

**CROWS LANDING INDUSTRIAL BUSINESS PARK**

**DRY UTILITIES INFRASTRUCTURE AND FACILITIES  
STUDY**



Prepared for:  
Stanislaus County  
1010 10<sup>th</sup> Street  
Modesto, CA 95354  
(209) 525-4130

Prepared by:  
VVH Consulting Engineers  
126 Drake Avenue  
Modesto, CA 95350  
(209) 568-4477

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## 1.0 INTRODUCTION

Section 1 states the study background and purposes, Study Area, and overall system planning assumptions.

### 1.1 STUDY PURPOSES AND OBJECTIVES

The Crows Landing Industrial Business Park project (Project) is an approximately 1,532-acre conceptually planned development that encompasses the reuse of the former Crows Landing Air Facility, which was decommissioned by NASA in the late 1990s, as shown in Figure 3.1.

A plan for a practical and highly reliable dry utilities infrastructure system is an essential component of the Crows Landing Industrial Business Park. The scope of this study is to identify the major infrastructure elements required to provide sufficient electric, communications, and gas services to the development. The findings of this study are based on available information and are subject to change once more detailed engineering analyses are performed as the Project progresses.

### 1.2 STUDY AREA

The Project addresses the reuse of the former Crows Landing Air Facility, encompassing approximately 1,532 acres in the western portion of Stanislaus County, west of State Route 33 and east of Interstate 5, southwest of Patterson, and approximately 1 mile west of the unincorporated community of Crows Landing (Figure 3.1). The Project is bounded on the east by Bell Road, on the south by Fink Road, on the west by Davis Road, and on the north by Marshall Road and State Route 33. The Delta-Mendota Canal traverses the southern portion of the Project in a northwest/southeast direction. Little Salado Creek enters the Project site along the western property boundary slightly northeast of the Delta-Mendota Canal and terminates near the intersection of Marshall Road and State Route 33. The Project site topography generally slopes down in a northeasterly direction with an elevation change of approximately 80 feet, with the lowest elevation near the intersection of State Route 33 and Marshall Road. The site includes vehicle and aviation improvements associated with the former air facility which are currently being leased for agricultural use.

## 2.0 BACKGROUND INVESTIGATION

Section 2 discusses existing dry utilities infrastructure.

### 2.1 EXISTING DRY UTILITIES

Some extendable dry utilities exist in the vicinity of the Project. Each of these is discussed in turn in the following sections.

#### 2.1.1 ELECTRICITY

The Turlock Irrigation District (TID), established in 1887, was the first publicly owned irrigation district in the state. TID serves a population of approximately 220,000 people throughout a 662-square-mile service area. The service area includes northern Merced County, and southern Stanislaus County and small sections of Tuolumne and Mariposa counties. TID is capable of generating slightly more than 505 megawatts (MW) of electricity with internal resources. The district's power generation sources include hydroelectric, geothermal, and fossil fuel power plants.

TID currently serves the Project area with a number of overhead facilities. A TID substation is located at the northeast corner of Marshall Road and Davis Road. This substation is fed from a double circuit 115 kilovolt (kV) line with a 12kV underbuild located along Marshall Road on the northern boundary of the Project site.

TID representatives state that capacity exists to serve the Project but that electrical distribution infrastructure would need to be constructed in order to do so. TID cannot estimate the required infrastructure nor the costs until such time as an application for service is made for the Project.

#### 2.1.2 COMMUNICATIONS

AT&T Inc. (AT&T, formerly SBC Communications) is the largest telecommunications company in the world (by revenue) with more than 100 million customers. The company serves customers with a concentration in 22 states: Alabama, Arkansas, California, Connecticut, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nevada, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, and Wisconsin. AT&T delivers a range of wireless voice and data services to customers across the United States as well as globally. AT&T is the nation's largest wireless carrier, based on subscribers, with 63.7 million users, and spectrum licenses in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. Furthermore, AT&T's wireless unit is expanding the company's ability to provide a range of innovative and flexible solutions that integrate wireless and wire line communications.

Global Valley Networks (GVN), based in Patterson, California, provides telephone and Internet services to the communities of Patterson, Livingston, Guinda, San Antonio, Diablo Grande, Westley, Cressey, Grayson, and Capay Valley, California. GVN was established in 1913 to meet the need for basic telephone service in the community of Patterson, California.

Both AT&T and Global Valley Networks currently provide telephone communications in the Project area.

Comcast Corporation (Comcast) was founded in 1963 and is the largest provider of cable and home internet services in the country, providing these services and voice services to residential and commercial customers in 40 states and the District of Columbia. Comcast serves 21.7 million customers.

No cable television service is currently available in the Project area.

### 2.1.3 NATURAL GAS

Pacific Gas and Electric (PG&E), incorporated in California in 1905, is one of the largest combination natural gas and electric utilities in the United States. The company provides natural gas and electric service to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California. The company's service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east.

PG&E currently has a 24-inch diameter transportation pipeline on the northern boundary of the Project area and a 3-inch diameter gas distribution pipeline running from Interstate 5 along the southern boundary of the Project area serving the community of Crows Landing. No gas service is currently available within the Project area.

## 3.0 PROPOSED INFRASTRUCTURE

Section 3 discusses proposed dry utilities infrastructure. Attached is a proposed dry utility layout and joint trench detail (Figure 3.1).

### 3.1 ELECTRICITY

TID will require 15 to 20 feet in width for a public utility easement to accommodate facilities. Manholes will be required every 800 feet for underground facilities, which will include 4-inch and 6-inch diameter conduits. Pad-mounted switchgear and pad-mounted capacitor banks could be required but the TID cannot estimate infrastructure requirements at this time.

### 3.2 COMMUNICATIONS

Both AT&T and Global Valley Networks state that they will provide telephone services to the Project. Manholes will be required every 600 feet for underground facilities, which will include 4-inch diameter conduits for telecommunication cable distribution.

Comcast will require an extension of their existing fiber optic cable from the Crows Landing community in order to provide service to the Project. Underground facilities will include 2-inch diameter conduit and manholes for cable television distribution.

### 3.3 NATURAL GAS

Pacific Gas and Electric (PG&E) has yet to answer inquiries regarding gas service to the Project.

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3.4 COST ESTIMATE

The specific dry utility needs and service requirements will vary depending on the specific uses and demands of the individual developments. While the specific uses are unknown at this time, an “order of magnitude” estimated cost for onsite dry utility service can be determined using reasonable judgment and assumptions. It is assumed that all dry utilities, including electricity, gas, telephone and cable, will be conveyed through the major backbone streets in a “joint trench”. Costs presented below do not include offsite utility improvements to bring dry utility services to the Project site. A typical detail of a joint trench is shown on Figure 3.1. Estimated costs for dry utilities to serve the Project are estimated on a lineal foot basis as shown in Table 1 below:

**Table 1 Estimated Onsite Dry Utility Construction Costs**

<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>
Joint Trench – Phase 1A	6,014	LF	\$200	\$120,280
Joint Trench –Phase 1B	7,660	LF	\$200	\$1,532,000
Joint Trench –Phase 2	23,004	LF	\$200	\$4,600,800
Joint Trench –Phase 3	25,265	LF	\$200	\$5,053,000

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Figure 3.1 Crows Landing Industrial Business Park – Dry Utilities Map

