be provided by SJWC, and an application that includes a substantially finalized project description (e.g., square footage) and fire flow information, received from the City's Fire Department Fire Prevention Staff, is required to be submitted to Jake Walsh. Follow-up is recommended to determine if an assessment for each of the parcels will be required or if the parcels can be grouped in one application.

## Sanitary Sewer Usage (City of San Jose, Public Works Department)

See **Attachment I** – email correspondence dated 9/6/2023 from Vivian Tom, Senior Engineering Manager, City of San Jose, Public Works, Development Services

Ms. Tom was contacted and provided comments regarding existing sanitary sewer capacity and known deficiencies in this area based on a computer modeling of the project.



Comments included:

"As referenced in the City's computer modeling, the 'project' will contribute to an existing capacity improvement need on Spring Street based on the following assumptions:

- The 'project' is described as buildings with the land use type of Office.
- Sites 1-5 sanitary sewer connections exist along Coleman Avenue (6-inch pipeline). Connecting to surrounding sanitary sewer pipelines, other than this existing 6-inch pipeline, <u>may</u> <u>exacerbate the existing capacity improvement on Spring</u> <u>Street."</u>

An existing capacity improvement at Segment 34970 <sup>A</sup> (north leg of University Avenue and Spring Street) is needed assuming a 6-inch VCP pipeline currently exists. It will need to be replaced with a 10-inch pipeline upstream. \*Note\* these streets are not accessible to vehicle traffic and the parcels in this area are vacant.

<sup>A</sup>= See weblink to the City's Public GIS in reference to Segment 34970 - <u>https://gis.sanjoseca.gov/maps/utilityviewer/</u>

## Stormwater (City of San Jose, Public Works Department)

See **Attachment I** – email correspondence dated 9/6/2023 from Vivian Tom, Senior Engineering Manager, City of San Jose, Public Works, Development Services

Ms. Tom stated in her correspondence, "development of 7 parcels from Open Space to Commercial increases runoff, but the impact to the system is minimal per computer models. A Capital Improvement Project (CIP) will be recommended as part of the Citywide Master Plan Report to address an existing deficiency; currently the McKendrie & Taylor CIP is currently not funded."

Storm drain lines exist on some of the streets immediately adjacent to the subject parcels. Once the Site Plan has been reviewed and 'project' building surfaces identified for stormwater runoff, an extension to the existing storm water drain lines may be required at some locations adjacent to the project parcels.

The City does have a requirement for new development to minimize the stormwater runoff. A Storm Water Control Plan and a Low Impact Development (LID) infeasibility memo will be required that will address storm water run-off. The City requires new projects to include on-site



measures to both treat and prevent increases in runoff (Provision C.3 / City Council Policy 6-29 & 8-14.)

The Site does not appear to be subject to the Hydromodification Management (HMP) requirements of Provision C.3 per the HMP Applicability Map. The Site is in a non-hydromodification management area.

## Recycled Water Usage (South Bay Water Recycling Program)

Although facilities exist in this immediate area, an estimate of usage for these seven (7) parcels was not included in this statement. Recycled water is approved for irrigation and landscape, and this usage amount has not been proposed at this time.

#### **TABLE A - Wet Utility Usage Information**

Location: Guadalupe Gardens - Sites 1 thru 7 (San Jose, CA - area of Coleman Avenue, between West Taylor and West Hedding Streets; West Hedding Street south of Ruff Drive. Assuming Maximum Land Use: OFFICE/BUSINESS AREA

Map ID	APN	Parcel Size (acres)	Maximum Building Size <sup>1</sup> (approx. SF)	Building Area - Circulation (approx. SF)	# of Occupants	Wet Utilities Domestic Water <sup>2</sup> (gpd)	Sanitary Sewer <sup>3</sup> (gpd)	Wet Utilities Storm Drainage <sup>4</sup>
						- SJ Water Co -	- City of San Jose -	- City of San Jose -
1	259-02-130	2.9	75,750	64,388	429	7,575	10,605	
2	259-02-131	3.19	83,250	70,763	472	8,325	11,655	
3	259-08-072	0.07	1,860	1,581	11	186	260	
4	259-08-101	0.18	4,800	4,080	27	480	672	
5 <sup>5</sup>	259-08-102	3.19	83,400	70,890	473	8,340	11,676	
6	230-30-076	0.36						
7	230-38-092	0.37	9,660	8,211	55	966	1,352	

#### Notes

Reference: DRAFT PROJECT DESCRIPTION FOR SUBS May 2 2023.docx provided by David J. Powers & Associates.

- Acreage reflects the portion of the parcel that would be subject to the GPA and rezoning. For each of the five parcels located along Coleman Avenue, the acreage shown takes into account: 1) the City's planned widening of Coleman Avenue to six lanes, which will require a strip of additional right-of-way along the east side of Coleman Avenue approximately 50 feet in width, and 2) the City's planned relinquishment of right-of-way from portions of University Avenue and Emory Street.

- No building (square footage) is shown on <u>APN 230-38-076</u> since that parcel is directly under the extended centerline of Runway 12L/30R and the SJ Airport Land Use Commission prohibits new structures in the 'Inner Safety Zone within 100 feet of an extended runway centerline.

- Recycled Water Service does exist in this area, however, any capacity analysis is not included in this table since this specific water use is non-potable and typically used for site landscape irrigation.

1 Maximum Floor Area Allowances per Occupant (Source: CBC 2022)

2 Gallons per Day (gpd) based on Proposed Building Square Footage. (Source: Jake Walsh, Assistant Chief Engineer, Planning, San Jose Water Company - email correspondence 7/21/2023)

3 Gallons per Day (gpd) based on Proposed Building Square Footage. (Source: San Jose-Santa Clara Sewage Treatment Plant Connection Coefficients & Rates, March 2001)
4 Email received from Vivian Tom. CSJ PW Development Services (dated 9/6/2023) is interpreted to indicate 'impacts to system is minimal per computer models.' However, an improvement

4 Email received from Vivian Tom, CSJ PW Development Services (dated 9/6/2023) is interpreted to indicate impacts to system is minimal per computer models. However, an improvemen project will be recommended as part of the Citywide Master Plan Report to address an existing deficiency; the McKendrie & Taylor CIP is identified and is currently not funded.

5 Due to a previous mapping error, two small portions of this parcel are shown with a Light Industrial (LI) General Plan Land Use Designation. The project proposes to change this designation to CIC.

## Attachment I

From:	Tom, Vivian <vivian.tom@sanjoseca.gov></vivian.tom@sanjoseca.gov>
Sent:	Wednesday, September 6, 2023 9:28 AM
То:	Zeferino Jimenez
Cc:	John Hesler; Candice Lownsbery; Olivia Bergin; Michael Lisenbee
Subject:	Re: Request for CSJ Assistance with CSJ Sponsored Project EIR - Coleman

Hi Zef,

I apologize for the delay. I was out sick last week. Please see below:

#### **Storm Master Plan:**

Based on latest storm models, parcels 1, 2, 6 and 7 are included in subcatchments that load to 30" diameter on W. Hedding St, and parcels 3, 4, and 5 load to 27" on W. Taylor St. Land use assumptions in the existing condition include open space with 0% imperviousness and project condition with commercial and 85% for estimated 10.8-acre development.

Per computer modeling and draft master plan to date, a CIP improvement project has been identified for the "McKendrie & Taylor" sub-drainage area to address deficiencies in the existing condition. The draft CIP includes multiple diversions in the upstream system re-routing flow to Stockton Ave, W. Hedding St and McKendrie St, along with an upsized 60" main on W. Taylor St down to outfall at Guadalupe River.

For this project review, 4 scenarios were modeled in ICM:

Land Use	Pipe Network	
Existing	Existing	
Project	Existing	
Existing	CIP	
Project	CIP	

Development of 7 parcels from open space to commercial increases runoff, but the impact to system is minimal per computer models. Assuming a future condition and recommended CIP is constructed, there is again minimal impact to system with the project condition land use. An improvement project will be recommended as part of the citywide master plan report to address an existing deficiency; the "McKendrie & Taylor" CIP is currently not funded.

The storm master plan is a current project, with continued refinement of computer models based on available information. The current computer models include storm mains 24" and greater in diameter, and 10-year 24-hour design storm input for deficiency analysis and recommended CIP.

#### Sanitary Master Plan:

With best available information and which assumes clean pipes with no debris, predicts that the project contributes to an existing capacity improvement need on Spring St. A couple assumptions were made:

1. Per our August 11<sup>th</sup> meeting with HMH, an assumption was made that all buildings had the land use type of Office.

2. All connections to the existing sanitary sewer system for Sites 1-5 are along Coleman Ave. Connecting to surrounding pipes other than the existing 6" line along Coleman Ave may exacerbate the existing capacity improvement need on Spring St.



The resulting model simulation predicts an existing capacity improvement need at segment 34970, assuming this is a 6" VCP line per <u>Utility Viewer</u> with a 10" line upstream of it.

Please let me know if you have any questions. Thank you and have a great day!

Vivian Tom City of San Jose Department of Public Works Development Services Division 200 East Santa Clara Street, 3rd Floor San Jose, CA 95113 (408) 535-6819

a.