Prewitt Industrial Park

MASTER PLAN AND PRELIMINARY DESIGN

GREATER GALLUP ECONOMIC DEVELOPMENT CORPORATION *moving forward*

MCKINLEY COUNTY NEW MEXICO

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MASTER PLAN AND PRELIMINARY DESIGN

July 8, 2020

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Prepared by Wilson & Company, Inc. Engineers & Architects
Albuquerque, New Mexico

for

Northwest New Mexico Council of Governments (NWNMCOG)

McKinley County, New Mexico

Greater Gallup Economic Development Corporation (GGEDC)

July 8, 2020

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Certification

PREWITT NDUSTRIAL PARK MASTER PLAN AND PRELIMINARY DESIGN

JULY 2020

I, Mario Juarez-Infante, do hereby certify that this report was prepared by me or under my direction and that I am a duly registered Professional Engineer under the laws of the State of New Mexico.

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Executive Summary

The Prewitt Industrial Park Master Plan and Preliminary Design details the concept for a large industrial park development on a 626--acre site north of the community of Prewitt in McKinley County, New Mexico. The site has been studied for years as a potential economic development site due to its size and location near major transportation routes, as well as local and regional interest in fostering development and job creation in the area. The Plan and Preliminary Design provides the most detail of any effort yet, moving the industrial park a crucial step closer to implementation.

This document includes an updated inventory of existing conditions on the site. Existing roadway, railroad, drainage, and utility infrastructure, as well as environmental conditions, are assessed. The analysis identifies key upgrades needed to implement the industrial park. See Figures ES-1 and ES-2 for proposed site layout alternatives. The Initial Site Layout (Figure ES-1) is closely based on the recommendations of the 2018 *Prewitt Industrial Cluster: Master Site Plan* report created by Foote Consulting Group, LLC. As part of this new master plan, Wilson & Company was contracted to develop a 30% design for this alternative. The 30% design for the Industrial Park is detailed and includes proposed subdivision of the current site, internal road and rail networks, and water, wastewater, and dry utility alignments. The design is intended to answer key development questions and to allow the local economic development partners to begin conversations with site selectors and developers interested in a multi-modal logistics park. The preliminary design is summarized in the report, while a detailed set of preliminary infrastructure construction drawings is provided in Appendix A.

The Revised Site Layout (ES-2) is a conceptual design that Wilson & Company developed in response to stakeholder feedback requesting a design that would require less capital investment to implement rail infrastructure. This alternative will require further study.

To move the Industrial Park even closer to implementation, a 90% construction drawings set is provided for a spec building within the Industrial Park site. This provides potential site selectors a nearly shovel-ready project. The proposed Phase I Spec Building is located within the Industrial Park site where buildout of transportation and utility infrastructure could be most quickly implemented, though the final location of the spec building can be flexible. It could be easily implemented within the Revised Site Layout Alternative industrial park design. Detailed design drawings for the spec building are available in Appendix B.

Cost estimates for the Phase I Spec Building and for full buildout of the Industrial Park are provided for interested developers, as well and an anticipated project schedule for the Phase I Spec Building. These details are intended to simplify and streamline the process for prospective developers. A brochure to be used in marketing the site to site selectors can be found in Appendix H.

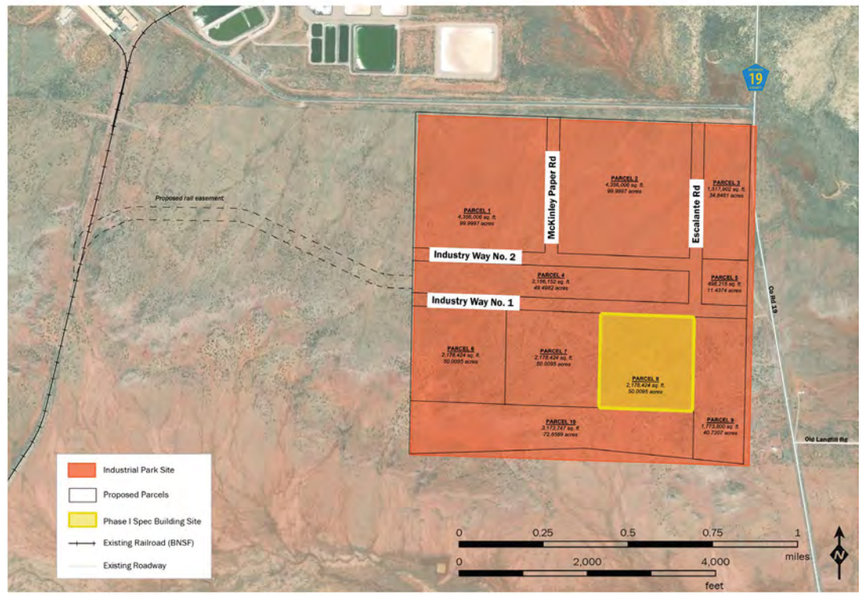

Figure ES-1: Initial Proposed Plat Alternative for Prewitt Industrial Park

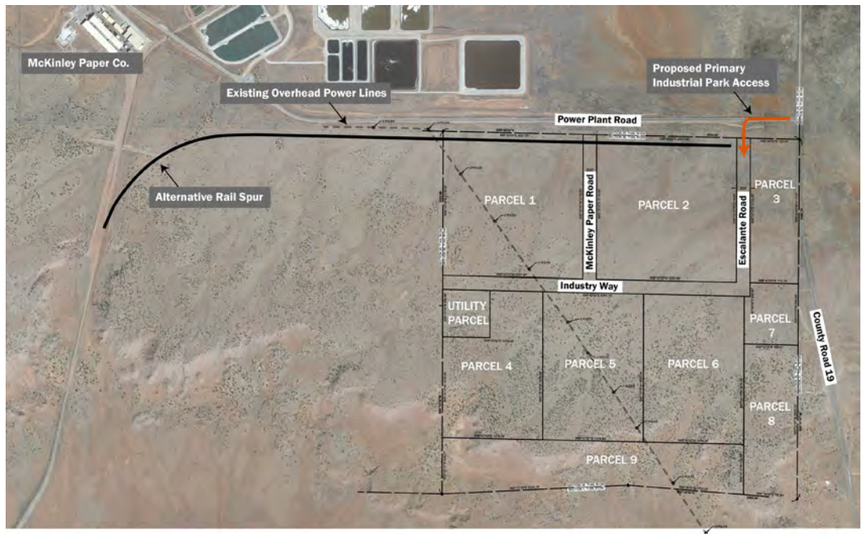

Figure ES-2: Revised Site Layout Alternative

1 Project Background

1.1 PROJECT PURPOSE

This plan provides a detailed concept for a large industrial park with rail service centered on a site north of the community of Prewitt, New Mexico. The location is among several within northwestern New Mexico being studied by the Northwest New Mexico Council of Governments (NWNMCOG) for future industrial or other economic development. This document includes preliminary designs of key infrastructure, such as roadway, railroad, drainage, and utilities, for the entire Prewitt Industrial Park site. This document also includes 90% construction drawings for a Phase I Spec Building situated in Parcel 8 of the Industrial Park site. This design is intended to provide a prospective developer with a "head start" in the implementation of their project.

In recent years several sites around the Escalante Generating Station (EGS) near Prewitt have been considered as possible sites for industrial development. A 2018 study, conducted by Foote Consulting Group, LLC, for the NWNMCOG, produced a planning-level analysis of infrastructure needs for a future industrial park on a section-sized site just south of the power plant. The study found that with several key infrastructure upgrades, the site could offer a prime location for large industrial developments – developments that could help rejuvenate the regional economy, which has continued to suffer due to the decline in the mining sector and coal-power generation industry. The study highlighted the Prewitt site's large contiguous size, its proximity to Interstate 40 and the BNSF Southern Transcon line, and the presence of the EGS as unique selling points of the proposed industrial park. While the recently announced planned closure of the EGS may have detracted slightly from the attractiveness of the site to developers, it also makes implementing the proposed park a greater economic priority for the region.

Foote Consulting Group also completed market and economic analyses that identified strengths and weaknesses of the local economy, along with the target industries most likely to develop within the proposed Prewitt industrial park. The analyses identified lack of skilled labor, modern facilities, and utility availability as weaknesses for the area; competitive wages, labor quality (in areas such as trainability, productivity, and absenteeism), and quality of life were identified as the area's economic strengths. For the Prewitt site, the studies identified key target industries, including warehousing/distribution, oil/gas supplier operations, plastics manufacturing, and paper manufacturing. The studies are described in greater detail in section 1.4 of this document.

This document builds on previous studies of the site and provides the project partners, including the NWNMCOG the Greater Gallup Economic Development Corporation (GGEDC), and McKinley County with a toolset with which to begin developing the site. This document's goal is two-fold: first, to provide developers a clearer understanding of the opportunities available on the site and the requirements needed to implement developments; second, to provide government a more detailed understanding of the infrastructure needed to facilitate development.

This report also details the design of a spec building for a parcel within the Prewitt Industrial Park Site. This would represent the Phase I of development within the industrial park. 90% design documents are provided for the Phase I Spec Building in Appendix B This detailed design allows a prospective developer to streamline the development process and saves them valuable time and resources otherwise spent on design and engineering services. The Phase I Spec Building design also serves as a template that future developers can follow when developing other sites within the industrial park.

Per the scope of this project, an appraisal of the site was completed. The results of the appraisal can be found in Appendix E. Meanwhile, Wilson & Company has initiated the process of pursuing BNSF Site Certification of the Industrial Park site. Certification ensures more rapid development of rail infrastructure on the site and aids national site selectors in understanding the opportunities at the site. The BNSF Site Certification process is described in greater detail in Section 5.4 of this report and in Appendix G.

This plan supports the shared goals of the NWNMCOG, GGEDC, and McKinley County of expanding and diversifying the regional economic base and of creating job opportunities for residents. The Prewitt Industrial Park site is among several sites being studied by the NWNMCOG for industrial development: a similar study is being prepared under a separate cover for a rail-served Industrial Park site in the Village of Milan, while a non-rail served site in Milan has been identified for future study. See Figure 1 for the location of these sites.

1.2 LOCATION

The Industrial Park site is located near the unincorporated community of Prewitt in McKinley County, New Mexico (see Figure 1 for the location). Prewitt is located approximately 35 miles east of the city of Gallup and 18 miles west of the city of Grants via Interstate 40 (I-40). Albuquerque, the state's largest city, is approximately 100 miles or an hour and a half driving time, to the east. Prewitt and McKinley County are part of the economy of northwestern New Mexico, a region of the state that, in recent years, has attracted increasing public and private investment in sectors such as transportation, manufacturing, logistics, and energy. In addition to I-40, Prewitt lies along another important transportation infrastructure: the tracks of the BNSF Railway Southern Transcon line. These road and rail routes are the two most important transportation routes in the region and are major links in the national interstate highway and railroad system.

1.3 PARTNERS

This Master Plan and Preliminary Design is led by the Northwest New Mexico Council of Governments (NWNMCOG) and Greater Gallup Economic Development Corporation, with key support from McKinley County.

The NWNMCOG is a key facilitator of economic development, transportation planning, and local governmental coordination efforts within the New Mexico counties of McKinley, Cibola, and San Juan. The organization also distributes funding from a variety of state and federal programs to support regional planning efforts. In the 2019 New Mexico Legislative Session, several appropriations were made for scopes-of-work for site planning and development at the Prewitt Industrial Park and the Milan Industrial Park. These appropriations are being administered regionally by the Northwest New Mexico Council of Governments.

Greater Gallup Economic Development Corporation (GGEDC) is a 501(c)3 nonprofit organization that promotes economic development in Gallup and McKinley County and aims to attract employers that provide economic base jobs in the region. GGEDC provides resources to local businesses, operates an Industrial Workforce Program, and has a toolset for site selectors.

McKinley County, under New Mexico Statutes "4-37-1- Counties; powers; ordinances," is the leading land use, planning, and development oversight authority. The County regulates land subdivision, operates the McKinley County Sherriff's Office and McKinley County Fire & EMS, administers elections within the county through the Bureau of Elections, and maintains county roads. McKinley County is in the process of updating its comprehensive plan, last updated in 2012.

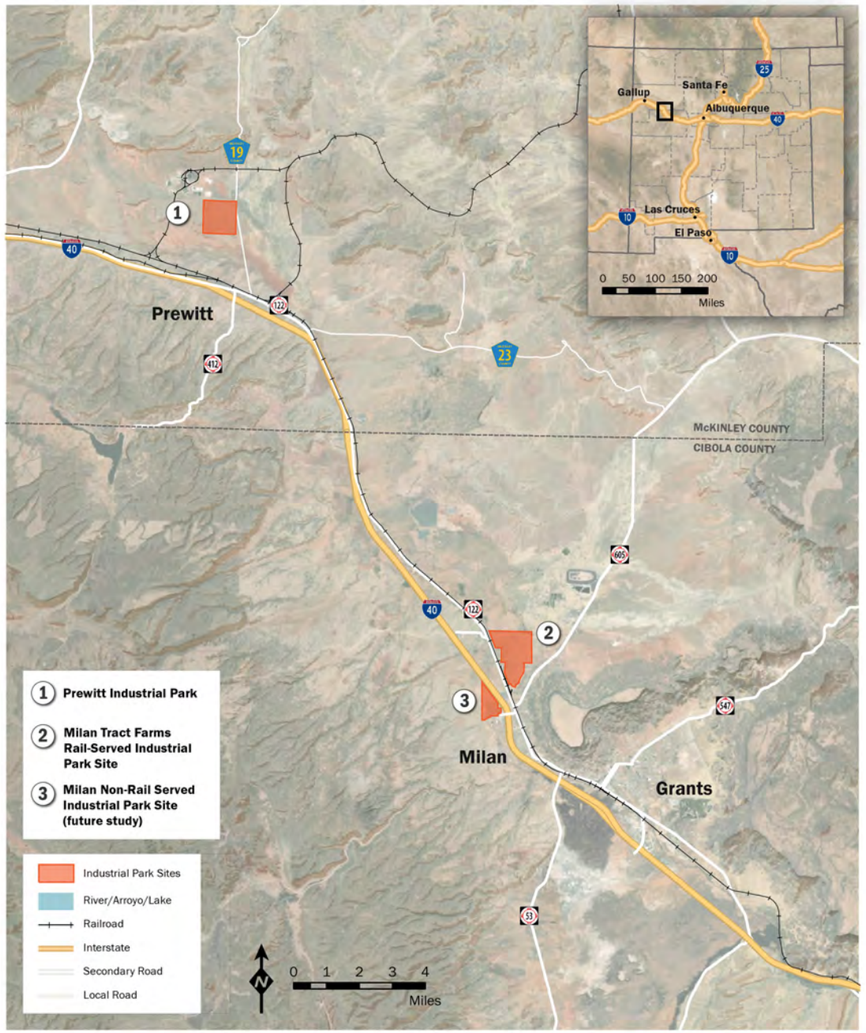

Figure 1: Industrial Park Sites being studied by NWNMCOG

1.4 PREVIOUS STUDIES

This document summarizes the key planning efforts concerning the Prewitt Industrial Park site, as well as economic development needs generally in Prewitt and the surrounding region. The 2018 *Prewitt Industrial Cluster: Master Site Plan* provides the most site-specific recommendations. Other documents cited illustrate the region's efforts to foster economic development, and they generally highlight similar industry sectors – such as energy, logistics, and tourism –as opportunity areas for the region.

The following studies and plans are summarized in the subsections below:

- *Prewitt Industrial Park Site Selection Report* (2020)
- Prewitt Industrial Cluster: reports (2018):
    - *Master Site Plan*
    - *Workforce Skills and Economic Development Assessment & Final "Best Fit" Targets*
    - *Supply Chain and Preliminary Targeted Industry Analysis*
- *A Regional Economic Assessment & Strategy for Coal-Effected Communities* (2017)

Other plans address economic development in the surrounding region but are less detailed or less applicable to the Prewitt Industrial Park. These were reviewed by the project team but are not summarized here. They include:

- *La Ristra-Northwest: Comprehensive Economic Development Strategy* (*CEDS*) (2018)
- *SET Plan, Trail of the Ancients Region* (2015)

The site has also undergone several environmental reviews. These are discussed in section 2.2.7 of this document.

1.4.1 *Prewitt Industrial Park Site Selection Report*

The report analyzed the feasibility of three (3) sites near Prewitt for industrial development. The report weighed the feasibility of each of the three (3) sites on several criteria, including: access, environmental constraints, drainage, rail access, utilities, usable land for development and ownership. The recommended site by the evaluation is the site studied in this master plan. The site was selected because it has the best access and relatively little land within the FEMA 100-year floodplain.

1.4.2 *Prewitt Industrial Cluster* Reports

This was a series of three (3) reports analyzing the opportunities and obstacles related to creation of an industrial park near Prewitt.

1.4.2.1 Supply Chain and Preliminary Targeted Industry Analysis

This was the first report of the Prewitt Industrial Cluster project. It examined opportunities for the NWNMCOG to take advantage of the regional supply chain and a preliminary analysis of industries to "target" with investment or marketing in order to attract them to the region.

The study examined three subject areas. The report examined the suppliers of local businesses, with the aim of identifying how many inputs were being created outside the region. Next, the study analyzed existing flows of freight through the region, pinpointing which products being transported through the region could be potentially made or distributed in the region. Finally, the analysis examined which industries had located to the four states surrounding the NWNMCOG region in recent years. This "cluster" data helps to highlight which industries are most viable for targeting efforts.

Based on the analyses, the study identified the following sectors as preliminary targets:

- Food/Beverage
- Industrial Machinery
- Wood/Furniture
- Chemicals/Pharmaceuticals/Plastics
- Paper
- Computers/Electronics
- Warehouse/Distribution
- Software/Related Services
- Financial Services
- Oil-Related

1.4.2.2 Workforce Skills and Economic Development Assessment & Final "Best Fit" Targets

This report was the second of the Prewitt Industrial Cluster project and built on the previous report that identified preliminary targeted industries. This second report included an economic development assessment that identified local workforce characteristics, location characteristics for potential targeted industries, and finally the "best fit" targets (or the industries that would be most likely to locate to the region and that would respond best to targeting efforts).

The report recommends revised "best fit" targets for existing Industrial Park sites in the Prewitt area, including Milan Industrial Park and Gallup Logistics Park sites.

The study identifies sites near the Escalante power plant in Prewitt as potential sites for industrial development, with similar target industries.

1.4.2.3 Prewitt Industrial Cluster: Master Site Plan

The third and final report of the Prewitt Industrial Cluster studies analyzed the feasibility of industrial development on a site, referred to as the County Road 19 Site, just south of the Escalante power plant in Prewitt. This is the Prewitt Industrial Park site being assessed in this document. It is a land section owned by the New Mexico State Land Office. The site was among several identified by the first two Prewitt Industrial Cluster studies as potential sites for large-scale industrial development; however, it was the only site identified that had not been studied.

The plan provides and high-level analysis of the strengths and weaknesses of the site and presents a conceptual layout for the parcel. The conceptual proposed layout from the 2018 master plan is shown in Figure 2.

The proximity to the Escalante power station is considered a plus, as developments on the Industrial Park Site may be able to take advantage of steam supply from the plant. The proximity to existing rail link to the BNSF Transcon is another advantage of the site. A key negative of the site is the status of the air quality permit related to the Escalante plant and McKinley Paper Company. The State of New Mexico may be unwilling to issue a new permit for a new emissions source in the vicinity of the existing plants.

Several key target industries for the site are listed in Table 1.

Table 1: Summary of Potential Target Industries, Prewitt Industrial Cluster: Master Site Plan

Potential Target Industries	Key Reasons
Warehouse/Distribution	• Feasible with domestic sewer and water; • rail sites advantageous • Large electric power loads may be required • Interstate highway access
Oil/Gas Supplier Operations	• Feasible with domestic sewer and water • Rail access advantageous • Large electric power loads may be required
Plastics Manufacturing	• Can be accommodated with domestic sewer and water • Rail access is often required • Large electric power loads are required
Paper	• Feasible with domestic sewer and water • Often requires rail access • Large electric power loads are needed

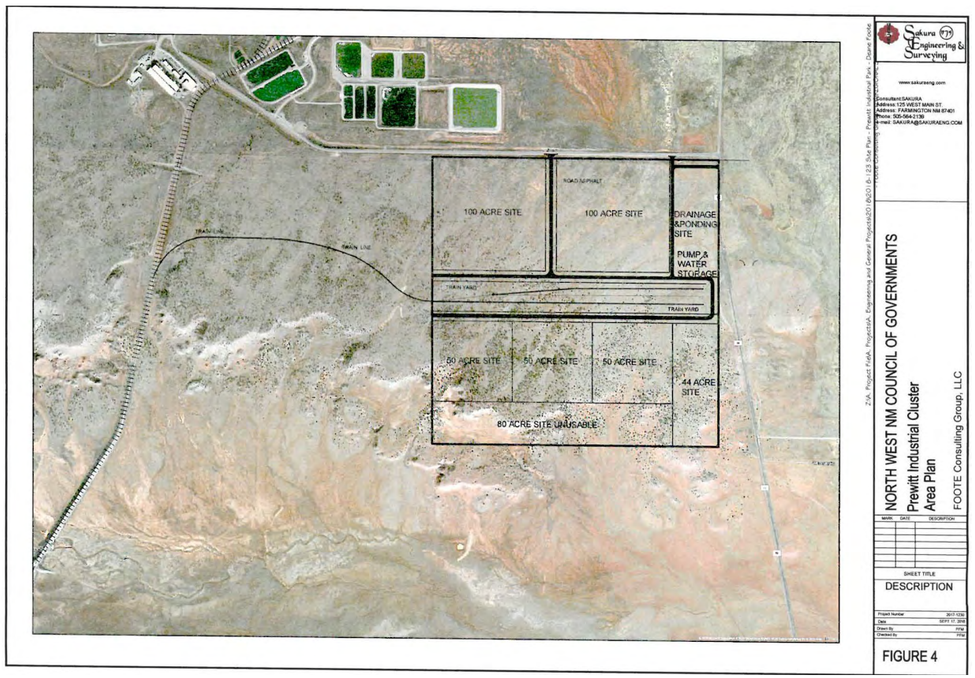

Figure 2: Site Plan, from Prewitt Industrial Cluster Area Plan (2018)

1.4.3 Regional Economic Assessment & Strategy for the Coal-Impacted Four Corners Region

This document was created to address changes in the local economy due to disinvestment in the Four Corners region's mining and energy production sectors. The report, compiled by Highland Economics, LLC, makes an accounting of the impact of the decline in the mining and energy sectors in San Juan, McKinley, and Cibola counties in New Mexico and recommends ways to strengthen the area's economy. The decline in the two industries is estimated to cost the region approximately 930 jobs and $122.1 million annually, or 1-2% of the region's jobs and annual income. The worst impacts are expected in San Juan County.

The report identifies several key strategies to improve the regional economy, including workforce and business development, quality of life investments meant to retain talent and attract employers, and partnerships to improve branding and marketing of the local economy and communities.

The document identifies "top targeting industries" for each county in the Four Corners region. For McKinley County, the report recommends transloading/warehousing and tourism, and to a lesser extent, local food manufacturing. For Cibola County, greenhouse, tourism and forest product are identified.

2 Existing Site

2.1 SITE LOCATION & MAP

The Prewitt Industrial Park Site is located approximately 1.9 miles north of I-40. See Figure 3. The site encompasses all of section 36, T14N, R12W. The project team analyzed the entire 640-acre section, although the preliminary design described later in this document encompasses only 625.85 acres because a southern portion of the section is undevelopable due to terrain constraints. The site is south of a property on which the Escalante Generating Station of Tri-State Generation and Transmission Association is located. The site is accessed via County Road 19 (CR 19), which runs north-south east of the site, and links to I-40 to the south via NM 122.

2.1.1 History

Few records are available documenting the history of the Industrial Park site. New Mexico State Land Office records show that an agricultural lease to Donald J. Elkins has been active since at least October 1990.[1]

The Escalante Generating Station, just north of the Industrial Park site, was constructed in 1984, when it was known as the Plains Electric Generating Station.[2]

The surrounding area has been associated with the mining industry for decades. According to the National Mining Hall of Fame in Grants, it was at Haystack Mountain, just four (4) miles east of Prewitt, that uranium was discovered in 1950.[3] By the 1980's, however, the local mining industry had declined, and much of the local economy with it.

The area in and around Prewitt has long been settled by the Navajo people and Pueblo indigenous communities. Today, Prewitt and the Industrial Park site are located within the Baca Chapter of the Navajo Nation.[4] (By the early 20th century, the area had become associated with a local ranching family with the last name of Baca.)

In 1916 a trading post was established in the area by brothers Bob and Harold Prewitt. A 1928 application for a post office in the community listed the place name as Prewitt.[5]

Prewitt lies along the former route of US Route 66, now NM 122.

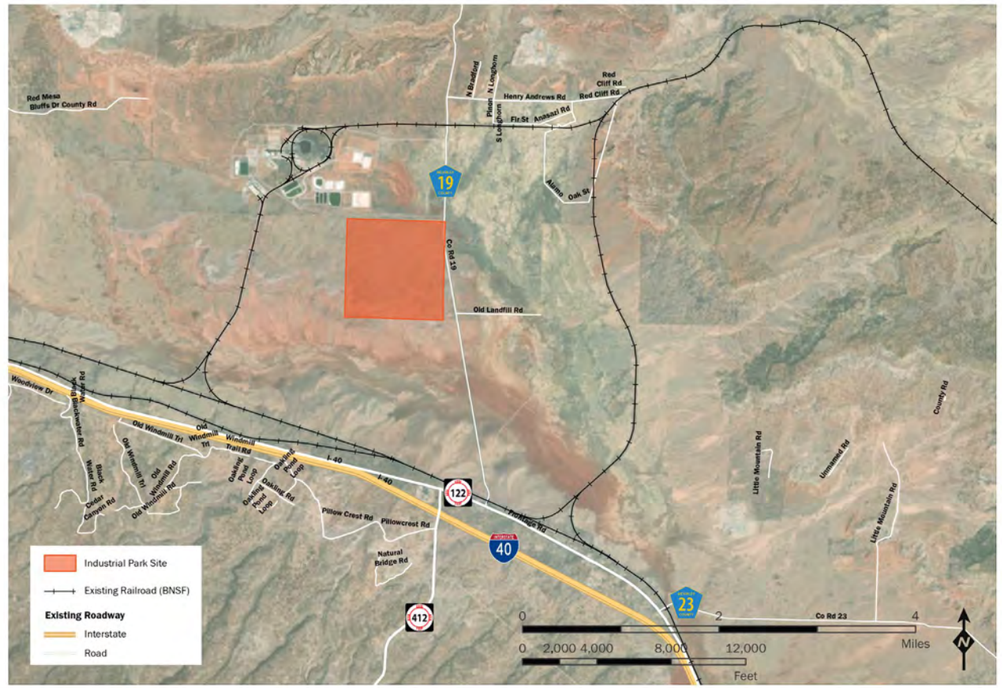

Figure 3: Industrial Park Site and Vicinity

[1] New Mexico State Land Office Data Access: List Lease Info. Lease number: G0-1885-0000. Accessed May 2020 from http://dataaccess.nmstatelands.org/DataAccess/Lease_Information_Single.aspx?Lease_Prefix=G0&Lease_Number=1885&Lease_Assignment=0

[2] "Tri-State to close Escalante coal plant" *Albuquerque Journal*, 5 January, 2020. Accessed 20 May, 2020, from https://www.abqjournal.com/1408313/latest-business-news-107.html

[3] "Martinez". *National Mining Hall of Fame*, https://mininghalloffame.org/inductee/martinez

[4] "Baca-Prewitt" *Navajo Nation Wind*, https://navajoprofile.wind.enavajo.org/Chapter/Baca-Prewitt

[5] "Prewitt, New Mexico". *The Route 66 Encyclopedia.* 2012. E-book preview. Accessed May 20, 2020 from https://books.google.com/books?id=_kr0AwAAQBAJ&lpg=PA205&ots=gx5B1BUoLi&dq=bob%20and%20harold%20prewitt&pg=PA205#v=onepage&q=bob%20and%20harold%20prewitt&f=false

2.2 EXISTING CONDITIONS & INFRASTRUCTURE

2.2.1 Land Use & Ownership

The Industrial Park site sits on trust land held by the New Mexico State Land Office (SLO). See Figure 4. The SLO administers leases, including ranching leases, on state trust land. Such land cannot be sold by the SLO – only swapped with land held by another entity.

The site is currently leased under an agricultural lease to Donald J. Elkins. The lease expires in 2020. It is vacant rangeland.

The land surrounding the site is generally held by a variety of private entities. Exceptions are the section to the northwest of the site, the site of the Escalante Generating Station and the McKinley Paper Company, which is Navajo Nation trust land, and the half-section directly to the southwest of the site, which is also state trust land.

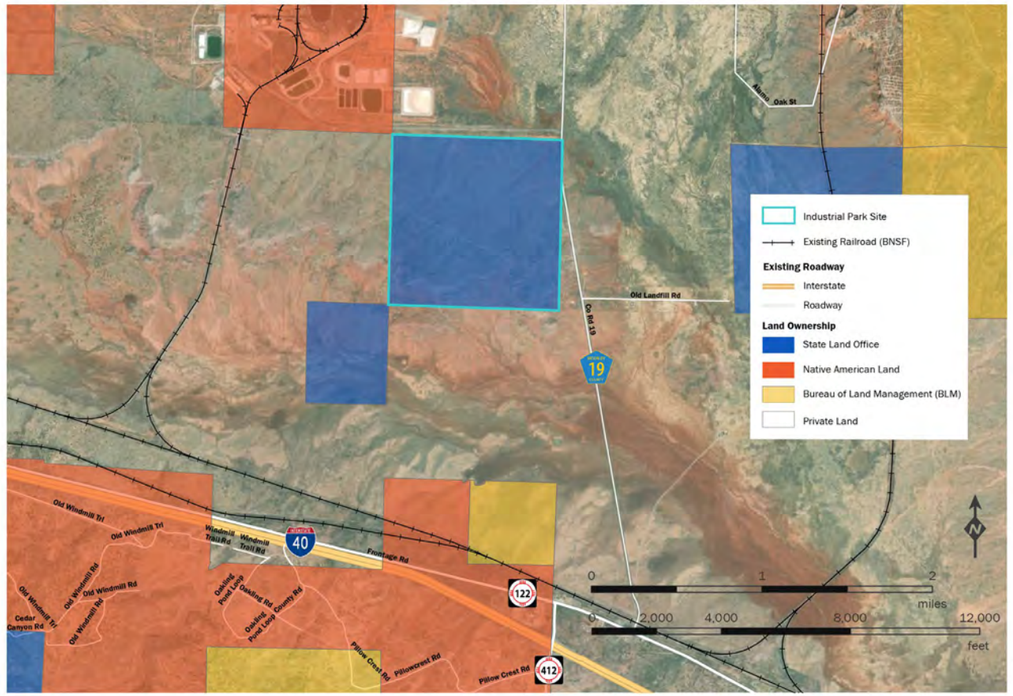

Figure 4: Land Ownership in Vicinity of Industrial Park Site

2.2.2 Roadway

The site lies near CR 19, a north-south road running that runs along the east side of section 36. CR 19 is a two-lane, asphalt-paved roadway maintained by McKinley County. CR 19 would be the primary access to the proposed Industrial Park, via a new easement.

Another access route could be via Power Plant Road, the current access road to the Escalante Generating Station and McKinley Paper Company plant which runs east-west directly north of the Industrial Park site. This road is a private two-lane, asphalt paved roadway and would require that an easement be acquired from Tri-State G&T. The power plant access road would benefit the proposed Industrial Park by providing more direct access to McKinley Paper Company and better industrial park traffic circulation.

I-40 is accessed from the Industrial Park site via NM 122 at Exit 63. Power Plant Road is 3.75 miles from the I-40 on/off-ramp.

2.2.2.1 Traffic Volume

Traffic volume refers to the number of vehicles traveling on a road throughout the course of a day. Annual average daily traffic (AADT) counts from 2017 are available from the NMDOT. On NM 122 less than 3,000 AADT was recorded, up to 10% of which was truck traffic. Between 15,000 and 29,000 AADT was observed on the segment of I-40 near Prewitt. Between 5501 and 8400 of that AADT count was truck traffic. [6] [7]

A traffic impact analysis (TIA) is required to understand the impacts to CR 19 should the industrial park become fully implemented.

2.2.3 Rail

A rail spur is located on the west side of the adjacent section 35, approximately one mile west of the proposed industrial park. This existing rail spur provides a unit train of coal to the EGS. The existing rail spur connects to the BNSF Transcon double track rail approximately 1.5 miles south of the proposed rail connection location to the Industrial Park site. To provide rail access to the Industrial Park site, a rail spur would need to be constructed across section 35 – a distance of one mile through difficult topography. The BNSF would need to approve the new Industrial Park extension before they could provide rail service.

The BNSF mainline to the south of the Industrial Park Site is one of 11 lines that make up BNSF's Southern Transcon rail corridor. The line is a major artery of BNSF's network and is busy -- about 90 trains pass through nearby communities of Milan and Grants daily on the track. The particular line through Prewitt runs generally east to west, from Belen, New Mexico, to Needles, California, south of Las Vegas, Nevada. Continuing on BNSF's network, a train could reach cities such as Albuquerque, Denver, El Paso, Houston or Chicago to the east or Phoenix, Los Angeles, Oakland, or Seattle to the west. As a mainline, the line is designed for trains to move through quickly. The 2015 *New Mexico Freight Plan* notes that this may present a challenge for small shippers along a main line – with a growing focus on economies of scale on the part of railroads, small shippers may face increased costs or logistical challenges when tying into a main line.

[6] *2017 Annual Average Daily Traffic (AADT) on State Owned and Maintained Roads: District 5.* Accessed May 2020 from https://dot.state.nm.us/content/dam/nmdot/Data_Management/TMP_AADT_Traffic_Flow_Maps.pdf

[7] *2017 Annual Average Daily Truck Traffic on State Owned and Maintained Roads: District 5.* Access May 2020, from https://dot.state.nm.us/content/dam/nmdot/Data_Management/AADTT_Map.pdf

BNSF's mainline is used daily for passenger service by Amtrak's Southwest Chief route. The train does not stop in Prewitt – the closest stops are in Gallup to the west and Albuquerque to the east.

2.2.4 Drainage

The existing drainage is from the escarpment on the south side of sections 35 and 36 flowing north and northeast to the Rio San Jose Tributary that flows through the EGS. The general slope of the land is between two (2) and four (4) percent with a pastureland cover in fair condition. The existing rail spur on the west side of section 35 is in a cut condition and on a relatively flat slope making drainage away from the track difficult. The proposed industrial park will set on a mesa about 30-40 feet higher than the rail spur to the west and CR 19 to the east. The proposed improvements should strive to maintain existing flow patterns and minimize added flows to the existing rail spur and CR 19.

2.2.5 Water and Sanitary Sewer

Potable water is not available from a public water system. Ground water is anticipated to be available by drilling water wells on the property and treating the water to drinking water standards. There are water wells located on the adjoining properties. Under this high-level evaluation of the wells in the area, it can be anticipated that water in an aquifer below the upper water table is at approximately 250 feet below grade at a capacity of 120 GPM. The entire system would require pipelines, tanks, fire suppression, well, water treatment, and pumping system.

Community sewer is not available from public wastewater authority. Septic or evapotranspiration systems would be the only manners to treat liquid waste. The New Mexico Environment Department would need to be consulted for regulation on the specific type of waste generated. The soil listed would be satisfactory for septic systems. This item is solely dependent on the type and size of operation that would be placed on the property. Depending on the industry they may have to use an advanced system of treatment prior to a septic system. The entire industrial site would require a sewer distribution system to be installed for an industrial site centralized wastewater treatment system.

2.2.6 Dry Utilities

Continental Divide Electric Cooperative (CDEC) provides electricity to the unincorporated community of Prewitt and to the cities of Grants and Gallup. CDEC currently has electrical transmission overhead power lines bisecting the site (see drawings in Appendix A). New Mexico Gas Company provides natural gas service across the state of New Mexico. Sacred Winds Communications provides internet service in the region.

2.2.7 Environmental

The Prewitt Industrial Park site is located approximately two (2) miles northwest of the unincorporated community of Prewitt in McKinley County, New Mexico (Sec 36, T14N, R12W). The property is currently undeveloped and owned by the State Land Office and managed as State Trust Land to generate revenue. The undeveloped semiarid grassland is currently under an agricultural lease for grazing livestock. The Prewitt Industrial Park site was evaluated for potential environmental constraints associated with the development of the site. This was accomplished by reviewing readily available online data and previous studies/reports including a recent Phase I Environmental Site Assessment completed for the project site location (Daniel B. Stephens & Associates, May 5, 2020).

2.2.7.1 Geology and Soils

Soils in the area of the subject property are classified as Penistaja-Tintero Complex, 1 to 10 percent slopes in the northern portion of the subject property and Celavar-Atarque Complex, 1 to 8 percent slopes in the southern portion. Penistaja is a sandy loam to about three (3) inches and a sandy clay loam beyond to 19 inches and sandy loam from 19 to 65 inches. It is found on fan remnants on valley sides with a parent material compoed of Eolian deposits and slope alluvium derived from sandstone and shale. It is a well-drained soil with a depth to the water table of more than 80 inches. Tintero is similar except that the soils are a fine sandy loam to 48 inches and are somewhat excessively drained.

The Celavar-Atarque Complex is found in the southern portion of the subject property. Celevar is a thin soil composed of loam from 0 to 2 inches, sandy clay loam from 2 to 31 inches, and bedrock from 31 to 40 inches. Celevar is found on dip slopes on cuestas and mesas with a parent material composed of Eolian deposits over slope alluvium derived from sandstone and shale. It is a well-drained soil with depth to water more than 80 inches. Atarque is similar except that the soil is a sandy loam from 0 to 3 inches, sandy clay loam from 3 to 14 inches, and bedrock from 14 to 20 inches.

Depth to groundwater ranges between 10 feet below ground surface (bgs) to 205 feet bgs, with groundwater flow determined to flow northeast toward Casamero Draw and eventually shift south to follow the Casamero Draw. The U.S. Geological Survey (USGS) 1995 7.5-minute Quadrangle for Thoreau, New Mexico indicates that topography of the site is generally gently sloped from the southwest to the northeast. The surface elevation ranges from approximately 6,907 feet above mean sea level in the southwest to 6,822 feet above mean sea level in the northeast. [8]

2.2.7.2 Water Resources

Wetlands and Waters of the U.S. are regulated by the U.S. Army Corps of Engineers (USACE) and impacts to jurisdictional wetlands generally require a USACE permit pursuant to Section 404 of the Clean Water Act. The National Wetland Inventory (NWI) is maintained by the U.S. Fish and Wildlife (USFWS) and provides a broad review of potential wetlands throughout the country. This online tool is not a substitute for on-site wetland delineation as wetlands can and do shift/change over time. Preliminary assessment indicates the presence of "riverine habitat" on the site spanning across the north end of the site, and second feature spanning across

[8] Natural Resources Conservation Service (NRCS). 2020. *Custom soil resource report for McKinley County Area, New Mexico, McKinley County and parts of Cibola and San Juan Counties*. April 2020.

the southwest corner of the site, therefore development of the site could impact what has been classified by the NWI as “riverine habitat.” Both “riverine habitat” features identified on site are classified as “riverine intermittent streambed seasonally flooded (R4SBC)” and shown in Figure 5. This classification includes dry arroyos that experience intermittent flow based on heavy rainfall events and does not imply a wetland-type environment. Typically, these drainages would be assessed during a biological field survey to determine whether they qualify as wetland features or jurisdictional waters of the US.

Due to the presence of intermittent drainages on the site, development activities would likely need to be evaluated for potential impacts to jurisdictional waterways in order to determine permitting options via Section 404. A biological field review and coordination with USACE could be required in the form of a preconstruction notification (PCN) or Nationwide Permit application dependent on total acreage of impacted waters of the U.S.

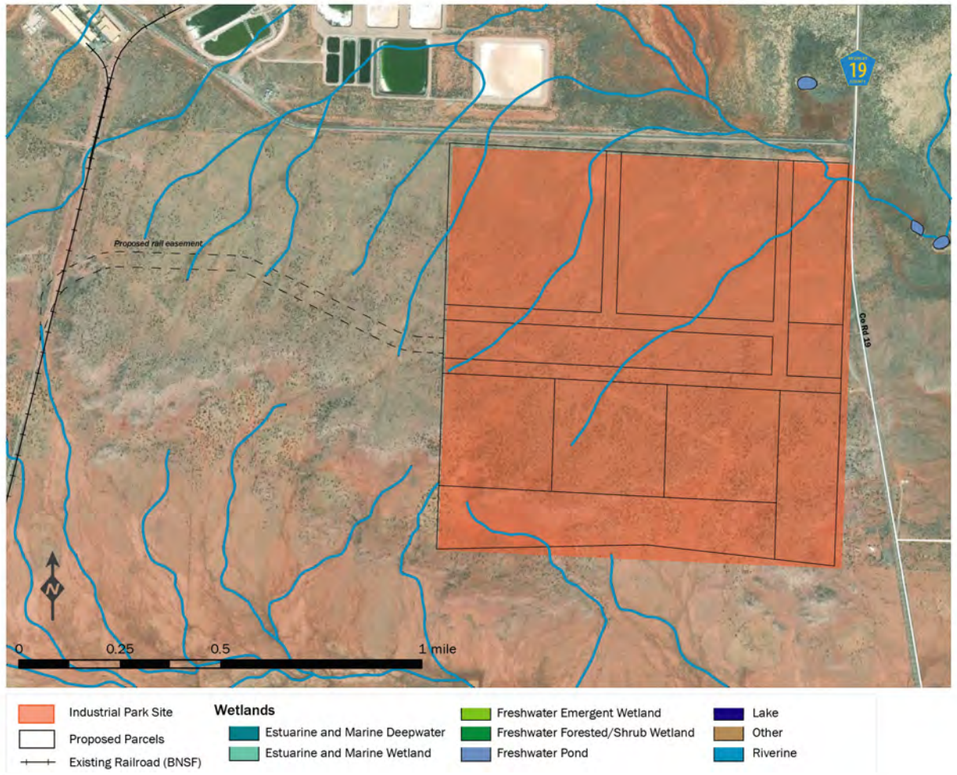

Figure 5: Water Resources in the Vicinity of the Prewitt Industrial Park Site

2.2.7.3 *Floodplain*

The Federal Emergency Management Agency (FEMA) National Flood Hazard Map Service identified that a small portion of the site is located within a Zone A floodplain, or 100-year floodplain. See Figure 5. Approximately five (5) acres in the northeast corner of the site are identified as Zone A floodplain; meaning that this area has a one percent change of flood annually. Activities that take place within the Zone A floodplain will require consultation with the County's floodplain administrator and preparation of a FEMA Conditional Letter of Map Revision (CLOMR) if any construction activities lie within the floodplain.

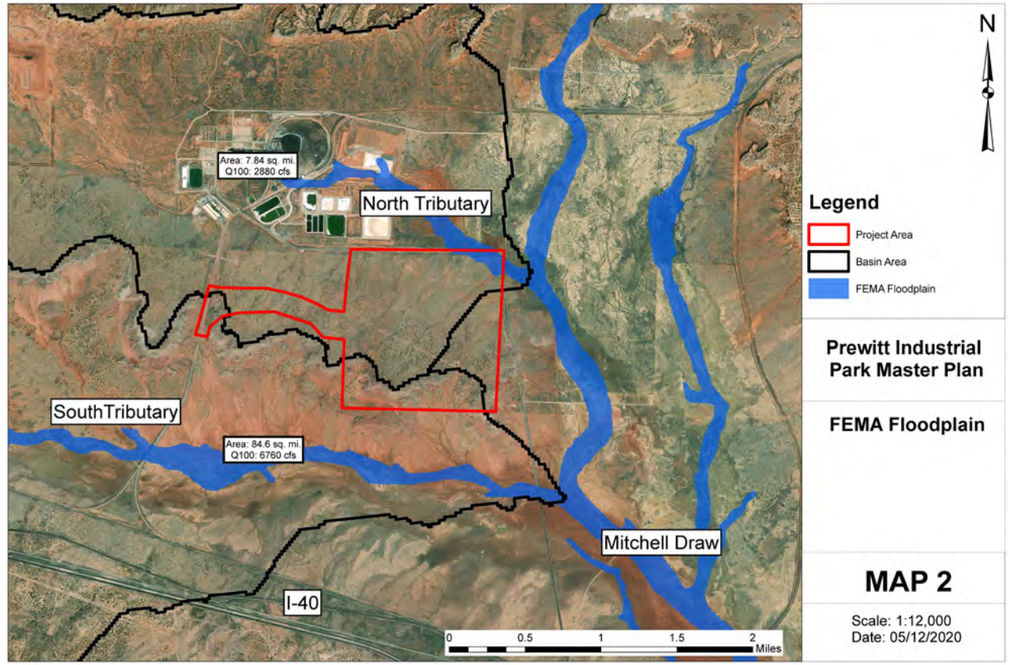

Figure 6: FEMA Floodplain and Drainage Basins near Project Area

2.2.7.4 *Protected Species*

The USFWS enforces the Federal Endangered Species Act and Migratory Bird Treaty Act, protecting specific species of plants and animals and their habitat. A review of potential sensitive species occurrence in McKinley County was performed using the USFWS Information for Planning and Consultation (IPaC) web tool. Five federally protected species were identified as having the potential to occur within McKinley County. Three species are listed as federally threatened, and two species are listed as federally endangered. See Table 2. No critical habitat for these species was identified within the project area: however, effects to critical habitat at this location would require analysis along with the endangered species themselves.

In addition to federally threatened and endangered species, the New Mexico Department of Game and Fish (NMDGF) maintains the Biota Information System of New Mexico (BISON-M); a list of state protected species by county. Species listed as part of the analysis for this site were those listed as threatened or endangered by the NMDGF for McKinley County. Seven state protected species were identified as having the potential to occur

within McKinley County. Four species are listed as state threatened and three species are listed as state endangered.

Based on the location and habitat present within the site, it is not anticipated to contain suitable habitat for any listed species. However, migratory bird species may utilize the area as stopover habitat if seasonally flooded riverine habitat on the site is inundated. Section 7 of the Endangered Species Act requires federal agencies to consult with USFWS before undertaking an action or making an approval that may affect a federally listed threatened or endangered species. A biological survey may be required depending on future project permitting and funding.

Table 2: Federal and State Protected Species in McKinley County

Common Name	Scientific Name	Status[a]
Birds		
Mexican spotted owl	*Strix occidentalis lucida*	FT
Bald eagle	*Haliaeetus leucocephalus*	ST
Peregrine falcon	*Falco peregrinus*	ST
Gray vireo	*Vireo vicinior*	ST
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE; SE
Yellow-billed cuckoo	*Coccyzus americanus*	FT
Costa's hummingbird	*Calypte costae*	ST
Least tern	*Sternula antillarum*	SE
Fish		
Zuni bluehead sucker	*Catostomus discobolus yarrowi*	FE; SE
Flowering Plants		
Zuni fleabane	*Erigeron rhizomatus*	FT

[a] FT = federally threatened; FE = federally endangered; ST = state threatened; SE = state endangered

2.2.7.5 *Cultural Resources*

Because the project area is on State Trust Land, New Mexico state regulations for the management of cultural resources would apply. Depending on future project permitting and funding, Section 106 of the National Historic Preservation Act may apply in the development of the industrial site.

A preliminary review of the New Mexico Cultural Resource Information System (NMCRIS) shows at least 22 previously recorded archaeological sites have been documented in the project area. The majority of the sites are Prehistoric sites, some of which contain intact features such as storage bins, hearths, roasting pits, mounds, and masonry and jacal roomblocks. Other prehistoric sites contain artifact scatters with no features. A few of the sites are historic sites that include corrals and hearths. The majority of the sites were documented in 1979 by the School of American Research for the Plains Electric Generation & Transmission Corporation's Prewitt Generating Station (now the Escalante Generating Station operated by Tri-State Generation and Transmission Association) and associated transmission line corridors.

Due to the age of the previous survey, it is anticipated that a new archaeological survey would be required of the proposed industrial site. Previously documented sites would need to be updated and assessed for eligibility for listing on the national and state registers. In consultation with appropriate agencies, measures will need to be developed to avoid, minimize, and/or mitigate potential adverse effects to significant properties. The archaeological investigations could potentially be completed in phases, as specific parcels are identified for development. It is anticipated that many of the sites could be avoided, but some may be unavoidable and would likely require mitigation, such as archaeological testing and/or data recovery efforts prior to site development.

2.2.7.6 *Air Quality*

The New Mexico Environment Department (NMED) Air Quality Bureau is responsible for enforcing air quality standards of the Federal Clean Air Act. The regulatory authority that NMED exercises to enforce air quality standards come from the state's Environmental Improvement Act, Air Quality Control Act, and the State Implementation Plan approved by the U.S. Environmental Protection Agency (EPA). The NMED Air Quality Bureau retains jurisdiction to permit and monitor industries that wish to build or modify facilities that emit air pollutants (emissions) into the air. Coordination with this bureau would be required prior to any construction activities to develop this site. Construction Permits are required for all sources with the potential emission rate greater than 10 pounds per hour, or 25 tons per year, of criteria pollutants (such as nitrogen oxides and carbon monoxide). Air quality construction permits must be obtained for new or modified sources prior to beginning construction.

NMED's Air Quality Bureau was contacted regarding the proposed industrial site and in light of the recent decommissioning of the Escalante Power Plant. The Bureau does not have a policy for multiple use industrial sites, each New Source Review (NSR) application is accepted as a stand-alone request for a facility to be constructed. The application must pass modeling for ambient standards before permit issue. While there could eventually be a cumulative impact from multiple facilities in one area that could result in a non-attainment status for certain emissions in the County, the Air Quality Bureau has not observed monitoring exceedances in the areas around the Escalante facility.

2.2.7.7 *Water Quality*

The NMED Surface Water Quality Bureaus are responsible for enforcing New Mexico Water Quality Standards, defining water quality goals by designating uses for water resources, and setting criteria to protect and preserve water quality. The state water quality standards are adopted by the Water Quality Control Commission and approved by the EPA under the Federal Clean Water Act. The Surface Water Quality Bureau would need to be consulted in order to obtain permits in relation to utility operation (water and wastewater), point source discharge, and dredge-and-fill permits (as applicable). The NMED Ground Water Quality Bureau would need to be consulted to ensure compliance with groundwater protection measures and, if applicable, obtain a ground water pollution prevention permit.

2.2.7.8 *Hazardous Materials*

Two facilities are within the vicinity of the Prewitt Industrial Park site; the coal-fired Escalante Generating Station (EGS) and the McKinley Paper Company. A Phase I Environmental Site Assessment (ESA) was conducted in 2020 for the subject property to identify the presence of recognized environmental conditions (RECs) in the

vicinity of the site. The Phase I assessment resulted in the identification of one REC. The EGS is listed with NMED for groundwater discharge and a leaking underground storage tank (LUST) that is now listed as No Further Action (NFA) status. Discharge from both the EGS and McKinley Paper Company are regulated under an active NMED permit, and a natural swale located at the northeast corner of the site is downstream of waste discharge ponds that are part of the EGS operations. In addition, the site is located south of leach ponds that process domestic waste from both EGS and McKinley Paper Company facilities and are regulated under the same active discharge permit. No other sites in the vicinity of the Prewitt Industrial Park site were identified as being associated with known RECs with the potential to affect surrounding properties. The ESA recommends further analysis of this location prior to site development in this area. [9]

[9] Daniel B. Stephens & Associates, Inc. 2020. Phase I Characterization, Prewitt Industrial Cluster Site, Prewitt, New Mexico. Inquiry Number 6020734.2s.

3 Proposed Industrial Park

3.1 PRELIMINARY PROJECT DESIGN

This document provides a 30% conceptual design for the Industrial Park site. This design identifies the proposed layout of parcels, roadways, utilities, and related easements. These elements are summarized below and are shown in detailed drawings in Appendix A.

The project team prepared a proposed plat showing how the site should be subdivided to reflect the conceptual design. This plat is shown in Figure 8. More detailed drawings of the proposed industrial park can be found in Appendix A.

This preliminary design does not detail the specific design of developments within the site. These will ultimately be determined by private developers. The one exception is the Phase I Spec Building, for which the project team has provided 90% designs. Those designs are detailed in chapter 4.

3.1.1 Initial Land Use Concept

A high-level land use concept was developed by the project team to guide the more detailed preliminary design. The land use concept is seen in Figure 7. The concept was developed using the conceptual site layout from the *Prewitt Industrial Cluster: Master Site Plan*, target industry data from recent economic development studies, and a sketch plat developed by the project team. The land use categories shown are conceptual and are not intended to restrict any type of development from any specific parcel.

In the land use concept, the largest parcels (Parcels 1 and 2) of approximately 100 acres are considered most suitable for warehouse and distribution development, which often require parcels of this size. Most of the remaining parcels – those ranging from 34 to 50 acres – are classified as most suitable for manufacturing operations, which can be accommodated on smaller parcels.

A parcel at the entrance to the park (Parcel 5) may be an appropriate location for office or institutional development, due to its proximity to CR 19. Portions of Parcel 3 and Parcel 5, as shown in the land use concept, are the recommended locations for wastewater and water facilities to support the industrial park. Parcel 10, the southwesternmost parcel, is likely undevelopable due to topography. Parcel 4, in the center of the Industrial Park site, is reserved for a railyard.

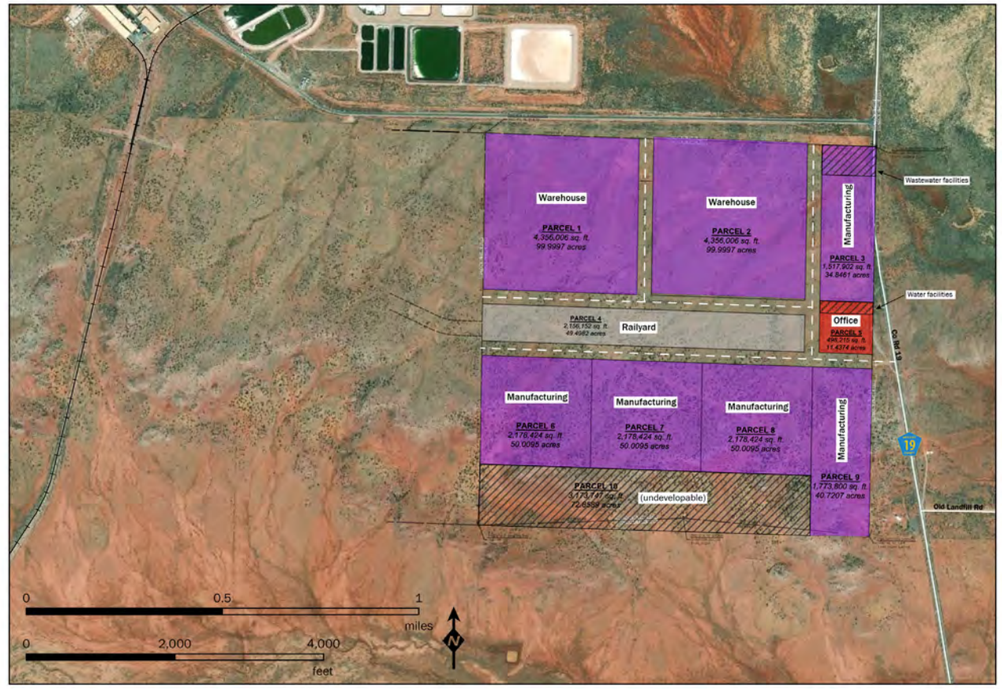

Figure 7: Prewitt Industrial Park Land Use Concept

3.2 INITIAL PROPOSED PLAT ALTERNATIVE

The proposed plat was based on the proposed site layout from the *Prewitt Industrial Cluster: Master Site Plan* prepared by Foote Consulting Group, LLC (see section 1.4 of this report for a summary of that report), and the land use concept above. The parcels of land subdivided are large enough to support an anchor company's land requirements to a smaller support company. The proposed plat is flexible and can be adjusted to fit most any type of development and includes: See Figure 9 for the proposed plat.

Two major 100-acre parcels are proposed on the north side of the railyard, with three (3) large 50-acre parcels on the south side of the railyard. The east parcels are of lesser size depending on the remnants with Parcel 8 set aside for the water tank/utilities and slopes.

There is a need for easements for:

- The rail spur track through section 35
- The CR 19 access across a lot in section 31 to the east
- Power Plant Road on the north side of section 36
- The Continental Divide Electric Cooperative transmission line that runs through the section

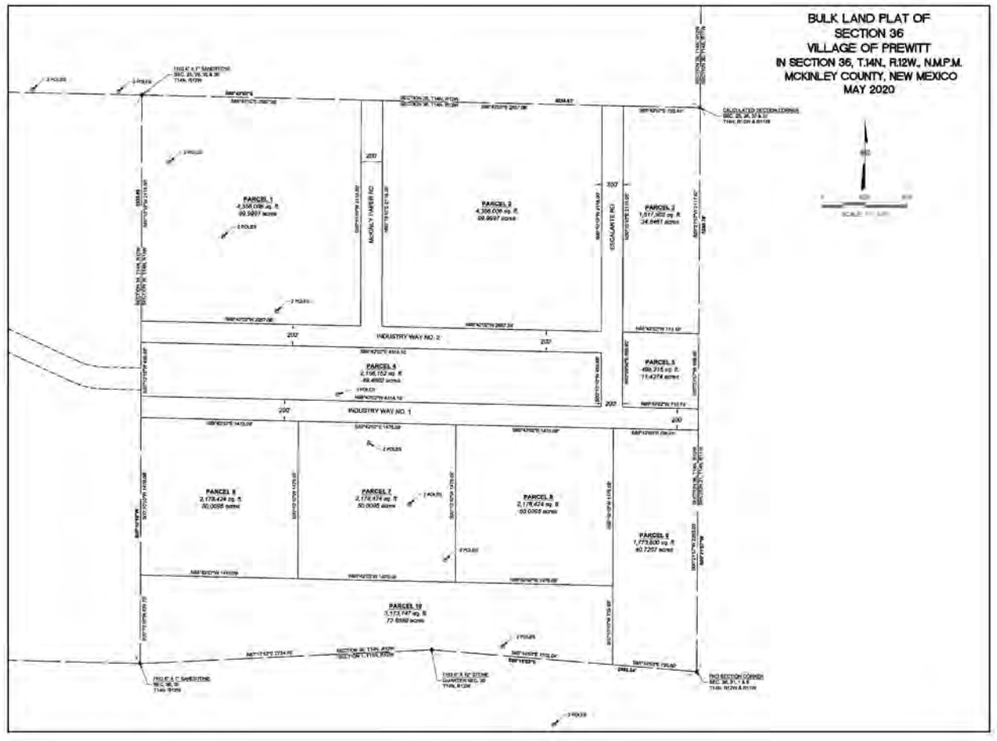

Figure 8: Proposed Plat for Prewitt Industrial Park Site

3.3 30% DESIGN ELEMENTS & CRITERIA

Preliminary plans were prepared for the proposed industrial park to develop better estimates of land use and construction costs. The following subsections analyzed the infrastructure needs required to support the Initial Proposed Plat Alternative. A

3.3.1 Standard Specifications for Public Works Construction

The dedicated right-of-way infrastructure (i.e. roads, curb and gutter, permanent signing and striping, drainage structures, sewer, water, etc.) is owned and maintained by McKinley County. Public infrastructure will adhere to the standard of care, which is the New Mexico American Public Works Association (APWA) Standards Specifications for Public Works Construction, 2006 Edition. The NM APWA Standard Specifications includes both material and installation specifications as well as standard drawings for roadway, drainage, wastewater, and water infrastructure. The roadway and drainage design will also be based on NMDOT design criteria. The rail design follows the BNSF Industry Track Standards for grades, track, and yard standards. Water and wastewater will follow APWA standards. Unique infrastructure such as a water booster station, are specifically designed to provide the necessary flow and system pressure required to serve the Industrial Park site. City of Albuquerque standards are referenced as well, where standards did not exist for McKinley County. The Phase I Spec Building will follow AIA and New Mexico Construction Industries standards (spec building design criteria are discussed in Chapter 4). Private utilities will follow the standards of the company providing the services.

3.3.2 Roadway

The roads used the standards from APWA for a rural roadway typical cross section with a design speed of 35 miles per hour. The roads will have a 48-foot wide rural pavement that includes two (2) 14-foot lanes and two (2) 10-foot shoulders to provide trucks adequate pavement to make needed movements. The pavement design was based on an R-value of 30 (sandy/loam A1-3 soils) and 50 trucks per day over a 20-year period. The pavement section is a 5-inch asphalt surface over a 6-inch aggregate base course on 12-inch of subgrade preparation. The NMDOT standard specification (current edition) will be used for this project. The roadway plan-profiles are included in Appendix A of this report.

3.3.3 Rail

The proposed rail layout for the Industrial Park site is seen in Figure 9. The rail spur providing rail access to the Industrial Park site will follow the BNSF Industry Standards that include a 1.5% maximum grade on the spur track and a 1.0% maximum grade in the railyard. The railyard layout includes an arrival track, a departure/runaround track, and two (2) loading/unloading tracks. The rail construction has the following features:

a. Tie into the existing Escalante Power Plant rail on the west that will require 40 rock cut and use maximum longitudinal grade of 1.5% and extend to site
b. Railyard will include four (4) tracks – arrival track, departure-runaround track, and two (2) yard tracks. This layout was developed in the *Prewitt Industrial Cluster: Master Site Plan* and provides a number of uses:
    i. Tracks 1 and 2 could be a transload loading/unloading facility for ag products, plastic pelts, materials, etc. to support industry and warehousing; or
    ii. The tracks have adequate separation to add storage tracks to support industries to avoid demurrage
c. The railyard provides track length of approximately 4,100 feet that fit under the existing Continental Divide Electric Cooperative transmission line poles. Vertical clearance will need to be checked to verify the railyard grades
d. The rail plan-profiles and sections are included with the plans in Appendix A of this report

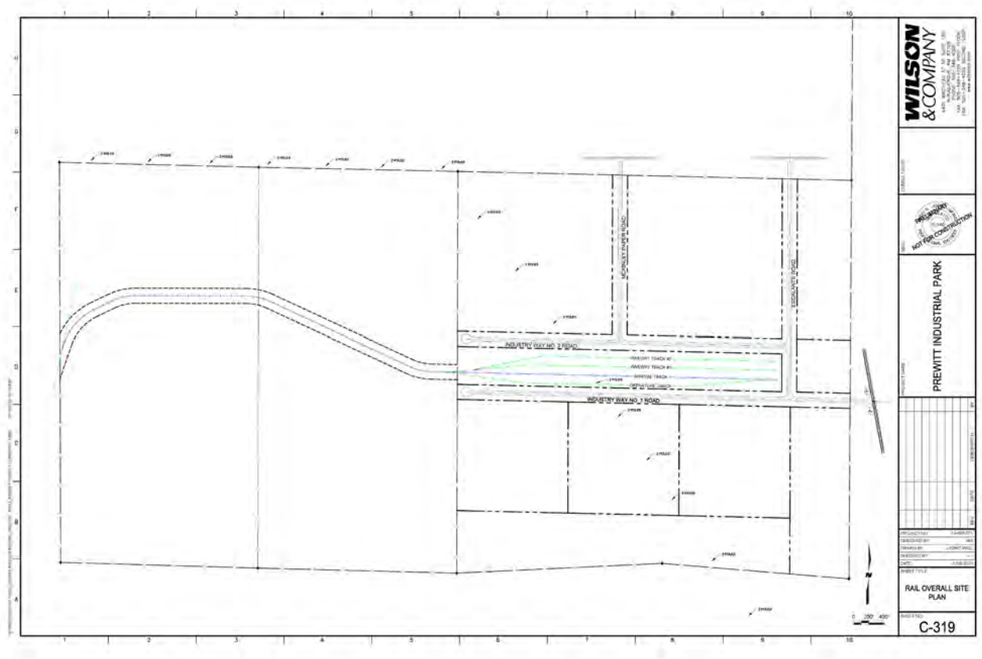

Figure 9: Proposed Industrial Park Rail Layout

3.3.4 Drainage

The drainage design storm is a 25-year storm with the 100-year storm evaluated for building elevations. The drainage will follow the existing drainage flow paths using culvert pipes to cross the improvements. Figure 10 shows the overall drainage plan. Key items relating to drainage include both regional and on-site. The following describes the drainage features:

3.3.4.1 Regional drainage:

a. There are two (2) tributary branches whose confluence drain into the Rio San Jose, near the northeast corner of site. The west tributary branch crosses the NE corner of the site (section 36) limiting approximately six (6) acres of useable property for parcels 2 and 3.

3.3.4.2 On-site drainage:

a. Drainage areas for the sub-basins are shown on the slide along with the required culverts (Figure 10). Drainage is from south to north thence east to tie into the Rio San Jose north tributary.
b. The drainage plan will use dikes to push drainage away from the rail spur connection to the Escalante Power Plant track to minimize impacts in this cut section.
c. Culvert sizes range from 42 to 54 inches with ditches having an 8-foot bottom with 2.5-foot depth.
d. The grading for the railyard is limited to 1% causing up to 35 feet of fill on the east end. This impacts the CR 19 access road pushing the railyard west to minimize fill and to provide an acceptable grade on the Industry Way No. 1 road grade – about 3%.
e. Two (2) 54-inch RCP culverts are proposed across Power Plant Road on the north to maintain historic drainage patterns.

The grading and drainage plans are included in Appendix A of this report.

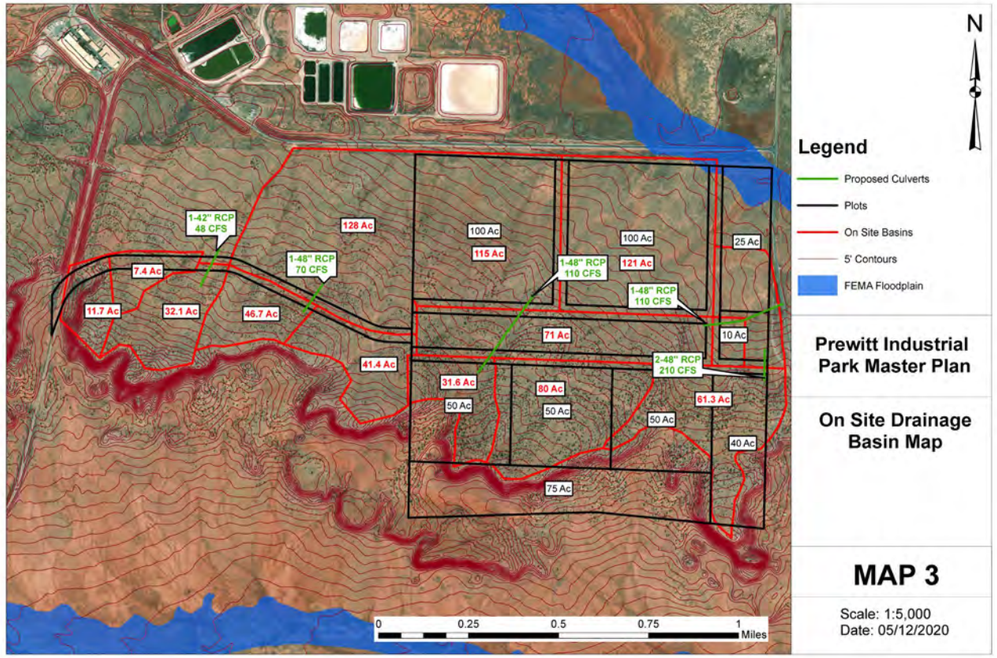

Figure 10: On-Site Drainage Basin Map

3.3.5 Water and Sanitary Sewer

This information is intended to provide a high-level view of the water and sanitary sewer needs to serve the Industrial Park at full buildout. Water and sanitary sewer sizing were developed based upon land use projections for water and wastewater demands are assumed to be a maximum of 500 employees for the Industrial Park. The Industrial Park sewer system is designed for 8,000 GPD. For planning purposes water demands are assumed to be 33% more than the sanitary sewer flows, so the required water demand for the industrial park would be approximately 11,000 GPD (2.0 AC-FT per day).

3.3.5.1 Water

The peak daily water supply to the Industrial Park is approximately 11,000 GPD with a peak flow rate of 100 GPM required for the site. Based upon the latest Uniform Fire Code, if all hazardous materials or combustible storage building areas are supplied with sprinkler systems and other fire code requirements, and all other normal (Type 1) building areas are less than 22,700-SF in size, then fire flows may be sized as a rate of 1,500 GPM, with a required duration of two (2) hours. The total flow required for the site is approximately 1,500 GPM + 100 GPM or 1,600 GPM.

On-site storage is required to fight the fire and supply the fire pump. The sizing of fire storage at this stage is not easily determined, as no site tenants, nor have the materials of storage been selected. Also, the presence of any assembly processes within the site have not been ruled out. Therefore, at this stage, on site storage shall be increased by a factor of 1.50. The storage calculations are thus: 1,600 GPM x 2 x 60 x 1.5 = 290,000 gallons of storage required.

A new water supply is required on-site for this industrial park at a minimum of 11,000 GPD, so a new well would need to produce a minimum of 16 GPM. Under this high-level evaluation of the wells in the area it can be anticipated that water in an aquifer below the upper water table is at approximately 250 feet below grade at a capacity of 120 GPM. It is anticipated the new well would be drilled at a depth of 300 feet with a well casing diameter of 8-5/8". If the newly drilled well can produce 120 GPM the industrial site would have a water supply capacity of 86,000 GPD (15.5 AC-FT per day).

To summarize, infrastructure for the water supply system will include a new well at 300-foot depth, a dedicated fire pump at 2000 GPM, a booster system for peak daily supply with two- or three-pump matrix at 100 GPM with bladder-type pressure tanks provided to hold pressures in the system, and a 290,000 gallon on-site above-ground storage tank. This is in addition to the on-site distribution system to all the industrial tracts within the site, which will be located along roadway rights-of-way to minimize the number of easements needed and provide access for future water system maintenance.

3.3.5.2 Wastewater

The industrial park sewer system is designed for 8,000 GPD which is initially planned to treat on-site with a centralized advanced septic tank and drainfield system. The system will be designed with two (2) systems, treating 4,000 GPD each. Each treatment system would include a 10,000-gallon advanced treatment septic tank with 1,500-LF of chamber type drainfield. This will allow for the system construction to be phased as necessary as the development of the Industrial Park progress.

The natural slope is south-west to the north-east. Sanitary sewer alignments were placed along the roadway rights-of-way to minimize the number of easements needed and provide access for future sewer maintenance. The sanitary sewer system was routed to minimize rail crossings. The sewer collection system conveys the sewer flow to the far north-east of the industrial park to the centralized on-site treatment system.

3.3.6 Dry Utilities

No major obstacles to expanding electric power, natural gas, and telecommunications are foreseen. The project team has confirmed with the relevant utility providers that the warehouse and light-to-medium manufacturing operations envisioned for the site can be served.

Appendix I includes information on expansion of dry utilities to Industrial Park site and the Phase I Spec Building.

3.4 REVISED SITE LAYOUT ALTERNATIVE

The scope of work for this master plan was to develop the site plan proposed in the 2018 *Prewitt Industrial Cluster: Master Site Plan* to preliminary design. In the development of the rail design two major items developed that made us question the feasibility of the 2018 site plan:

1. The Escalante Rail Spur on the west end of the project was in a rock cut area and the proposed connecting spur track to the site would need to remove approximately 143,000 cubic yards (CY) of rock to ascend to proposed site mesa. In addition to extend the rail yard to provide 4,100 feet of track for a transload type facility, embankment in the 35' range was required on the east end (approximately 780,000 CY). These earthwork items added about $15M to the cost of the rail.
2. The Continental Divide Electric Cooperative has a transmission line that traverses the site that spans the proposed rail yard. This creates a safety issue with the transloading of materials/ equipment with the use of cranes.

Based on the above information, the project team re-evaluated the site plan to include the possible re-purposing of Escalante Generating Station rail infrastructure to provide rail service to the area (both the proposed industrial park and existing development to the north) in a holistic manner.

It is important to note that this alternative would require further study and would require cooperation with Tri-State Generation & Transmission Association and McKinley Paper Company, which own Power Plant Road and the property to the north of the Industrial Park site.

Figures 11 and 12 show the Revised Site Layout Alternative. Though the primary change from the initial layout under this alternative concerns the rail network, some changes would also occur with parcel layout and road network. Under the revised scenario, the central railyard is replaced with a single line serving the northernmost Parcels 1 and 2. Parcel 4, which comprised the railyard in the Initial Proposed Plat Alternative, and Industry Way No. 2 are eliminated and absorbed by new Parcels 4, 5, 6, and 7. Industrial Way becomes the only east-west road within the industrial park. No direct access from County Road 19 to the industrial park is proposed. A new Utility Parcel is proposed along Industry Way, towards the west-central end of the Industrial Park site.

Beyond the changed to the rail and road networks in the revised alternative, the infrastructure requirements discussed under Section 3.3 above would not be significantly different under this alternative The project team estimates that the total cost estimate for the revised alternative would be $15 million less than the initial alternative, due to savings from the new rail layout. The reduced road network under the revised scenario would also likely lead to lower construction costs.

3.4.1 Revised Rail Scenarios

The alternative rail alignment was developed to provide rail access to the proposed Prewitt Industrial Park that could be constructed within the estimates provided in the 2018 Foote *Master Site Plan* and in the Initial Proposed Plat Alternative above. This alternative alignment shown in Figure 9 avoids the extensive excavations/fills required to build the rail yard in the. The alternative rail alignment has two scenarios: Since the users of the proposed Industrial Park are not known at this time it is best to leave all options open in particular with the changes occurring in the Escalante Generating Station. These scenarios should both achieve approximately $15 million in savings in the cost of rail infrastructure, compared with the Initial Proposed Plat Alternative above.

3.4.1.1 Rail Scenario 1

The rail access to Parcels 1 and 2 will be used warehouse/distribution facilities and the rail cargo will be manifest type. This scenario will require an at-grade rail crossing at McKinley Paper Road.

3.4.1.2 Rail Scenario 2

The rail access to the industrial park will be to provide a unit train that a major developer would use for singular cargo that will place a unit train on one track and pick on the other track. This scenario would require the re-aligning of McKinley Paper Road to Escalante Road to fit the unit train. Escalante Road will not have a rail crossing in that the track ends just west of the roadway.

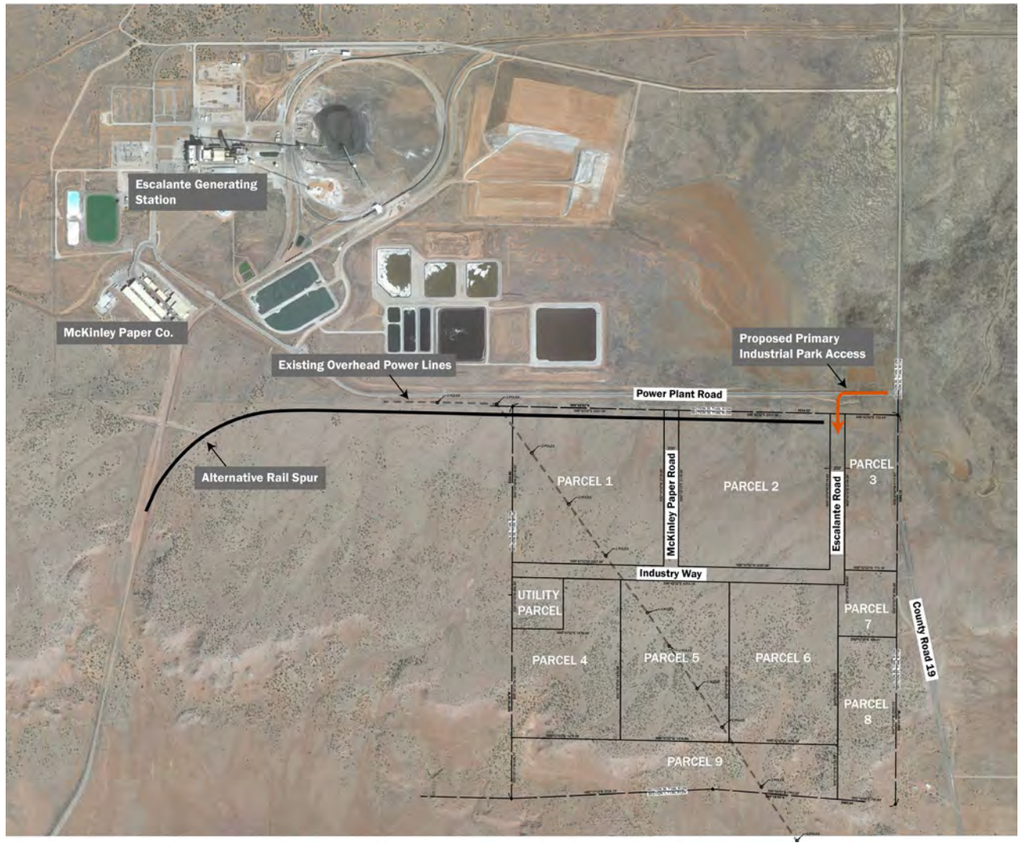

Figure 11: Revised Industrial Park Layout Alternative and Vicinity

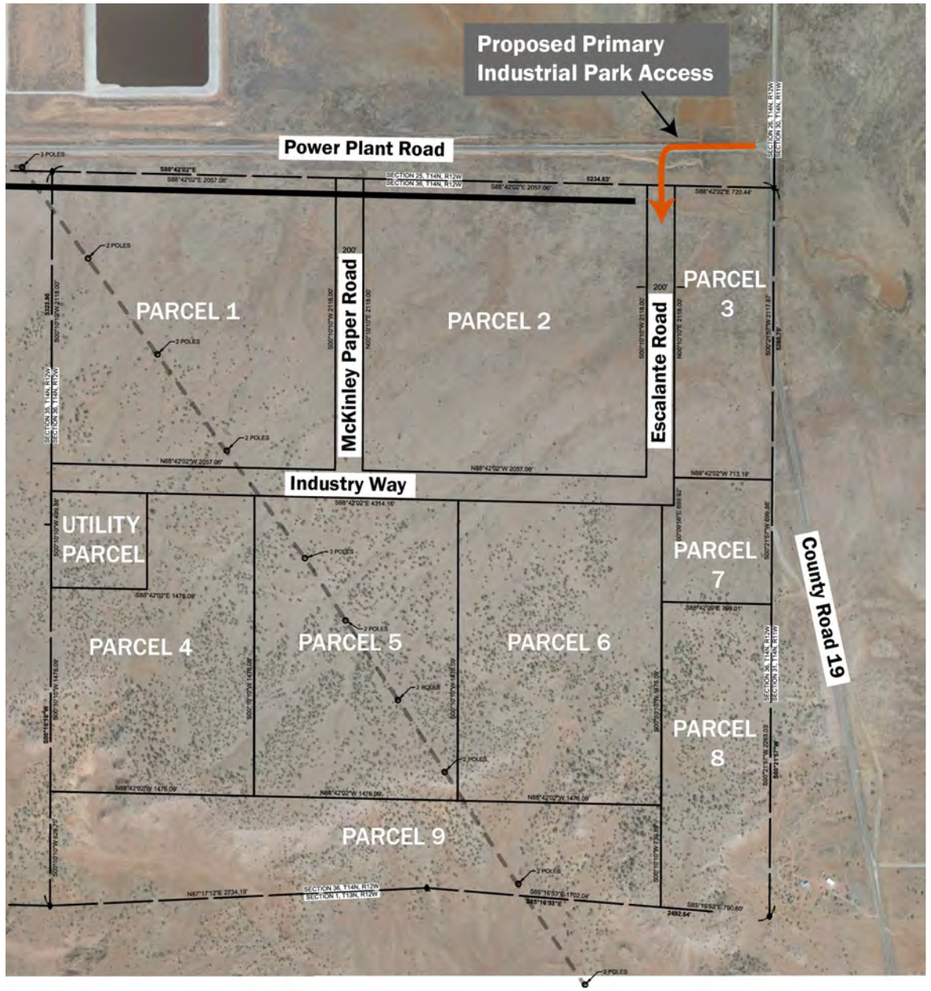

Figure 12: Revised Industrial Park Layout Alternative

3.5 POTENTIAL CONSTRUCTION PROBLEMS

Construction cost are escalated because of the approximately 22 cultural sites identified by the New Mexico Cultural Resource Information System (NMCRIS). Updating the archaeological sites, monitoring of adjacent construction activities and reporting is both time consuming and costly. Also, the site topography is relatively steep on the southern portion of the section 36. Deep soil cuts are required to maintain a 1% maximum grade for the proposed railroad spur. Rail construction will require close coordination with the BNSF to meet their standards.

3.6 LAND REQUIREMENTS

The plat shown in section 3.1.2 of this document shows the proposed parcels to be subdivided within section 36. It is noted that the escarpment on the south side of section 36 removes about 120 acres of useable land. Furthermore, the floodplain in the northeast corner of the section removes about six (6) acres of useable land.

The proposed rail spur track crossing section 35 to the west will require a 200-foot rail easement for approximately one mile. It is noted that the rail spur will be fenced and the usage of the north part of the section will be limited due to the rail obstruction of livestock movement. This impact would be reduced under the rail layout proposed in the Revised Site Layout Alternative (see Section 3.4).

Under the Initial Proposed Plat Alternative, the primary vehicular access from CR 19 wouid require a permanent road easement or dedicated right-of-way across private land, 200 feet in width.

The north access, via Power Plant Road, will require an easement of approximately 300 feet in width to connect to section 36 and include the existing road.

3.7 SUSTAINABILITY CONSIDERATIONS

Water source development and harvesting, including rainwater, treatment, and recycling infrastructure are a few of the strategies that may be employed in developing the overall industrial park one tenant at a time. Green infrastructure captures the rain where it falls. It mimics natural hydrological processes and uses natural elements such as soil and plants to turn rainfall into a resource instead of a waste. It also increases the quality and quantity of local water supplies and provides a myriad of environmental, economic, and health benefits. Other recommended strategies for Industrial Park development include:

- Downspout Disconnection
- Rainwater Harvesting
- Rain Gardens
- Planter Boxes
- Bioswales
- Permeable Pavements
- Green Streets and Alleys
- Green Parking
- Green Roofs
- Urban Tree Canopy
- Land Conservation

In the Phase I Spec Building design, the post-development peak discharge equals that of pre-development to ensure that run-off of the site is not increased. Depressed areas are graded to attenuate flow, reduce soil erosion, and encourage ground infiltration. The roof spouts are disconnected and reroutes rooftop drainage pipes from draining rainwater into the storm sewer to draining it into rain permeable and depressed landscaped areas. The depressed landscaped area will store stormwater and allow it to infiltrate into the soil.

A bioswale is graded along Industry Way No. 1, safely conveying stormwater north to south. Bioswales may be vegetated, mulched, or xeriscaped channels that provide treatment and retention as they move stormwater from one place to another. In the Phase I Spec Building design, the xeriscaped swale slows, infiltrates, and

filters stormwater flows. Parking lot hydrocarbons are removed via the soil media protecting the ground water source. As linear features, they are particularly well suited to being placed along streets and parking lots.

4 Phase I Spec Building

This project identified the recommended site on which an initial spec building would be constructed and provides 90% design review drawings. This spec building is considered Phase I of the Industrial Park development. See Appendix B for 90% design review drawings for the spec building.

4.1 SITE ALTERNATIVES CONSIDERED

Several proposed lots within the Industrial Park site were evaluated possible sites for development of the Phase I Spec Building and associated infrastructure. This evaluation was conducted for the Initial Proposed Plat Layout – a evaluation may be required if the Revised Site Layout Alternative is implemented The scenarios below refer to the parcels proposed in the Initial Proposed Plat Layout; however, the spec building design can easily be adapted to most locations within the Industrial Park site. See Figure 13 for location of the sites within the Industrial Park site.

The lots evaluated include:

- Site A – Parcel 1
- Site B – Parcel 8
- Site C – Parcel 9

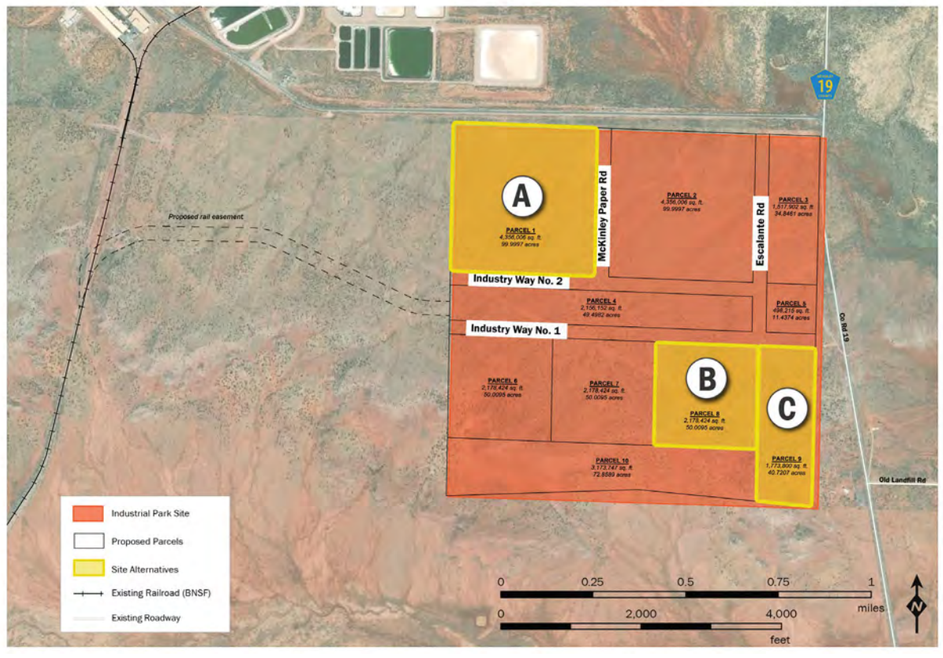

Figure 13: Site Alternatives Evaluated for Phase I Spec Building

4.1.1 Site A

Site A is a 100-acre tract that is fully usable if the drainage in the southeast corner is placed in a ditch or pipe. Site A has access to Power Plant Road via CR 19 and is adjacent to rail service. The site drains from south to north with minimal grading required. Access from McKinley Paper Road will require a 49-inch culvert to cross the ditch on the west side of the roadway. A 100,000-SF building fits on the site easily but may restrict uses for an anchor tenant wanting a larger tract. This tenant may have a different building location, type and size requirement. Site A has access to water but is a longer distance from the tank/well than other site locations evaluated. The site has adequate size for a septic sanitary sewer system. Power will need to be extended from CR19/Power Plant Road.

Site A's parcel contains two (2) known prehistoric archaeological sites, one in the northwestern quadrant and one in the southeastern quadrant. As the parcel is larger, it may have additional unknown cultural sites and larger overall impact to habitat, soils, and threatened and endangered species. However, because the parcel is larger, it may be easier to avoid impacting cultural sites. In addition, juniper cover is sparser in this parcel than the other parcels and there may be less tree removal required.

4.1.2 Site B

Site B is a 50-acre tract with only 34 acres of usable space; the escarpment to the south constraints the earthwork development. The site is accessed from Industrial Way No. 1 directly to CR 19 and is adjacent to the railyard with direct access. The site drains from south to north with minimal grading required. Access from Industrial Way No. 1 will require a 48-foot culvert to cross the ditch on the south side of the roadway. A 100,000-SF building fits on the sites easily with room for parking/loading docks/laydown areas. The site has access to water with minimal distance to the proposed tank/well. The site has adequate size for a septic sanitary sewer system. Power will need to be extended from CR 19 via Industry Way No. 1.

Site B's parcel has three known archaeological sites above the escarpment, all of which are located along the western edge of the parcel. Juniper cover is denser than in Parcel 1 and similar to Parcel 3; however, the parcel is less than half the size of Parcel 1 and would have less overall impact to soils and habitat. In addition, there is already previous disturbance from the waterline and transmission line corridors in this parcel has the escarpment and may have unknown cultural resources on the site.

4.1.3 Site C

Site C is a 40-acre tract with only 29 acres useable due to the escarpment to the south. The site has direct access and visibility to CR 19; however, Site C is not adjacent to the railyard and access will need to be transported via Industrial Way No. 1. The site drains from south to north with minimal grading required. Access from Industrial Way No. 1 will require a 42-foot culvert to cross the ditch on the south side of the roadway. Only a 75,000-SF building fits on the site due to the site width and topography. The site may appeal to a service industry requiring direct access and visibility from CR 19. The site has access to water but is a short distance from the proposed tank/well. Site C is an adequate size for a septic sanitary sewer system. Power will need to be extended from CR 19. Although this site is smaller, situated in a disturbed area, and appears to have less opportunity for cultural resources and threatened and endangered species impact; it has three known and documented archaeological sites above the escarpment, which may be difficult to avoid. Juniper cover is similar to Parcel 2, but there is less previous disturbance to the area.

Table 3 shows how each site scored based on key criteria, with a higher score indicating that the site has more favorable conditions for development. According to Table 3, the building Site A, on the 100-acre tract, would be the most advantageous site to locate the spec building. Particularly if McKinley Paper Company requires a warehouse building, Site A would be favorable to them. Also, if public health or a service industry would like a site on CR 19 that did not require rail service, then Site C may work best. Finally, a large anchor tenant such as a solar plant or a distribution center may desire a large tract such as Site A. If the Revised Site Layout Alternative is implemented, Site A may become the most appropriate site due to its proximity to the alternative rail spur alignment.

Table 3: Site Alternative Matrix

Evaluation Criteria	Site A	Site B	Site C
Usable Land	3	1	1
Road Access	2	2	3
Rail Access	3	2	1
Drainage / Grading	3	1	2
Building	3	3	1
Utilities – power, etc	3	3	3
Environmental	3	3	2
TOTAL	**20**	**15**	**12**

4.2 SPEC BUILDING DESIGN CRITERIA

A steering committee was held on Monday, June 1st, 2020, to review a high-level programming criteria list for use in the design of the Phase I Spec Building. The information listed below was derived from this meeting and makes up the design criteria for the Phase I Spec Building.

4.2.1 Building Dimensions

Approximate Building Size: 500'-0" x 240'-0" (120,000-SF)

Approximate Building Height: 25'-0" to 40'-0" The height varies in different locations depending on the height of the roof structure in any given area. It varies based on the roof slope that allows moisture to sheet flow off at any given location. A height 10'-0" to 12'-0" in office and support area will be assumed. The future tenant will determine the final office height and location of office space at a later time. The Spec Building will be designed to allow as much flexibility as possible.

4.2.2 Main Building Elements:

Criteria for main building elements include the following:

- Main Warehouse Area: 100,000-SF
- General Use / Office Area: 20,000-SF (assumed). A future tenant will determine the amount of office space required for their particular need.

4.2.2.1 Foundation:

- Continuous Spread Footing: Located at exterior walls. *(Refer to Drawings for anticipated size)*
- Spread Footings: Located at column locations. *(Refer to Drawings for anticipated size)*
- No perimeter foundation insulation requirement.

4.2.2.2 Exterior Walls:

- The exterior walls are anticipated to be 18'-0" wide x 40'-0" high load bearing concrete tilt-up panels (9" thick to accommodate the 40'-0" height requirement which creates panel lifting limitations) with finishes and patterns as shown on drawings.
- The tilt up panel will include an interior fur-out with 1.5" rigid on the interior, 3-5/8" metal studs with R-13 finished with 5/8" impact gypsum board, taped, textured and painted continuous from floor to deck at all perimeter walls.

The project team also considered alternative types of construction for the spec building design (listed below). For planning purposes, the decision use tilt-up construction as a basis of design was based on the following benefits:

- **Construction Time:** Tilt-up construction has a much faster completion time as concrete panels can be constructed on site and cure in a few days, and tilting them up and into place is much faster and less labor intensive.
- **Energy Efficiency:** Cost of Labor and Material: By the nature of concrete, it has sound qualities and insulating properties. These properties can also be enhanced with additional insulation for maximum energy savings and efficiencies.
- **Size Efficiencies:** As the size of the structure increases, the cost per square footage decreases and we can begin to see the savings associated with the fabricated on-site panels.

Two alternative construction types were considered – cost estimates were derived RS Means *Construction Costs Index*:

1. A factory building with metal panels, rigid steel structure at 60,000 SF is about $131.40 per SF. This assumes toilet facilities, sprinklers, HVAC Elec (600 Amp).
2. A warehouse building, pre-engineered metal building, 60,000 SF is about $97.50 per SF. This assumes toilet facilities, sprinklers, HVAC Elec (200 Amp).

The average above is $114.45 per SF. A 100,000-SF building would be slightly less expensive than the above. So, the $125.00 would be a good number for Gallup, which will be higher than the national average in regard to location. No site work is included.

4.2.2.3 Roof:

The roof would have a ridge running east west to create a roof slope running north and south. Roof drains are to be used to collect water and drain back to the east at a minimum of 1/4" per foot positive slope west. The anticipated roof assembly is as follows:

- 80 Mil white Thermoplastic Membrane roofing (TPO) – Firestone Ultraply TPO Platinum or Equal with 20-year No Dollar Limit (NDL) manufacturer's warranty, fully adhered.
- ½" dense deck Prime or equal cover board.
- 1-1/2" structural metal deck.
- R-38 Vinyl Faced Batt Insulation (Flame Spread to meet code requirements) Provide strapping between purlins at spacing per manufacturer's recommendations.

4.2.2.4 Structure:

Approximate Bay Sizes and Structural Spacing:

- The building layout will include a total of eight (8) column free spaces which are approximately 62'-6" x 200'-0"(12,500SF)
- It can be partitioned in a number of different combinations based on the needs of any particular tenant. For example, the structure can be partitioned in two (2) sections at 250'-0" x 240'-0" (60,000SF) each or four (4) sections at 125'-0" x 240'-0" (30,000SF) each.
- Roof Joists: 32LH06
- Roof Joist Girders: 48" Deep
- Columns :HSS 10x10
- Wall Panels: 9" Thick

NOTE: Refer to drawings for anticipated structural layout and approximate sizes.

4.2.2.5 Floor Slab / Finish:

- Construction: Laser – Leveled, cast-in-place concrete floor slab isolated from exterior walls via ½" expansion joint. It is anticipated that the floor slab will be 8" reinforced cast-in-place concrete. The exterior walls will bear on a continuous spread footing designed to meet code required frost depth, structural loads, and soil bearing capacity.
- Strength: 4,000 PSI minimum at 28 Days.
- Vapor Barrier: Assume 6 mil vapor barrier continuous under slab.
- Finish: Sealed concrete with steel trowel finish.

4.2.2.6 Ceiling:

- Open structure exposed within warehouse and manufacturing areas.

4.2.2.7 Doors:

- Pedestrian Doors: Hollow metal solid core, painted.
- Overhead Coiling Doors: Metal, painted.

4.2.2.8 Signage:

Provide text in 24-inch high cast aluminum letters on the exterior of the building.

4.2.3 Code Analysis

A. Project Address:Prewitt, New Mexico
B. Applicable Regulatory Information:
   a. 2017 New Mexico Electrical Code
   b. 2015 New Mexico Building Code
   c. 2015 New Mexico Mechanical Code
   d. 2015 New Mexico Plumbing Code
   e. 2015 New Mexico Fire Code (as Amended)
   f. 2009 International Energy Conservation Code
   g. ICC/ANSI A117.1-2009
C. Occupancy Group: Group B, F-1, F-2, S-1, and/or S-2 (Section 306.3, IBC)
D. Construction Type: II-B (Table 601, IBC)
E. Automatic Sprinkler System: Provided throughout in accordance with section 903.3, IBC.
F. Fire Suppression System Type: Wet Pipe System.
G. Building Area:
   a. Allowable Area: Unlimited (Per Table 507.4, IBC)
   b. Proposed Area: 117,798 GSF
   (Gross square feet is as measured to exterior face of walls)
H. Allowable Height:
   a. Allowable Height:55 Feet (Per Table 504.3, IBC)
   b. Proposed Height: 40 Feet
I. Allowable Stories:
   a. Allowable Stories: 3 Stories (Per Table 504.4, IBC)
   b. Proposed Stories: 1 Story
J. Fire-Resistance Rating Requirements for Exterior Walls: Not Required
   (Fire Separation Distance = Greater than or equal to 30' Per Table 602, IBC)
K. Corridor Resistance Rating: Not Required
   (Corridors Not Used. Table 1018.1, IBC)
L. Interior Wall and Ceiling Finish Requirements by Occupancy (Table 803.9):
   a. Occupancy F-2:
      i. Exit Enclosures and Exit Passageways Flame Spread Index: B
      ii. Corridors Flame Spread Index: C
      iii. Rooms and Enclosed Spaces Flame Spread Index: C
M. Minimum Roof Covering Classification:
   a. Class B (Table1505.1, IBC)
N. Occupancy Separation:
   a. None Required (Per Section 508.3.2)
O. Maximum Travel Distance: (Section 1017.2, IBC)
   a. Maximum Allowable Travel Distance: 400 FT
   b. Proposed Maximum Travel Distance: 120 FT
P. Maximum Occupant Load for Spaces with One Exit or Exit Access Doorway (Table 1015.1): 1:500

4.2.4 Parking Space Requirements

McKinley County does not have parking standards for development, so standards from the City of Albuquerque were used. The parking standards are based on "Part 3: General Regulations Section 14-16-3-1 Off-street Parking Regulations" from the City of Albuquerque's (COA) *Comprehensive City Zoning Code*, which preceded the City's current *Integrated Development Ordinance*. These earlier standards provide more generic standards for industrial development – these standards were considered more applicable to the Industrial Park site, as the specific land use category of each future development on the site is not known. See Table 4 for parking requirements for the Phase I Spec Building.

Table 4: Parking Requirements for Phase I Spec Building

Parking or Land Use Category	Parking Standard	Required Number of Spaces
Main Warehouse Area (Manufacturing and Wholesaling per COA Zoning) 100,000 SF	COA Zoning Requirements: Manufacturing and wholesaling: one space for each three (3) employees on the largest shift or one space per 1,000-SF of net leasable area, whichever requirement is greater.	100,000-SF / 1000 = 100 Required Parking Spaces
General Use / Office Area 20,000 SF (Assumed)*	COA Zoning Requirements: Offices: one space per 200-SF of net leasable area on the ground floor and one space per 300-SF of net leasable area in the basement areas and on all floors above the ground floor.	20,000-SF / 200 = 100 Required Parking Spaces
Motorcycle Spaces	COA Zoning Requirements: Offices: Based on a required parking count of 200, a total of five (5) motorcycle spaces would be required. See graphic listed below from the City of Albuquerque Comprehensive City Zoning Code.	Five (5) spaces

4.3 POTENTIAL CONSTRUCTION PROBLEMS

The truss and bar joist system proposed in this structure will have long lead times for fabrication. The proximity to a local concrete plant will determine if the use of a temporary concrete batch plant will be needed.

4.4 3-D RENDERINGS

Figures 14 and 15 are renderings of the Phase I Spec Building Site. More renderings in larger format are available in Appendix C.

Figure 14: Rendering (Ground-Level View) of Phase I Spec Building

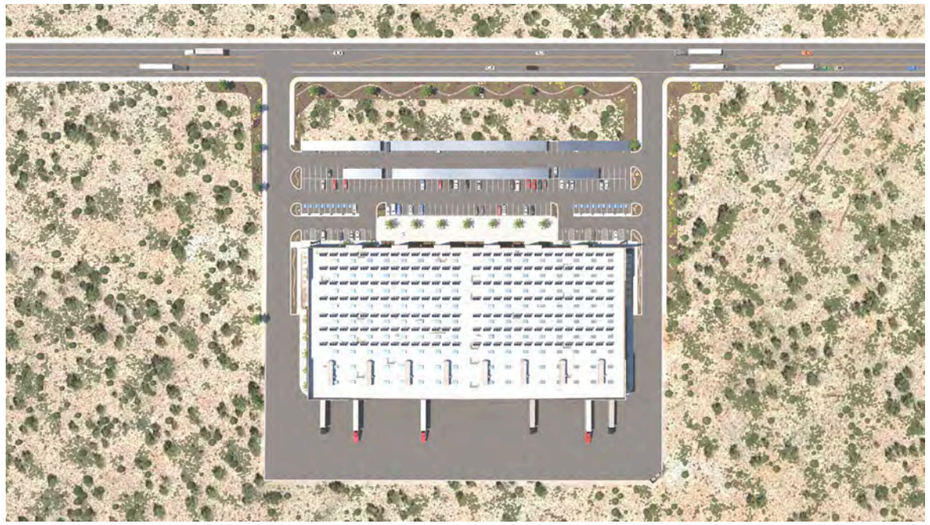

Figure 15: Rendering (Plan View) of Phase I Spec Building

4.5 SUSTAINABILITY CONSIDERATIONS

4.5.1 HVAC

The heating, ventilation and air conditioning (“HVAC”) systems will be designed to provide flexibility for multiple tenants and to accommodate different tenant user space sizes. The proposed approach is to utilize high-efficiency rooftop units (“RTUs”) and a combination of make-up air units (“MAUs”), exhaust and unit heaters for the warehouse areas. This will provide flexibility for control and energy usage considerations when heating or cooling these large spaces. All supply and return ductwork will be provided with insulation in accordance with the International Energy Conservation Code.

4.5.2 Lighting:

LED lighting will be designed throughout the facility with high-output, high-bay LED fixtures for the warehouse areas. Lighting controls will be provided according to tenant needs. Skylights will also be included in the warehouse area to supplement the LED lighting. This will provide flexibility for energy usage considerations when artificial lighting is not needed.

4.5.3 Plumbing

Water heating systems for domestic hot water will be high-efficiency, condensing-type, gas-fired water heaters to ensure the lowest energy usage for the domestic hot water systems. All hot water piping will be provided with insulation in accordance with the International Energy Conservation Code.

4.5.4 Rain Barrels

The design has depicted barrels that will be used for Rainwater Harvesting to collect water that can be filtered and stored for later use to irrigate the landscape or flush toilets.

4.5.5 Courtyard with Eating Area

Two outdoor sitting areas are to be located on each side of the structure to promote the interaction of its users and make connections between people, places, landscape and architecture.

Green Rooftop: The future “Retail” area depicted in the visualizations included in the design package, include the use of a Green Roof. Continuing on with the sustainable design theme at this site, the following benefits come from utilizing a sustainable roof.

- Improves Stormwater Management
- Provides insulation to the building
- Improves Air Quality
- Reduces Urban Heat Island Effect

4.5.6 Solar Panels

A photovoltaic array will be designed to be located on the roof complete with lightning arrestors, DC to AC inverters and tied into the power utility. A life cycle cost analysis will be conducted in order to provide the maximum return of investment, sufficient sizing and sustainable design.

4.5.6.1 Solar Panels for Shade Structure

A photovoltaic system will also be designed to be located on the new parking shade structures. These will also be designed complete with DC to AC inverters and tied either into the power utility or utilized for site lighting.

4.5.7 Electric Charging Stations

Pedestal type electric vehicle charging stations will be placed strategically in the new parking area. Charging stations will be IP56 rated for outdoor installation and provided with charging presets for energy consumption savings. Charging stations will be provided with access control with RFID readers and integral upstream and personal line protection.

5 Project Cost and Schedule

5.1 TOTAL PROJECT COST ESTIMATE (ENGINEER'S OPINION OF PROBABLE COST)

Prewitt Industrial Park offers a transformational economic opportunity for the northwestern region of the state and the local area around the unincorporated community of Prewitt. To assist the partnership (i.e. Northwest New Mexico Council of Governments, Greater Gallup Economic Development Corporation, McKinley County, and other key stakeholders), proper capital investment planning is needed to best understand short-term and long-term financial investments, as well as maintenance and operational costs. Appendix D provides a summary of the Phase I and Full Buildout project cost. Raw supporting data is also provided, following the summary cost.

5.1.1 Planning Budget

Once the initial capital investment is made, the region will leverage a new spec building, land, access to multi-modal transportation logistics options, and its natural resources as incentives for industry attraction. Long-term maintenance of high-quality infrastructure is essential to the economic vitality and quality of life for the unincorporated community of Prewitt and its neighboring communities. A good capital planning and budgeting process will ensure that McKinley County makes smart investments in infrastructure and, thereby, investments in the future. A capital planning and budgeting process has three basic steps, summarized below and in Figure 15:

- Define scope of the Industrial Park Capital Improvement Plan (IPCIP): This planning document outlines the original purpose and need and defines a "capital project", and how far into the future it will plan.
- Determine participants and select projects: The NWNMCOG, fiscal agent, is leading the process of planning procurement. The organization is providing guidance as to which stakeholders are crucial to the creation of the IPCIP. NWNMCOG and stakeholders select projects to include in the IPCIP.
- Balance the IPCIP and connect to the County budget: The capital investment choices must be financially sustainable, both in terms of the initial capital outlay and long-term operating and maintenance. Replacement costs and ongoing debt service should be part of a long-term financial plan.
- Manage the project: Capital projects must be carefully managed in order to come in on time, on budget, and within specifications.

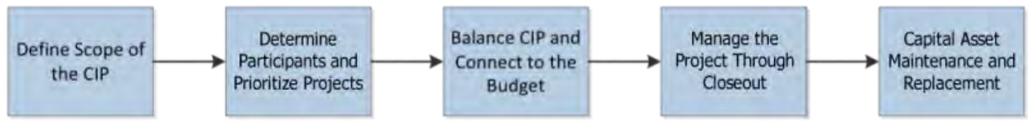

Figure 16: Capital Planning and Budgeting Process Key Steps

5.1.2 Construction Estimate

Cost estimates are provided for the Initial Proposed Plat Alternative and the Phase I Spec Building. The Revised Site Layout Alternative will require further study before a detailed cost estimate can be prepared. Construction estimates were developed based on several assumptions and knowledge of the area, geologic setting, climatic conditions, and market cost history. These factors drove construction cost development and were compared to historical bid data to establish a base Phase I Spec Building and Full Buildout estimates. Each discipline (i.e. water, wastewater, drainage, roadway, rail, etc.) required a detailed estimate. Detailed estimates were converted into linear feet of road to simplify the Industrial Park development construction cost estimates. Cost estimates are summarized in Table 5 and described in greater detail in Appendix D.

Table 5: Cost Estimates, Phase I and Full Buildout

Phase	Estimated Cost	
Phase I Spec Building Development Cost (Building and Infrastructure)	$	31,303,112.43
Full-build Cost (excl. Phase I Spec Building and Infrastructure)	$	35,787,732.83
Full On-Site Build out Development Cost with Phase 1 Spec Building	**$**	**67,090,845.26**

5.1.3 Summary of Project Budget

Table 5 provides a summary of the base year (2020) Phase I Spec Building and full buildout construction estimates. A Consumer Price Index (CPI) of 1.70 is recommended for future out-year planning. The CPI is based on the past 10-year average for the south region. CPI is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services (see https://data.bls.gov/pdq/SurveyOutputServlet).

5.2 PROJECT SCHEDULE

The timeline for full implementation of the proposed industrial park will depend on market forces and developer initiative and cannot be fully projected. It is anticipated that the Phase I Spec Building could be implemented relatively quickly by the standards of industrial development. The 90% construction documents provided in Appendix B allow a developer to quickly and efficiently developed the design into 100% signed and sealed drawings, submit for building permit, and proceed with a six-month tilt-up construction schedule. This process could be accomplished in as little as eight (8) months. Figure 17 illustrates the major work breakdown structure items and associated durations.

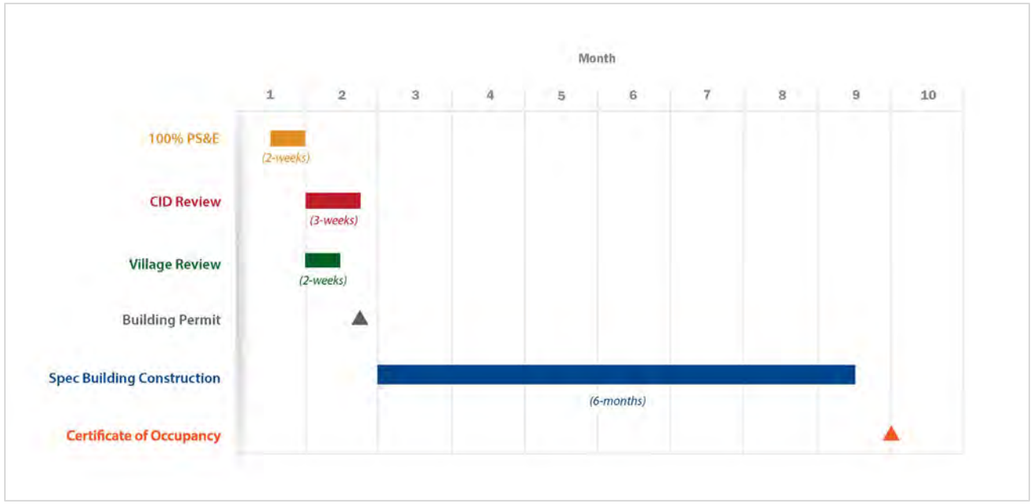

Figure 17: Schedule for Review and Construction of Spec Building

5.2.1 Permitting Requirements

Building permitting for industrial park development in McKinley County is under the jurisdiction of the New Mexico Construction Industries Division (CID). The Division is responsible for:

- Ensuring that construction is performed in a safe, competent, and professional manner
- Licensing contractors and enforcing licensing laws
- Requiring licensure for any person practicing or offering to practice construction contracting
- Enforcing the laws, regulations, and standards governing construction contracting in a fair and uniform manner

A Subdivision Improvement Agreement (SIA) will be required between the developer and McKinley County. A draft SIA is included in Appendix F. A developer is encouraged to contact the McKinley County manager and schedule a pre-design meeting with their on-call engineer to review (1) permitting application, (2) valuation and fees, and (3) plan submittal for building permit. Although CID is the vertical building permitting jurisdiction, the County has jurisdiction with respect to the internal Industrial Park transportation, drainage, water and wastewater services. The County is committed to facilitate the design and building permitting process as needed to ensure that the information summarized below, is clear, efficient, and business friendly. Building permit applications and a CID checklist for developers can be found in Appendix F as well as a sample SIA Agreement for developer review.

5.2.2 Permit Application Data

To obtain a permit, the applicant shall fill out an Application for State Building Permit supplied by the Construction Industries Division office. (The application is available on their website.) Applicant must supply description of work, building address, construction material, total square footage, specific use of building, project owner's name and address; contractor's business name, address, and license number; and architect's name, address, and license number. The licensed contractor requesting the permit must sign the application.

5.2.3 Valuation and Fees

Valuation of a project is based CID Rules New Mexico Administrative Code 14.5.5.10. A project does need the signed contract between the project owner and contractor. The fee (which covers plan review, the permit notice, and required inspections) is based on the valuation amount. The CID office will calculate the valuation and fee for you.

5.2.4 Plan Submittal

Two (2) complete sets of plans and specifications must be submitted to Construction Industries Division for permit and must be sufficiently clear to show the project in its entirety. Figure 18 shows the minimum required drawings for review by Construction Industries Division for new commercial construction, additions, and remodels.

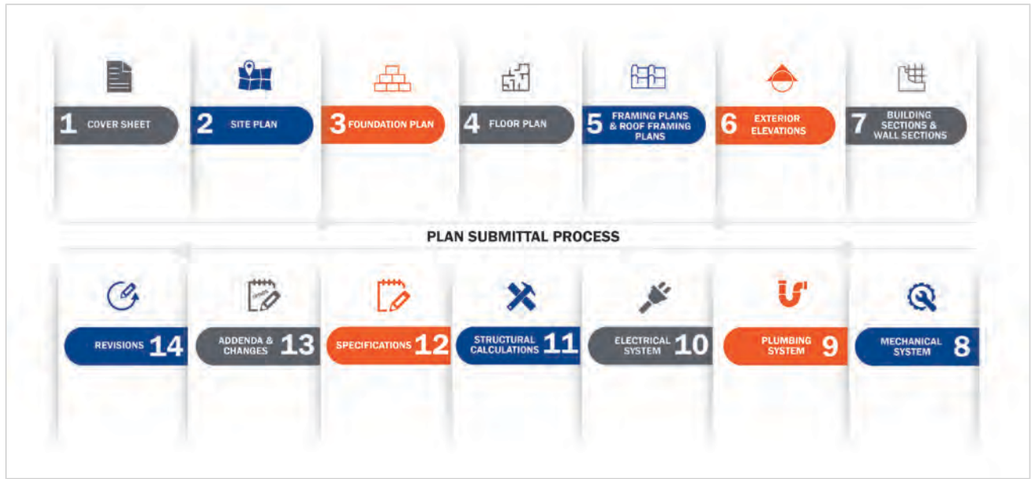

Figure 18: New Mexico Construction Industries Division Submittal and Review Process

5.2.5 Anticipated Environmental Permitting Needs

In addition to building permits, permitting may be required to ensure a development does not substantially impact environmental resources. Full environmental evaluations of the site have not been completed – a review of possible environmental resources is found in Section 2.2.7 of this document. The required permits will depend on the type of resource and the development that is being constructed. BNSF Railway requires standard environmental reviews of locations where Site Certification is being sought.

5.3 ANTICIPATED PERMIT NEEDS

The above information is summarized here in terms of anticipated permit needs for the Prewitt Industrial Park Site development. Table 6 summarizes anticipated permitting needs based on currently available information and may need to be updated or revised as new information is obtained regarding the proposed project.

Table 6: Environmental Permitting Considerations

Resource/Issue	Approval/Permit Needed	Schedule Considerations
Wetlands and Section 404 Permit A biological survey may be required to identify potential jurisdictional waters of the US in the project area. Wetlands are not anticipated. If jurisdictional water of the US are present, specific amounts and locations of impacts need to be determined in consultation with the USACE.	A Clean Water Act Section 404 permit would be needed for impacts over certain thresholds to jurisdictional waters of the US.	A jurisdictional waters and wetlands assessment can typically be completed at the same time as a general biological survey and may take up to three (3) months, including reporting and agency coordination.
Federal/State Protected Species Biological review of potential species impacts would be required if future developments obtain federal or state permitting or funding. This may include a biological field survey.	The lead agency would assess whether the proposed developed may affect protected species. Although not likely in this case, consultation with USFWS would be required if protected species will be affected and applicable permits would need to be obtained.	Assessment of protected species can take one (1) to three (3) months to complete, depending if reporting to, and coordination with USFWS is required.
Historic Resources A cultural resources investigation would be required to comply with New Mexico state laws and regulations for the management of cultural resources. If any federal agencies provide funding or permitting for future development of the industrial site, Section 106 of the National Historic Preservation Act would also apply. There are at least 22 previously documented archaeological sites in the project area that would require updating.	The lead agency will determine the project's potential to impact significant cultural resources. This would include coordination and consultation with the New Mexico State Land Office, the New Mexico SHPO and other applicable agencies and Native American tribes prior to the lead agency's "determination of effect."	A Section 106 cultural resources investigation of the site and agency review would take two (2) to three (3) months to complete, assuming management strategies result in a "no adverse effect to historic properties" determination. An "adverse effect" determination would require additional mitigation, such as excavation, and could take up to a year.
Water Quality Construction and ongoing operations always have potential to affect nearby receiving waters, largely due to erosion and stormwater runoffs (as well as potential spills).	The NMED Surface Water Quality Bureau and Ground Water Quality Bureau would need to be consulted for appropriate water quality certifications and/or requirements prior to construction. A Construction Stormwater General permit is required if the project will discharge to water of the U.S. and disturb greater than one acre.	A Construction Stormwater General permit requires the filing of a NOI at least 14 days prior to start of permitted activity. Section 401 certification is required for issuance of a Section 404 permit. The USACE has determined a reasonable timeframe for review of Section 404 permit projects is no more than 60 calendar days.
Air Quality The project would likely result in temporary emissions of dust due to land clearing and excavation activities. If the project is likely to generate additional ongoing long-term emissions via added capacity, air impacts would need to be evaluated.	Due to soil disturbance, the NMED Air Quality Bureau should be consulted for applicable permits required for project activities. The permitting section consists of three programs: • Minor Source • Major Source • Technical Services	Any air quality permits applicable to the project are required prior to construction. Determination of appropriate air quality permits should be made as soon as practicable, as some air permits can require up to a year of pre-construction air monitoring prior to submittal.
Hazardous Materials The 2020 Phase I ESA identified the EGS and McKinley Paper Company (combined under a single discharge permit) as an REC. The potential to encounter hazardous materials in the northeastern corner of the site should be taken in to consideration during the design phase and additional analysis may be warranted at this location.	Review of the Phase I ESA and associated permitting will depend on the lead agency funding or permitting the development. NMED Hazardous Materials Bureau provides regulatory oversight for the treatment of hazardous waste.	Additional work may be required at the northeastern corner of the property to ensure worker health and safety prior to development in this area. EGS maintains a groundwater monitoring well at this location and coordination with EGS should be conducted.

5.4 BNSF CERTIFICATION

The NWNMCOG, GGEDC, and McKinley County all understand and agree on the benefit of securing site certification of the Prewitt Industrial Park site from BNSF. BNSF Certified Sites are industrial parks that have gone through a vigorous review process to guarantee the site is ready for development. The Prewitt Industrial Park parcel sites offer direct rail service for customers looking to locate along BNSF Transcon. Appendix G provides a copy of the application with support documentation, including conceptual track plan. BNSF has indicated that the Site Certification process does not have a defined timeline and is often driven by number of applicants and timing that may take up to a year, before any decision is made. The review process and site certification are divided into three phases. The steps are summarized in Figure 19.

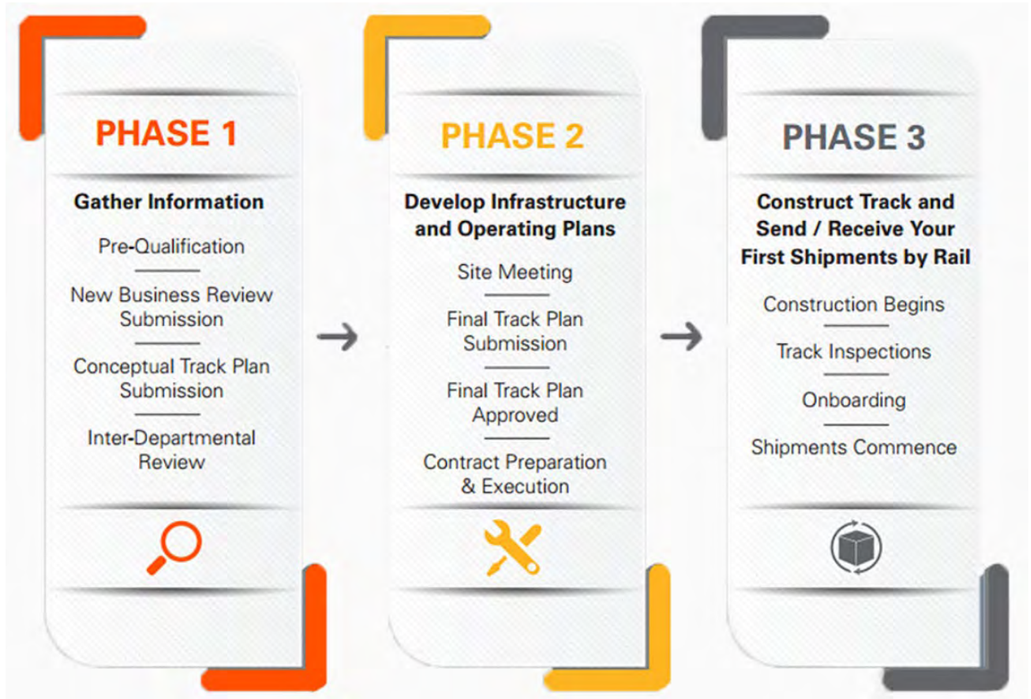

Figure 19: BNSF Site Certification Steps

6 Recommendations

Recommendations were developed by the project team in consultation with the steering committee and other stakeholders. Recommendations lay out specific next steps for project partners to begin facilitating development and to implement the Prewitt Industrial Park. This section details key short-term recommendations and explores funding options.

6.1 IMPLEMENTATION MATRIX

The matrix below lays out short-term recommendations towards the implementation of the industrial park.

Short Term Actions (now to 6 months)	Explanation	Lead Responsibility
Begin formal consultation with key stakeholders Tri-State Generation and Transmission Association and McKinley Paper Company	The Revised Site Layout Alternative will require further study in coordination with the two entities that occupy the land to the north. A formal consultation would begin this process. See Section 3.4 for more information on the revised alternative.	NWNMCOG, McKinley County, GGEDC
Program industrial park improvements into McKinley County Infrastructure Capital Improvements Plans (ICIP)	Programming the industrial park into local ICIPs allows the County to allocate funding and to begin identifying state and federal funding sources for improvements.	McKinley County
Secure lease from NM State Land Office for Industrial Park site and obtain transportation easements from relevant landowners	The Industrial Park site lies on State Trust Land. McKinley County should obtain a lease from State Land Office (SLO) for development of the Prewitt Industrial (SLO cannot sell state trust land, only lease or swap it). Transportation easements will also be needed to ensure road access to the Industrial Park site.	McKinley County
Request incentives review by NM Economic Development Department (NM EDD)	EDD will perform an incentives review on a potential project, identifying possible incentives that could be secured. This provides a starting point for organizing efforts to pursue incentives.	
Complete and submit BNSF Site Certification application	Completing the Site Certification process will help ensure that the Prewitt Industrial Park is shovel-ready for rail-served development and that the site will be promoted by BNSF to site selectors.	NWNMCOG
Work with New Mexico Partnership to market Prewitt Industrial Park to site selectors	NM Partnership is a state-designated organization dedicated to providing business assistance to prospective businesses interested in locating in the state. The organization promotes development site through site visits, trade show marketing, and other efforts.	NWNMCOG, GGEDC
Complete Prewitt Transportation Study	NWNMCOG is securing funding to complete a study to identify transportation needs in the vicinity of Prewitt, including an area from Thoreau to Grants. This study will examine the needs anticipated from industrial park developments in Prewitt.	NWNMCOG

6.2 TRI-STATE GENERATION AND TRANSMISSION ASSOC. AND MCKINLEY PAPER CO.

During the planning effort of the Prewitt Industrial Site, Tri-State Generation and Transmission Association made a decision to decommission the Escalante Generating Station and to explore options for reuse of the plant site. A more detailed analysis of the early Foote *Master Site Plan* has revealed that the development costs for rail services are uneconomical. The project team identified a more economical, and feasible alternative. The preferred and recommended alternative merits further dialogue with Tri-State Generation and Transmission Association and McKinley Paper Company. It is crucial to consider repurposing the Escalante plant's Spur Track; keeping it in operation to provide rail service to McKinley Paper Company and possibly the Prewitt Industrial Park.

6.3 CAPITAL STRATEGIES

A creative approach to lowering up-front land development capital investment is by identifying a public need. A junior tenant such as a Regional Hazmat Facility, Public Safety Building, or Fire Station would provide two-fold benefit to the future industrial park and create a vehicle for public funding of public infrastructure such as access, water, wastewater, drainage, electrical power, and gas. The facility could be situated adjacent to the

Phase I Spec Building. Such an approach will great reduce the need for private investment, making the Phase I Spec Building much more affordable per square foot since the development cost will invested in the building and site envelope. Such a strategic approach would start with a strategy planning session that may include the County Manager, key County Directors and representatives from similar state agencies. Once a public junior anchor is identified, an implementation plan and schedule should be tailored and a champion for plan execution identified.

6.4 KEY INCENTIVES PROGRAMS

The project partners are encouraged to request an incentives review of the Prewitt Industrial Park and of potential developments within the park from the New Mexico Economic Development Department (EDD). This will help identify the possible incentives packages that can be offered to developers.

The following is a list of incentives programs and funding sources that are likely applicable to developments within the Prewitt Industrial Park.

6.4.1 Job Training Incentive Program (JTIP)

This state program funds a portion of wages for individuals being trained for newly created jobs. JTIP reimburses 50-75% of worker wages for up to six months, for both classroom training and on-the-job training. Companies that receive JTIP funds must produce a product in New Mexico or provide services and export at least half of their services (based on revenue or customer base) outside of the state. Businesses in certain green industries also qualify. Since the program's establishment in 1972, it has helped create 47,000 jobs across the state. [10]

6.4.2 Industrial Revenue Bonds

An Industrial Revenue Bond (IRB) is a form of financing for industrial projects that also secures certain tax exemptions for the private company involved. To obtain an IRB, the private company in question signs over property related to the project to a local government, which issues bonds to finance the project. The transferred property is leased back to the company, and the lease payment forming the bond payment. IRBs can be issued for real or other property.

Because the property is owned by a local government, the bonds are exempt from certain taxes, including property tax. In effect, the private company avoids paying those taxes until bond maturity, when the company purchases the property back from the local government. IRBs typically mature in 20 years.

Projects that can receive IRB financing include manufacturing facilities, warehouse/distribution facilities, and non-profit organizations. Municipal IRB projects cannot include retail establishments.

The private company involved is responsible for finding bond buyers. The local government does not assume liability for the project. [11]

6.4.3 Local Economic Development Act (LEDA)

The Local Economic Development Act is a state law that enables the EDD and local governments to financially support and provide technical assistance to certain economic development projects created through public-private partnerships. Under the law's framework, local governments can pass their own LEDA ordinance, which establishes a local economic development corporation and allows the local government to create LEDA projects. The Act permits local authorities to establish public-private partnerships with a private developer in order to create a project, and then makes state funding available to the project. McKinley County has passed a LEDA ordinance.

The act also established a Job Creation Fund that the state can use to provide grants to local governments to help implement their projects. In order for a local government to receive LEDA funds, the business in question must meet one of several criteria, such as that the business provides economic base jobs.

Adoption of SB 118 in 2020 amended the Local Economic Development Act to allow the state Economic Development Department to support land or construction projects that are not yet associated with a business. An estimated $9 million in combined LEDA funding is available for McKinley and Cibola counties. Municipalities and counties can pass 1/8th-cent gross receipts tax to provide funding for LEDA projects, though no local match to state grants is required.

6.4.4 Tax Increment Development District (TIDD)

Formation of a Tax Increment Development District allows a portion of gross receipts tax and property tax from private development in the district to be redirected into construction of the public infrastructure associated with the development. The difference between the existing tax generated at a site and the new, higher tax generated by new development on the site is referred as the increment. New Mexico state law says that up to 75% of that increment can be diverted for 25 years to be used to finance bonds for infrastructure improvements on the site. This effectively relieves the developer of the responsibility of financing that infrastructure, thereby creating an incentive. TIDDs are established by local governments, though the percentage of the increment that can be diverted is approved by the state.

6.4.5 New Markets Tax Credit

The Prewitt Industrial Park is located within a New Markets Tax Credit-eligible census tract. The US Department of Treasury's New Market Tax Credit program is designed to attract private investment to low-income communities throughout the country. The program attracts investment through tax credits that are allocated annually to designated community development entities (CDEs) across the nation. Investors can earn the tax credits by taking an equity stake in a CDE. The CDE then uses the capital from the equity purchase to offer loans to qualifying businesses operating in NMTC census tracts at favorable terms. NMTC loans can be business loans, can support commercial, industrial, or community facility development projects, or can finance for-sale housing development.

[10] "Job Training Incentive Program". NM Economic Development Department https://gonm.biz/business-development/edd-programs-for-business/job-training-incentive-program. Accessed June 2020.

[11] "Industrial Revenue Bonds Offer Novel Approach to Economic Development" Finance New Mexico. https://financenewmexico.org/wp-content/uploads/2015/06/402_Industrial-Revenue-Bonds-Offer-Novel-Approach-to-Economic-Development.pdf. Accessed June 2020.

NMTCs are administered in New Mexico primarily by the New Mexico Finance Authority (NMFA), on behalf of Finance New Mexico. [12] The Industrial Park site is located in an NMTC Eligible census tract – one that is designated at "Severely Distressed" because the poverty rate is over 30% (see Figure 20). This designation can help an application for an NMTC loan score higher. [13] Businesses interested in NMTC financing should contact NMFA.

6.4.6 Opportunity Zones

The Prewitt Industrial Park is located in an Opportunity Zone census tract (see Figure 20). Opportunity Zones are designated low-income census tracts across the United States that have been designated as target areas for private investment via Qualified Opportunity Funds. These funds are created by corporations or partnerships, and 90% of the fund's assets must be invested in Opportunity Zones. The investors receive tax breaks on capital gains realized from their opportunity zone investments, with their tax burden decreasing the longer the investment is held. [14]

New Mexico is offering an additional $1 million in LEDA funding to projects located in Opportunity Zones, provided they meet certain criteria.

6.4.7 US Economic Development Administration Programs

The Economic Development Administration (EDA) has several programs that provide funding to projects. The agency's Public Works program provides funding to projects in economically distressed communities. The Revolving Loan Fund Program provides gap financing to small business that are starting up or expanding. The EDA is also administering economic development funds available through the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act. [15]

6.4.8 Locomotive Gas Tax Credit

A 2011 state law allows common carrier railroads operating in the state to purchase locomotive fuel effectively free of gross receipts tax if they commit to $50 million in capital improvements to rail infrastructure, including their "track, signals, or supporting network" in the state. BNSF might be interested in making additional investments to meet the investment total required by the law. [16] [17]

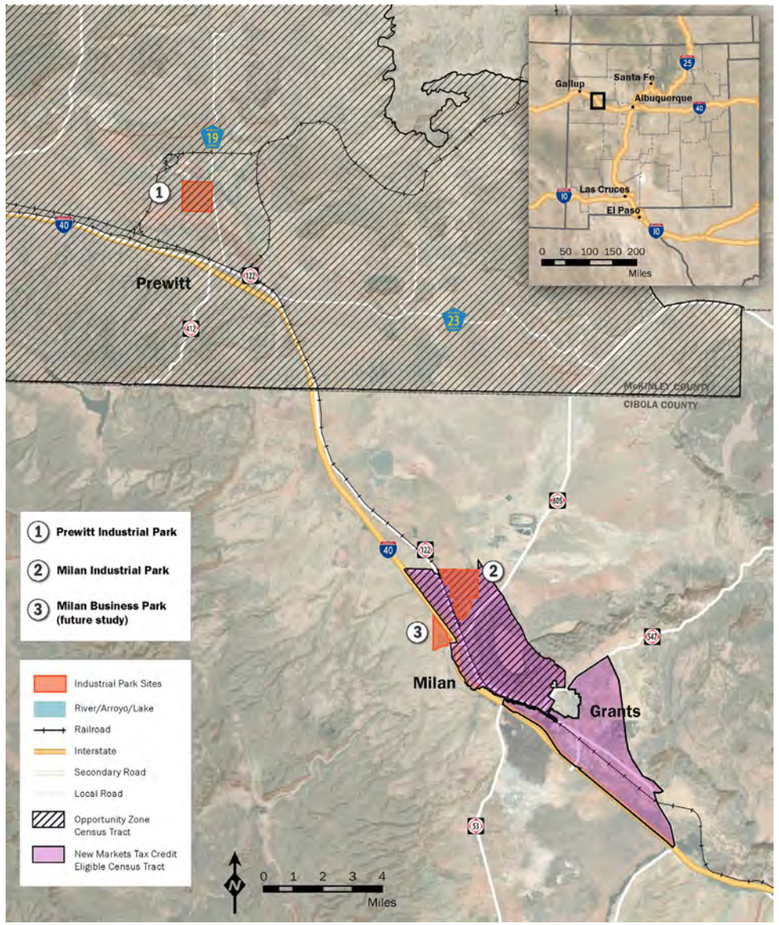

Figure 20: Federal Tax Credit Eligible Census Tracts

[12] "New Markets Tax Credits". New Mexico Finance Authority. https://www.nmfa.net/financing/new-markets-tax-credits/. Accessed June 2020.

[13] "New Markets Tax Credit (NMTC) Program Eligibility, Severe Distressed Status, and Non-Metropolitan Status, for CY 2019, using 2011-2015 eligibility data." Policy Map. https://www.policymap.com/widget?sid=117&wkey=4D2AFE10710D41918F180775F0A353F2. Accessed June 2020.

[14] "Qualified Opportunity Fund" *Investopedia.* May 28, 2019. https://www.investopedia.com/opportunity-fund-4688682. Accessed June 2020.

[15] "EDA Programs." US Economic Development Administration. https://www.eda.gov/programs/eda-programs/. Accessed June 2020.

[16] *Progressive Railroading.* "New Mexico enacts locomotive fuel tax bill" https://www.progressiverailroading.com/mechanical/article/New-Mexico-enacts-locomotive-fuel-tax-bill--35717. Accessed June 2020.

[17] *Progressive Railroading.* "New Mexico enacts locomotive fuel tax bill" https://www.progressiverailroading.com/mechanical/article/New-Mexico-enacts-locomotive-fuel-tax-bill--35717. Accessed June 2020.

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