

Comment on Diamond Tail Solar and Storage Project at Sandoval
County Planning and Zoning Commission Meeting
December 10, 2024

Walter Gerstle, PhD, PE
1709 Neat Lane SW
Albuquerque, NM 87105

My name is Walter Gerstle. I am a professional engineer, registered in New Mexico. I live in Albuquerque's South Valley. I have studied the plans for the Diamond Tail Solar and Storage Project. This is a very well-planned and appropriate renewable solar energy project. The risk from fire to the surrounding landscape is negligible. The impacts upon the surrounding communities and landscapes are acceptable.

The best way to mitigate drought, flooding, and fire danger in New Mexico is to mitigate climate change. We have seen how higher temperatures and drought in New Mexico have exacerbated drought as well as flooding. We must do our part to minimize global warming by swiftly transitioning from fossil fuels to renewable energy such as is offered by the Diamond Tail Solar Energy project.

Please approve the Diamond Tail Solar and Storage Project.

SUMMARY by Julie Wannlund, 13 La Cantera, Sandia Park / ZNCH-24-005

This is short summary of a review that I conducted of the documents that govern this application. The memo I gave you has additional details. I hope you'll read that also.

There are several conflicts between this application and the Comprehensive Plan and several cases where the zoning requirements are not met. Here are some examples:

The Staff Report doesn't discuss compliance with Section 1 Policy A.

The Staff Report states that Applicant complies with other requirements in Section 1 because the facility is "located in a remote location."

However, this site is not remote to:

- Sandia Mountain tramway riders and hikers
- Travelers on the Turquoise Trail
- Imagine driving south from Madrid on the Turquoise Trail coming down through Stagecoach Canyon, and the first thing you see in the sweeping view before you ISN'T the Sandia Mountains, it's the 1800 acres of black solar panels!
- It's notable that the PCR Visual Resources Memo that was uploaded very recently does not show these views.

Both the Written Report and Staff Report claim that several zoning requirements are met because the project is visually similar to a nearby PNM facility. The numbers don't support that statement:

- PNM Substation: 45 acres, 7 miles away from the Turquoise Trail, and 700 feet lower in elevation than the proposed facility, hidden by distance, elevation and topography
- Industrial solar facility: 1,800 acres, 2.5 miles from the Turquoise Trail, 700 feet higher than the PNM facility, on an exposed alluvial plain immediately to the west of the Turquoise Trail

SUMMARY by Julie Wannlund, 13 La Cantera, Sandia Park / ZNCH-24-005

In addition:

- The Applicant says he complies with several requirements because the Diamond Tail parcels are zoned RUR-F, which is not a Sandoval County zoning code.

For evidence that the zoning amendment won't conflict with the Comprehensive Plan, the Applicant and Staff provide a "benefit" statement about the , BUT...

The requirement is actually for **satisfactory provisions that it won't conflict**. **In fact, there are multiple conflicts as I've detailed above and in my memo.**

Themes from Review:

- Conflicts with Comprehensive Plan Policies and Strategies
- Some zoning requirements are not adequately met
- Comments from many impacted property owners indicate that this is an inappropriate location for this industrial facility, contrary to assumptions made by Applicant and Staff.

Finally, the Comprehensive Plan also says that the county shall protect significant historic sites. One of these is the Turquoise Trail National Scenic Byway.

- The last part of the DOT definition for "Scenic" says this:
- "All elements of the landscape -- landform, water, vegetation, and manmade development -- contribute to the quality of the corridor's visual environment. Everything present is in harmony and shares in the intrinsic qualities."
- 1,800 acres of solid black solar panels clearly do not represent a manmade development that contributes to the quality of the visual environment and is in harmony with the land.

I urge you to deny this application because:

- It is not consistent with, or is in conflict with, the Comprehensive Plan
- Many requirements in the Sandoval County Zoning Ordinance have not been satisfied

Date: December 10, 2024

To: Sandoval County Planning and Zoning Commission

From: Julie and Jon Wannlund, 13 La Cantera, Sandia Park, NM 87047

Re: Planning and Zoning Commission Meeting 12/10/2024, ZNCH-24-005 Request for Zone Map Amendment

Dear Commissioners:

We've conducted a review of some of the ordinances and documents that govern the submission and approval of the Planning and Zoning Application, as referenced above, and would like to raise some concerns for your review and consideration. I've specifically looked at:

- SC Comprehensive Plan, dated February 2024
- SC Zoning Ordinances, June 2020 Amended
- Application for Zone Amendment, dated August 8, 2024
- Special Use District Permit Application Written Report, dated October 2024 ("Written Report")
- Report from the Planning and Zoning Department Staff dated December 10, 2024 ("Staff Report")

Sandoval County Comprehensive Plan

An important requirement in the Special Use District and Zoning Amendment sections of the Zoning Ordinances is that SUD designation, zone amendments, uses, etc. is that these changes do not conflict with the Comprehensive Plan.

Section 1, Policy A:

- The Comprehensive Plan designates 6 geographic areas in the state with differing physical characteristics and development needs, and says that development must take into account the needs and desires of the people living in each geographic area, as well as traditional land uses. (Section 1, Policy A).
- The Comprehensive Plan also says that the county intends to develop land use plans that reflect the unique characteristics of specific areas within the region, and are consistent with the overall plan (Section 1, Policy A, Item 4).

The Staff report contains no reference to or consideration of compliance with Policy A.

Section 1, Policy B:

- The County declares that the overall plan is to retain a prevailing rural residential characteristic, with business and industry development in appropriate locations. Under Policy B, there are several strategies which include the following (numbers are from the Policy):
 2. Efforts shall be made to protect the traditional, locally important land use patterns existing within the County.
 3. Development decisions shall be based on impact on surrounding land uses, particularly in residential and agricultural areas...” and
 5. Appropriate sites for industrial and commercial facilities shall be identified and efforts made to encourage new businesses to locate at these sites.

The Staff Report only lists one of these strategies (#3) as applicable to this project and claims that this applies because the facility “will be located on remote undeveloped privately-owned lands...”

The facts are that this site won't be “remote” to:

- Riders of the Sandia Peak Tramway
- Hikers in the Sandia Mountains
- Visitors traveling the Turquoise Trail National Scenic Byway
- Imagine driving from Santa Fe to Albuquerque on the Turquoise Trail National Scenic Byway, coming down through Stagecoach Canyon south of Madrid first thing you see in the sweeping view before you ISN'T the Sandia Mountains, it's 1,800 acres of black solar panels! Instead of passengers saying “Oh, WOW!” they will say “What is THAT?”

In addition, the project itself actually violates several of the other Strategies (e.g., 2 and 5 above). It also violates the main premise of Policy B which is to retain a rural residential characteristic and promote development of business and industry in appropriate locations.

Someone might argue that it's only necessary to identify one Strategy underneath a Policy but we would argue that it doesn't make sense that a project would actually

violate the other Strategies because then your Strategies aren't each designed to support your Policy.

Written Report and Staff Report

Both reports provide inadequate evidence that some requirements in the SC Zoning Ordinance have been met. Among those requirements are:

- Satisfactory provision re preservation of integrity, character, property value in adjacent zone districts (Section 10 A 4)
- Satisfactory provision re compatibility of the amendment with actual or permissive zoning use of adjacent properties (Section 19 F 5)
 - The adjacent zone districts and the adjacent properties are the remaining many square miles that surround the target industrial area, that remain zoned Rural Residential/Agricultural land.

For evidence of meeting the SUD requirement and Amendment requirement, the Applicant claims and the Staff accepts, that the proposed industrial solar project is visually similar to a nearby PNM electrical substation. Actually, that PNM facility is not visually similar, or similar in any other way, to the proposed industrial solar facility:

- PNM Substation is 45 acres, 7 miles away from the Turquoise Trail, and 700 feet lower in elevation than the proposed facility, hidden by distance, elevation and topography
- Industrial solar facility is 1,800 acres, 2.5 miles from the Turquoise Trail, 700 feet higher than the PNM facility, on an exposed alluvial plain immediately to the west of the TT

Factual Error in the Written Report:

- Several sections refer to the DT parcels currently being zoned as RUR-F. This is not a Sandoval County zoning designation; however, it is a zoning designation in Santa Fe County. There are no parcels being considered by the SandCo PZC that are located in Santa Fe County.

Finally, the Applicant declares, and Staff agrees, that provisions are made to assure that the zoning amendment won't conflict with the Comprehensive Plan. As evidence for this requirement, the Applicant simply makes a statement that "the project will provide electrical service to achieve the County's growth goals."

The problem is that the requirement is not to supply a statement of “benefit,” is to supply “satisfactory provision” the proposed amendment will not conflict with the Comprehensive Plan. In fact, there are multiple aspects where the Special Use District zoning amendment will cause conflict with the Comprehensive Plan, including:

- Lack of consideration for needs and desires of people living in the region
- Lack of protection for the traditional, locally important land use patterns
- Building an industrial facility in an inappropriate site
- Lack of protection for significant historic sites (destruction of the viewshed along the Turquoise Trail National Scenic Byway, a New Mexico State asset)

Several themes arise out of this review, showing that the requirements in the Comprehensive Plan and the Zoning Ordinances have not completely been met:

- Approval of this zoning amendment does not comply with the Comprehensive Plan Policies and Strategies to maintain a rural residential character of the land and to protect traditional, locally important land use patterns
- The Plan requires identifying and placing industrial facilities in appropriate locations – this has not been done.
- Staff report affirms that the development decision was based being comparable to another nearby PNM facility, and in a remote location but:
 - We described earlier how dissimilar the PNM facility and industrial solar facility in every way are and how this location is not remote given its physical prominence on the landscape, AND
 - There are a number of disapproving comments from adjacent and nearby landowners, representing almost 400 individual property owners, all zoned as RRA. These comments show that the assumptions made by the Applicant and Staff about how this change will affect their properties are incorrect.

In closing, we comment on the Turquoise Trail National Scenic Byway:

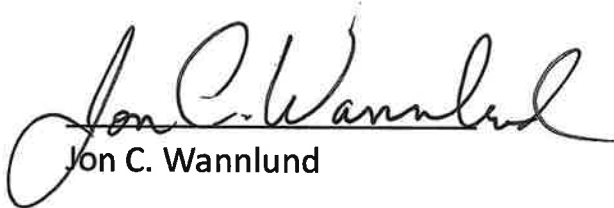
- Comprehensive Plan Section 3 says that the county shall protect significant historic sites.
- The TT received its federal designation from the DOT in 2000, based on meeting the single Intrinsic Quality titled “Scenic” which the DOT defines as this:

- “Scenic Quality is the heightened visual experience derived from the view of natural and manmade elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape -- landform, water, vegetation, and manmade development -- contribute to the quality of the corridor's visual environment. Everything present is in harmony and shares in the intrinsic qualities.”
- 1,800 acres of solid black solar panels clearly do not represent manmade development that is in harmony with the land and that contributes to the quality of the visual environment.

We urge you to deny this zone amendment application based on these facts:

- It is not consistent with, or is in conflict with the Comprehensive Plan
- Many requirements in the Sandoval County Zoning Ordinance have not been satisfied

Respectfully submitted,


Jon C. Wannlund


Julie A. Wannlund

PCR Solar Power Plant and Ecological Devastation

Our land in the East Mountains is renowned for its natural beauty so much so that NM-14 was designated a National Scenic Byway and why the Golden Open Space was created. Moreover, it is why tourists from all over our nation and the world flock to the Turquoise Trail and Sandia Crest in order to cherish the view of the East Mountains along the Trail toward Santa Fe.

However, the pine-juniper woodlands and high desert of the East Mountains, while beautiful, are also extremely fragile ecosystems, and once disturbed, it will take decades to regenerate.

The plan for Diamond Tail Solar is to bulldoze, clear, and compact approximately 3 square miles of land. Once configured for Diamond Tail Solar, that part of our ecosystem will be literally wiped out. The resulting brownfields will be a dark blot on the landscape, in full view of the Turquoise Trail and Sandia Crest for the life of the solar power plant. The visual impact cannot be overstated.

But the situation is worse than that. PCR claims that, after the power plant has outlived its usefulness, the *“Solar power plant site will be restored to the condition as it was 30 years ago”*.

However, PCR’s Decommissioning Plan tells another story. Here are some highlights from the Plan:

1. “The areas of the Project that have been disturbed will be restored, *as near as practicable*, to their pre-construction and allow for similar land use.” (emphasis added.)
2. “Portions of the Project site that have been excavated and backfilled will be restored, *as near as practicable*, to pre-construction conditions.” (emphasis added.)
3. “After all equipment is removed, any holes or voids ... will be restored to surrounding grade and *tilled to farmable condition*.” (emphasis added.)
4. “In addition, the site *may be revegetated*” (emphasis added.)
5. “All access roads and other areas compacted by equipment will be de-compacted to a depth of 18 inches from finished grade prior to fine grading and tilling or seeding. *This may include seeding as farmland or re-development of the land for other beneficial uses, based on consultation with landowners.* (emphasis added.)

Focusing on the last point above, we conclude that there is, in fact, no plan to restore the land to its original condition, even if that were possible. Instead, what we seem to have here is a corporate maneuver being run through a Special Use loophole:

- Diamond Tail Ranch leases land to PCR, making money;
- PCR uses their solar power plant initiative to change zoning from “Agricultural” to “Special Use” then builds and runs the solar power plant, making more money;
- After the solar power plant is phased out, Diamond Tail Ranch and PCR re-develop the land for “other beneficial uses”, such as building another huge industrial facility (like a Facebook server farm or an Amazon AI center), making even more money.

COUNTY COMMISSIONER'S CHAMBER
1500 IDALIA RD NE
BLDG D
BERNALILLO NM 87004

MEMORANDUM

TO: Chair Dennis R. Trujillo, Sandoval County P&Z Commission

FROM: Lorna & Bill Parsons, 23 La Cantera, Sandia Park, NM

SUBJECT: Significant Issues with PCR Proposal ZNCH-24-005

ISSUE: PCR proposal, ZNCH-24-005, requests zoning change to build a large-scale solar power plant (1,833-acres) on Diamond Tail Ranch, in East Mountains area of Sandoval County, NM.

PURPOSE: In an effort to promote due diligence and engender detailed transparency, we analyzed PCR documentation supporting proposed zoning change ZNCH-24-005.

KEY FINDINGS: Below we identify 5 significant issues, which call into question how ZNCH-24-005 can satisfy Sandoval Comprehensive Zoning Ordinance requirement that *“the Special Use District will not become detrimental to public health, safety, or general welfare of the County”*:

1. **Water.** PCR claims 38 million gallons to construct power plant, we estimate 244 million gallons; PCR claims 130,000 gallons/year for operation & maintenance (O&M), we estimate 2-3 million gallons/year; significantly, as of 12/3/24 public meeting, PCR still has no plan how to source water.
2. **Traffic.** PCR claims construction traffic at 33 vehicles/day; we estimate 113-140 vehicles/day; however, all traffic estimates are heavily dependent upon actual water truck traffic.
3. **Thermal Pollution.** PCR did not consider possible negative thermal (heating) effects from solar power plant operation, such as: (a) “Photovoltaic Heat Island” (PVHI) effect, in which air above solar power plant likely to be heated 3-9 °F; and (b) “Thermal Advection” effect, in which heated air from solar power plant is transferred onto adjacent properties (1-2 kilometers away from PV arrays), thereby cooling solar power plant soil but heating adjacent landowners’ soil.
4. **Wildfire Risk.** As part of its argument that Battery Energy Storage System (BESS) does not pose a fire risk, PCR claims Diamond Tail area is rated “Minimal” (1/6) for wildfire risk; we are unable to substantiate this claim, all databases consulted listed Diamond Tail area as at least “Moderate” wildfire risk (4/10 or 4/6, depending on database), thereby vitiating PCR safety analysis.
5. **Current BESS Design Fundamentally Flawed.** PCR severely under-estimates security risk of Battery Energy Storage System (BESS): Neither Tesla Megapacks nor proposed BESS layout will be secured against catastrophic risks, such as terrorist attack. PCR “security plan” merely consists of a 6-foot-tall, 3-strand bard wire fence. Also, site is doubly remote, with no on-site security personnel and first responders are at least 30-60 minutes away; and site is known for trespassing criminal elements (e.g., armed poachers). This particular BESS design, coupled to this particular location, ensures Diamond Tail BESS will be the lowest of “low-hanging terrorist fruit”.

RECOMMENDATIONS:

- A. Deny ZNCH-24-005, PCR request to re-zone, and let PCR sort it out on Appeal; or
- B. Defer further consideration of ZNCH-24-005 until PCR can clarify issues above.

1. Water Usage. PCR appears to have substantially under-estimated the amount of water needed for both construction and operation and maintenance (O&M). *In addition, PCR provides no details on how they plan to source water for construction.*

Construction: PCR numbers for estimated construction water are all over the place. At the October 8 hearing they had no numbers; on October 29, they estimated 23 million gallons (70 acre-feet/year); and on December 3, they estimated 19 million gallons/year (58 acre-feet).

At December 3 at the public outreach meeting, PCR estimated construction water at 19 million gallons per year, a 17 reduction from October 29 number. This is the number used on Point 1 on first page, multiplied by 2 to account for 2-year construction, to get an overall total of 38 million gallons for construction.

PCR numbers appear to be massive under-estimates. Near Santa Fe, another company, AES, is building a 600-acre solar power plant. **AES estimates 100-150 acre-feet per year to construct.** AES has considerable experience building and operating large-scale solar power plants, while PCR never built or operated a solar power plant. Therefore, AES estimate is more credible. Using AES estimate (125 +/-25 acre-feet, 41 +/- 8 million gallons), scaled up to Diamond Tail Solar size (x 3), and using PCR two-year timeline, the likely amount of water used to construct Diamond Tail project will be:

244 million gallons +/- 49 million gallons; therefore, PCR lowest water estimate for construction is too low by almost a factor of 6. This is enough water to supply approximately 2,800 homes/year.

O&M: On page 23 of their October 29 PowerPoint, PCR states that, "During O&M period, water will be used to clean solar panels once a year, using approximately 0.4 acre-feet per year." However, **AES estimates O&M water use for their 600-acre Santa Fe solar power plant at 2-3 acre-feet/year.** Using AES estimate (2-3 acre-feet/year), scaled up to Diamond Tail Solar size (x 3), the likely amount of water used to operate and maintain Diamond Tail project, every year for 30 years, will be:

2-3 million gallons of water; basically, PCR water estimate for O&M is too low by almost a factor of 20! This is enough water to supply 23-34 homes/year, all to be drawn from our local aquifer.

To be clear, AES estimates construction water at 100-150 acre-feet per year, PCR most recent estimate claims 58 acre-feet per year; AES estimates O&M water at 2-3 acre-feet per year, PCR claims 0.4 acre-feet per year; and recall that PCR power plant is 3 times the size of the AES power plant.

Water Use in Gallons

	PCR Estimates	AES Estimates (Facility 1/3 the size)	PCR Suggested Actual (AES Estimates x 3 x 2)	Change in PCR Estimates
Construction (x2x3)	38 million	32-48 million	192-285 million	5-7.5X
O&M (x3)	130,000	651-977,000	1.89 - 2.9 million	14.5-22X

Increase by 2 times for longer construction duration. Increase 3 times for size difference.

Bottom-line: There is a massive disconnect between PCR and AES numbers for construction and operation of solar power plants in almost identical areas of New Mexico.

2. Traffic Estimate. PCR has substantially under-estimated their construction traffic.

Why? Because they:

- **failed to include water trucks in their traffic estimate, and**
- **have substantially under-estimated their water usage during construction.**

On page 22 of their October 29 PowerPoint, PCR provides their daily traffic estimate during construction as 33 vehicles: 6 semi-trucks, 5 buses, 7 SUVs, and 15 cars.

However, on page 23 of their PowerPoint, they state: “Construction water will be transported to the site (15/20 trucks per day)”. **Those water trucks are not included in the traffic estimate on page 22. PCR just dropped the ball, due to sloppy staff work.**

Adding the water trucks to their traffic estimate boosts the PCR daily traffic estimate to 48 to 53 vehicles per day, not 33. In round numbers, that is a 50% increase in estimated construction traffic, using PCR’s *own* numbers.

Moreover, as pointed out in Point 1 above, on water usage, PCR appears to have substantially under-estimated water needed for construction. We estimate that PCR water usage is too low by a factor of 6. This means their daily water truck estimate is way too low, so daily water truck traffic should be something like 80-107 trucks per day, not 15-20.

Therefore, taking into account likely water usage using EAS numbers, construction traffic for Diamond Tail Solar should be around 113-140 vehicles per day, not 33 as claimed by PCR. In round numbers, PCR’s overall daily traffic estimate is too low by a factor of 4, that is, their likely daily construction traffic is 400% higher than PCR claims.

Bottom-line: Any estimate for traffic construction is driven by water trucks. Therefore, we cannot have any confidence in PCR traffic estimates until the numbers for water usage are sorted out and how that construction water is going to be sourced (off-site water trucks or on-site wells).

3. Thermal Pollution. PCR did not consider possible negative thermal (heating) effects from solar power plant operation, such as: (a) “Photovoltaic Heat Island” (PVHI) effect, in which air above solar power plant likely to be heated 3-9 °F; and (b) “Thermal Advection” effect, in which wind could transfer heated air from solar power plant onto adjacent properties, thereby cooling solar power plant soil but heating adjacent landowners’ soil.

An untended consequence of large-scale solar power plant operation is the creation of heated air above the facility, a “heat dome”. This phenomenon is known as the “Photovoltaic Heat Island” (PVHI) effect. PVHI has been scientifically verified by *in situ* field measurements, for example, at a solar power plant near Tucson, Arizona, and at a solar power plant in China (G.A. Barron-Gafford *et al.*, “The photovoltaic heat island effect: larger solar power plants increase local temperatures”, *Sci. Rep.* 6 (2016) 35070, and R. Chang *et al.*, “Observed surface radiation and temperature impacts from the large-scale deployment of photovoltaics in the barren area of Gonghe, China”, *Renewable Energy* 118 (2018) 131–137). As another study put it, “Specifically, there is a growing consensus to date that air temperature increases within solar parks, up to 3-4 °C in a hot semi-arid climate zone and 2-5 °C in a cold desert climate zone” (Guoqing *et al.*, “Grounded-mounted photovoltaic solar parks promote land surface cool islands in arid ecosystems”, *Renewable and Sustainable Energy Transition* 1 (2021) 100008).

An increase of 2-5 °C in air temperature equates to an increase of 3.6 to 9 degrees Fahrenheit. To put that into perspective, an increase of 5 °C exceeds the 1.5 °C maximum limit set forth in the Paris Agreement on mitigating global climate change by 333%.

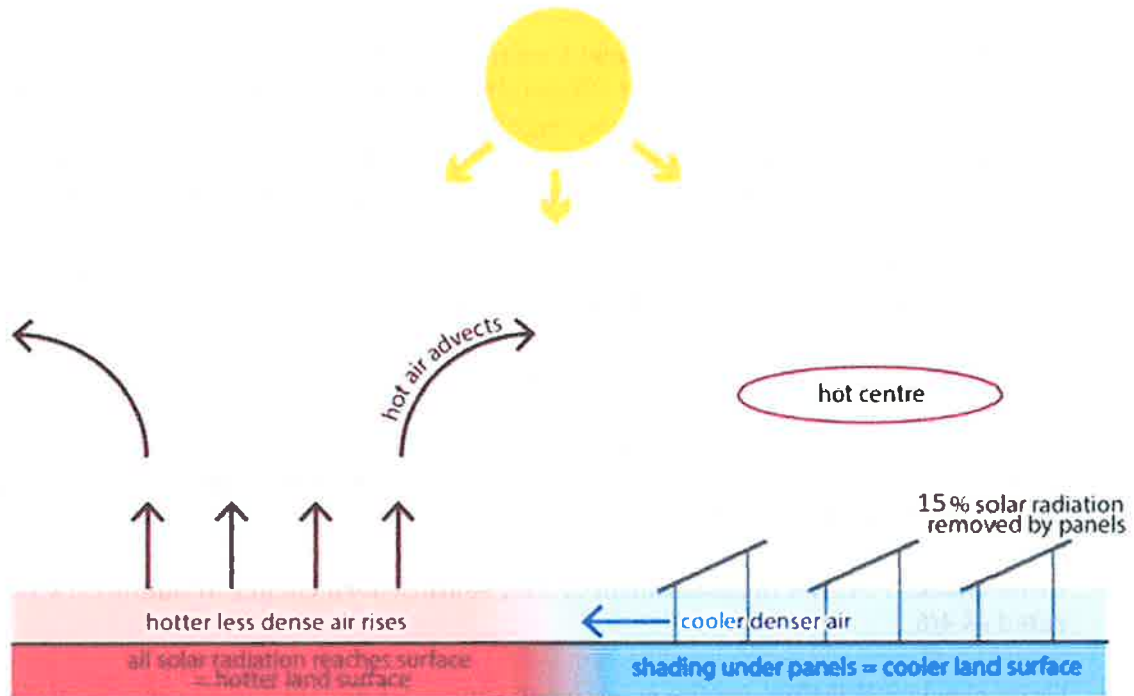
So, what does the PVHI effect mean for us, here in the East Mountains?

One recent study (2021) asked a very simple question: **What happens to the PVHI Heat Dome, especially when the wind blows?** Answer: Due to “Thermal Advection”, the soil underneath the PV arrays was cooled, but the soil 1 to 2 kilometers away was heated. **In our case, this means that the PVHI Heat Dome gets fractionated and moved away from Diamond Tail Solar, cooling the ground underneath PCR but heating the ground of adjacent landowners.**

This Thermal Advection effect is very counter-intuitive, and very variable, so much so that the authors of the study stated: “Given the potential implications for ecosystem processes, ... , improved understanding of solar park LST [land surface temperature] impacts is required. Specifically, this knowledge is needed to inform the development of sustainable land use and energy policies considering the rapid growth of solar park developments” (Guoqing *et al.*, *ibid.*)

Bottom-line: PCR has not acknowledged PVHI or Thermal Advection effects, much less addressed them in a constructive manner. A thorough scientific study of PVHI and Thermal Advection, as it specifically relates to Diamond Tail Solar, should be done before going forward with a zoning change. **We owe our adjacent landowners due diligence to ensure that Diamond Tail Solar thermal pollution will not detrimentally affect them.**

Thermal Advection Diagram:



Source: Guoqing *et al.*, “Grounded-mounted photovoltaic solar parks promote land surface cool islands in arid ecosystems”, *Renewable and Sustainable Energy Transition* 1 (2021) 100008)

4. Wildfire Risk. As part of its argument that Battery Energy Storage System (BESS) does not pose a fire risk, PCR claims **Diamond Tail area is rated “Minimal” (1/6) for wildfire risk; we are unable to substantiate this claim**, all databases consulted listed Diamond Tail area as at least “Moderate” wildfire risk (4/10 or 4/6), thereby vitiating PCR safety argument.

People are worried about the fire risk posed by a large Battery Storage Energy System (BESS) such as the one proposed for the Diamond Tail Storage Project, which will consist of 114 Tesla Megapacks, each containing thousands of Lithium-ion batteries. These batteries are known to overheat, burn and explode, and produce toxic pollutants when doing so; and Tesla Megapacks have, on several occasions, burned. These well-documented events justifiably cause concern in our community about battery fires causing: (a) toxic air pollution; and (b) wildfires.

Turning to wildfire risk, PCR makes this argument: No fire risk from BESS, because even if the whole thing blows up, the surrounding land is not subject to wildfire and therefore there is no risk of fire spreading to local communities.

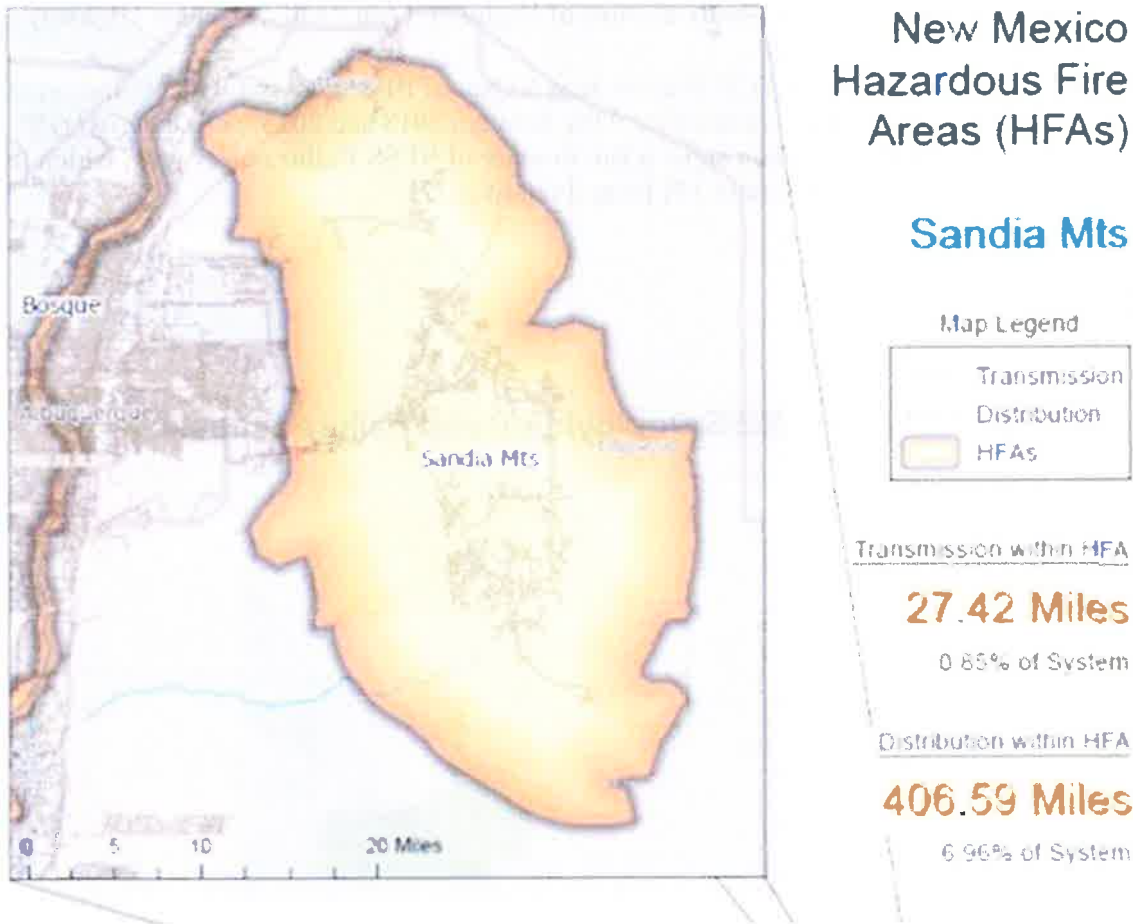
PCR states repeatedly: ***“In the unlikely event of a battery fire, the spread of fire off-site will also be unlikely due to the Project area’s minimal wildfire risk”.***

This PCR assessment is based on claim that First Street.org shows Diamond Tail Solar area as Minimal Fire Risk (1/6). **We tried to verify this claim and could not:**

- **First Street.org analysis for Sandoval County** states: (a) “99% of all properties in Sandoval County will have some risk of being affected by wildfires over the next 30 years”; and (b) “Overall, Sandoval County has a major risk of wildfire over the next 30 years”. **So, to believe that wildfire risk to Diamond Tail BESS is “Minimal”, we have to believe that PCR has the *only* location not threatened by wildfire in all of Sandoval County!**
- **First Street.org provides a checklist of factors that will increase risk of wildfire. Diamond Tail Solar area meets their listed risk factors:** electric transmission lines; lightning; nearby fuel sources, such as extremely flammable pine trees, juniper trees and tall grass; extremely dry vegetation; intense winds; and varied topography with ravines and hills.
- Cross-checked **First Street.org “Fire Checker”** for many individual addresses adjacent to Diamond Tail Solar: **All came back rated as Fire Risk 4/10 in Diamond Tail area, not one was rated “Minimal” (1/10).**
- Cross-checked **FEMA** fire assessment center: **southeastern corner of Sandoval County rated as 4/6.**
- Cross-checked **Wildfire.org** fire assessment center: **Sandoval County rated as 4/6.**

Simple Solution: Talk to PNM, which has thoroughly analyzed wildfire risk within their area of operations and has produced extensive Hazardous Fire Area (HFA) maps (see diagram next page). **Surely, PNM knows the wildfire risk underneath their own power lines!**

PNM HFA Chart for Sandia Mountains



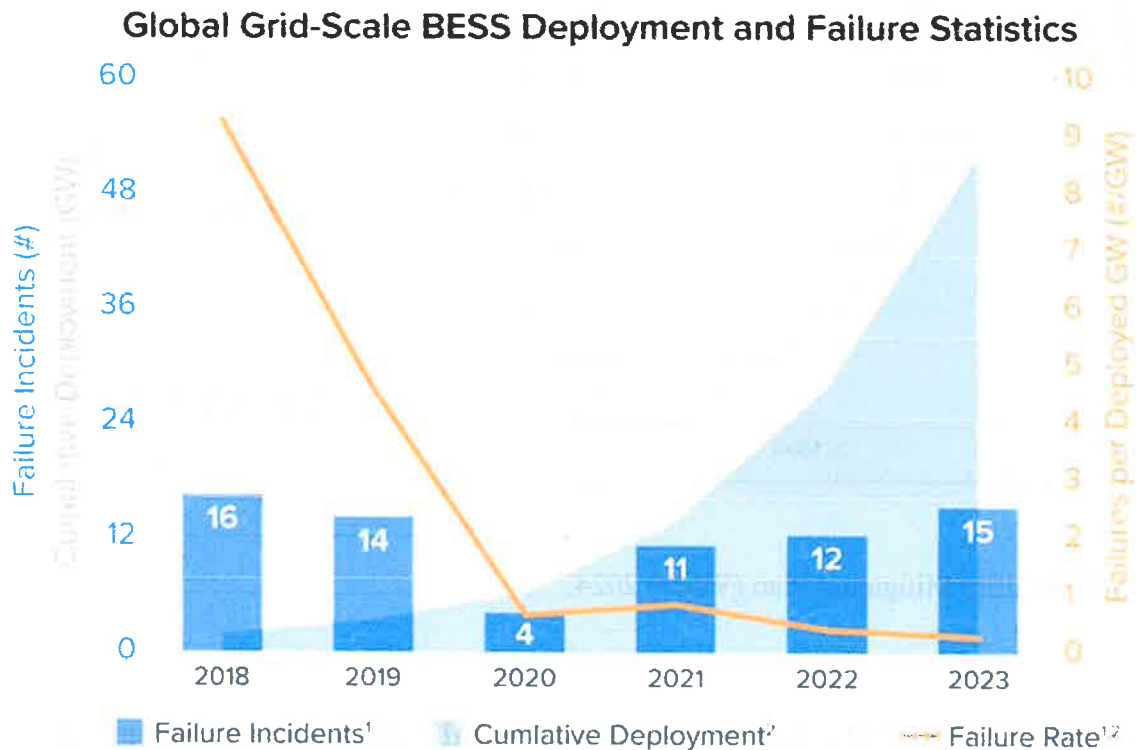
Source: PNM Wildfire Mitigation Plan (WMP) 2024.

Note close proximity of HFA to proposed Diamond Tail Solar site, at top of Diagram, where thick PNM transmission line splits into a loop and bends toward the upper right corner of the HFA.

Before leaving the subject of fire risk, we want to rebut PCR claim Tesla Megapacks are inherently safe, by making two simple points:

- **Moss Landing, CA Tesla Megapack Fire (9/2022):** PCR says this fire didn't cause measurable air pollution outside BESS; true, but here's what PCR *didn't say*: the Tesla Megapack fire caused a 12-hour Shelter-in-Place order for the entire Moss Landing community and caused a 12-hour closure of Highway 1, an "All-American Highway".
- **EPRI BESS Safety Chart:** PCR likes to show a chart of BESS Safety Incidents and says that BESS Failure Rate has been reduced by 97%, between 2018 and 2023, *per Deployed GW*; this is true, but hiding in plain sight is the *number of BESS Failures, per year*, which has increased by almost 400% (4 to 15) from 2020 to 2023!

EPRI Chart



Sources: (1) EPRI Failure Incident Database. (2) Wood Mackenzie. Data as of 12/31/23.

5. Current BESS Design Fundamentally Flawed. PCR severely under-estimates security risk of Battery Energy Storage System (BESS).

What we're concerned about is a catastrophic event that destroys all or most of the BESS facility.

One such catastrophic event would be a terrorist attack using long-range, heavy-caliber sniper rifles to shoot up Tesla Megapacks. Without going into details in a public forum, I estimate that one or two skilled shooters, within a few minutes, could hit all (or almost all) 114 Megapacks and key ancillary BESS equipment, initiating wide-spread battery fires and numerous explosions. This terrorist attack could be accomplished with "off-the-shelf" equipment and budget of ~\$75,000.

The risk of terrorist attack against PCR BESS is enhanced by: (a) design of Tesla Megapacks, which are *very* susceptible to damage by shrapnel; and (b) Megapack placement, in plain view, with geometric spacing, to ensure easy targeting. **Proposed PCR BESS is a sniper's paradise.**

The risk of terrorist attack is especially enhanced, because the proposed PCR BESS site plan is especially bad: (a) location is remote; (b) no on-site security personnel; (c) no nearby first-responders (30–60-minute response time); (d) ample cover around facility for terrorists; (e) known criminal elements ("feral humans") already trespassing on Diamond Tail Ranch (e.g., armed poachers and hunters); and (f) no defenses, PCR "security plan" is to install a 6-foot, barbed wire fence, which is effective only against cattle.

Question: Is terrorist attack against PCR Bess far-fetched? Answer: ABSOLUTELY NOT! (a) There have already been two serious sniper attacks against the U.S. electrical grid, the 2013 "Metcalf Sniper Attack" near San Jose against PG&E substation, and the 2022 "Moore County Substation Attack" in North Carolina, which resulted in a homicide and a serious power blackout and (b) drone attacks or threats against U.S. electrical grid (July 2020 attack in PA, 2024 FBI arrest in TN).

Question: What would happen if snipers attacked PRC BESS? Answer: All bad (a) Solar power plant instantly goes down and goes dark; (b) Tesla Megapacks go up in smoke, costing ~\$101+ million; (c) multiple fires and explosions; and (d) if attack executed correctly, possibility that all or part of PNM is grid is destabilized and goes down along with Diamond Tail Solar.

Prediction: Sooner or later bad actors will go after undefended U.S. BESS facilities.

Guarantee: Once one U.S. BESS gets whacked, Federal regulations will require *all* BESS facilities to be hardened against attack, requiring multiple layers of security.

Question: Are any U.S. BESS operators taking security threats seriously, *right now*?
Answer: Yes, for example, proposed Nighthawk BESS in Poway, CA.

Bottom-line Question: Ask PCR what plans and preparations they have in place to deal with a terrorist attack against their proposed BESS facility.

Old National Security Saying: "Hope for the Best, prepare for the Worst".

6. SUMMARY: We have identified what appears to be several substantive issues relating to PCR Project:

1. Miscalculation of water usage, traffic construction impact, and wildfire risk.
2. Ignoring thermal pollution and BESS security flaws and risks.

These issues call into question how PCR's proposed "*Special Use District will not become detrimental to public health, safety, or general welfare of the County*", as required by Sandoval County Comprehensive Zoning Ordinance.

7. RECOMMENDATIONS:


- A. Deny ZNCH-24-005, PCR request to re-zone, and let PCR sort it out on Appeal; or
- B. Defer (postpone) further consideration of ZNCH-24-005 until PCR can clarify issues above.

Attachments:

Letters of Opposition to ZNCH-24-005, proposed zoning change to build Diamond Tail Solar Power Plant and Storage Facility, by adjacent and surrounding large ranch owners, submitted to the public record, prior to Sandoval County Planning & Zoning Commission hearing, December 10, 2024.

Nov. 1, 2024

I, the below signed, am an adjacent landowner and I am against the zoning change requested by Diamond Tail Ranch from Residential/Agricultural District to Special Use District.

Signature  _____

Steve Chavez, Chavez Ranch, 2138 NM Hwy 14, Cerrillos, NM, 87010



Campbell Management

December 2, 2024

Planning & Zoning Department
Sandoval County Administration Planning & Zoning Department
Sandoval County Administration Building
1500 Idalia Road, Building "D" 2nd floor
Bernalillo NM, 87004
State of New Mexico
Attn: Director

Re: ZNCH-24-005

Dear Director and P&Z Commissioners:

Thank you for taking the time to read and review our letter of concern.

The Campbell family has been a large if not the largest landowner along NM state hwy 14 since prior to its existence. In fact, Campbell specifically granting a right of easement for its path and construction while still retaining ownership. Campbell has always been a strong proponent of this scenic byway which has reached national prominence as the scenic and artful way for residents and annual tourist the travel to and from Albuquerque and Santa Fe.

One of the biggest strengths of this treasured asset for New Mexico is the striking natural beauty and vistas. The Campbells have always been proponents of rational alternative energy sources in particular solar. We are currently involved with several at different locations in the state. However, the common location characteristic among them, besides access to strong sunlight, they are all located in remote locations not easily visible from the majority of the public or along tourist corridors.

The proposed location of this current proposed zone change not only seems to defy the economic feasibility with remote locations its visual impact on one of New Mexico's greatest tourist assets defies logic.

No doubt the project itself has merits but placing it at this location considering the cost benefit of damaging one of the greatest tourist corridors and asset for the state can not be overstated.

We humbly recommend moving the project location to one of the MANY available sites better suited for this type of land use in order to preserve the beauty of arguably one of the best national scenic byways in the United States.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Gately", written over a horizontal line.

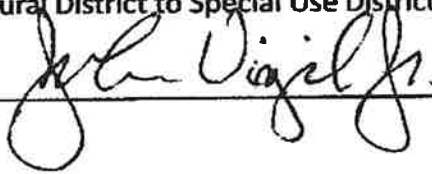
Robert Gately
President
Campbell Farming Corporation

Nov. 11, 2024

I, the below signed, am an adjacent landowner and I am against the zoning change requested by Diamond Tail Ranch from Residential/Agricultural District to Special Use District.

Signature _____


John Vigil, jlvigiljr@gmail.com, 505-281-8626

A handwritten signature in black ink, appearing to read "John Vigil Jr.", written over a horizontal line. The signature is cursive and somewhat stylized.

Nov. 11, 2024

I, the below signed, am an adjacent landowner and I am against the zoning change requested by Diamond Tail Ranch from Residential/Agricultural District to Special Use District.

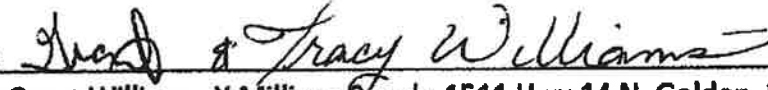
Signature

A handwritten signature in black ink, appearing to read "John Vigil", written over a horizontal line.

John Vigil, jlvigiljr@gmail.com, 505-281-8626

Nov. 1, 2024

I, the below signed, am an adjacent landowner and I am against the zoning change requested by Diamond Tail Ranch from Residential/Agricultural District to Special Use District.

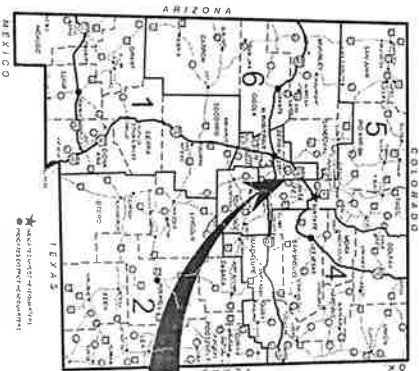
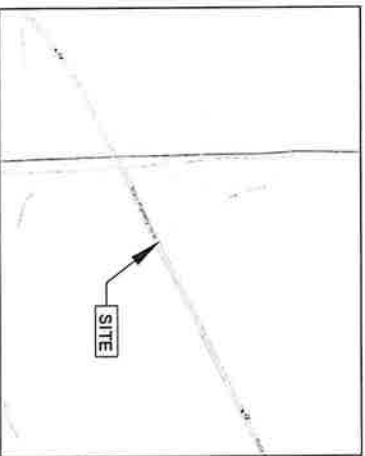
Signature 
Tracy and Grant Williams, X-Milliron Ranch, 1511 Hwy 14 N, Golden, NM, 87047

PCR Energy Diamond Tail Solar Project Puertocito Road Improvements At NM 14 CONSTRUCTION PLANS

SANTA FE COUNTY, NEW MEXICO

February 2024

Sheet Number	Sheet Title
1	COVER SHEET
2	NB NM 14 - WB PUERTOCITO ROAD TURNING MOVEMENT
3	SB NM 14 - WB PUERTOCITO ROAD TURNING MOVEMENT
4	NM 14 - PUERTOCITO ROAD TURNING MOVEMENT IMPROVEMENTS
5	TTCP TURNOUT APPROACH CLOSURE
6	TTCP TURNOUT DEPARTURE CLOSURE
7	TTCP TURNING

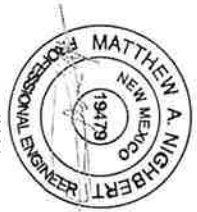


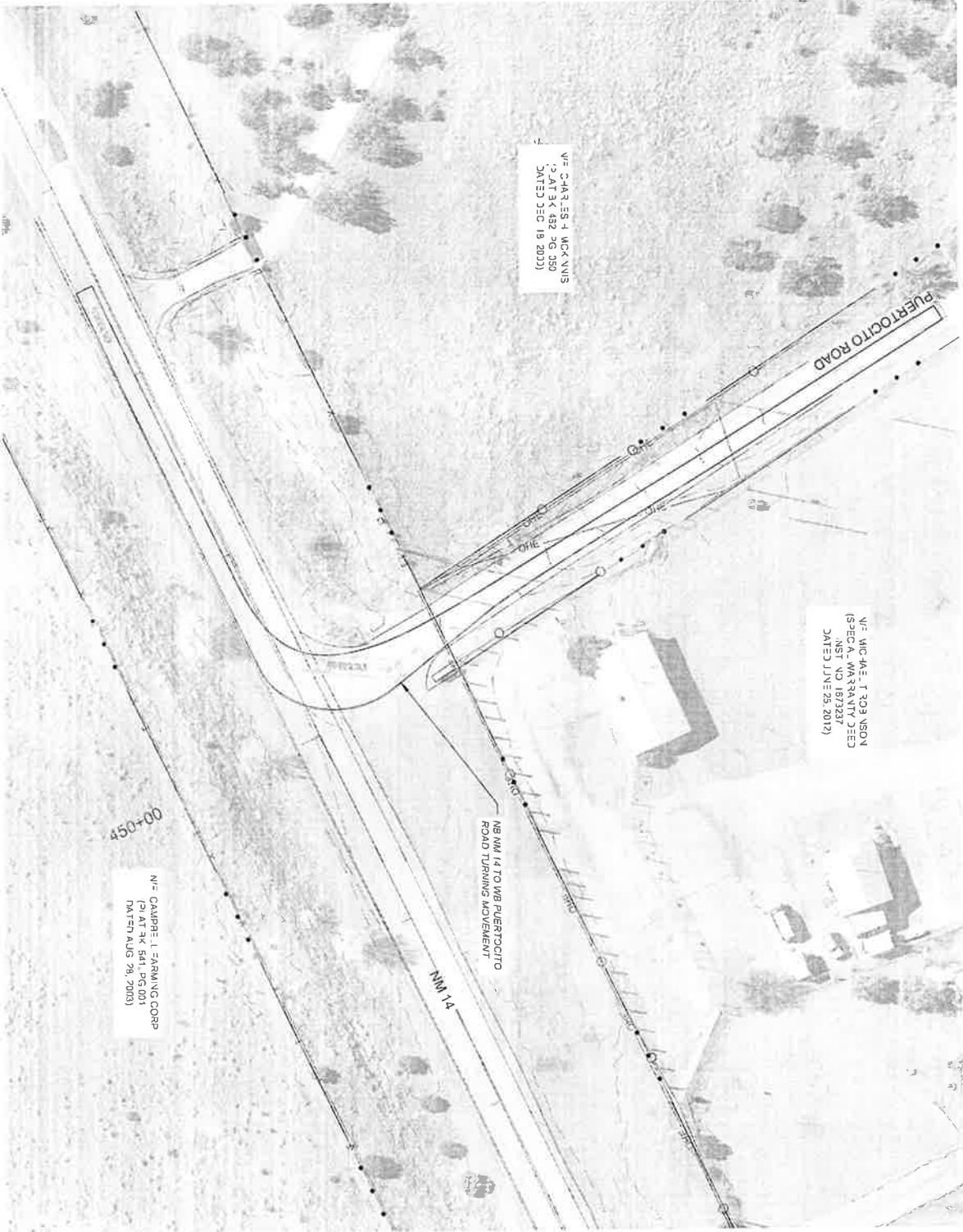
LEGEND

- RIGHT OF WAY
- EDGE OF ASPHALT
- OVERHEAD ELECTRICAL
- EDGE OF GRAVEL
- UNDERGROUND TELEPHONE
- FENCE
- SIGN
- POWER POLE
- GUY ANCHOR
- TELEPHONE BOX
- ELECTRIC BOX
- GATE
- MAIL BOX

NO.	DATE	BY	DESCRIPTION

ASMA
 5454 Vantage Avenue, NE, Suite D
 Albuquerque, NM 87111
 505.261.1111
 Fax: 505.261.1112
 www.asma.org
 ASMA is an Equal Opportunity Employer. Minorities and women are encouraged to apply.





V/E CHARLES A. WICKINS
 PLAT 34, 482 PG. 050
 DATED DEC 19, 2003

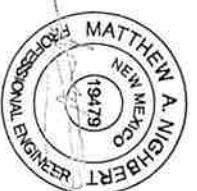
V/E MICHAEL T. COX, NSCN
 (S-E-C-A) WITH 142327
 DATED JUNE 25, 2012

N/E CAMPEL FARMING CORP
 PLAT 74, 581 PG. 001
 DATED JULY 28, 2003

NB NM 14 TO NB PUERTOCITO
 ROAD TURNING MOVEMENT

450+00

NM 14

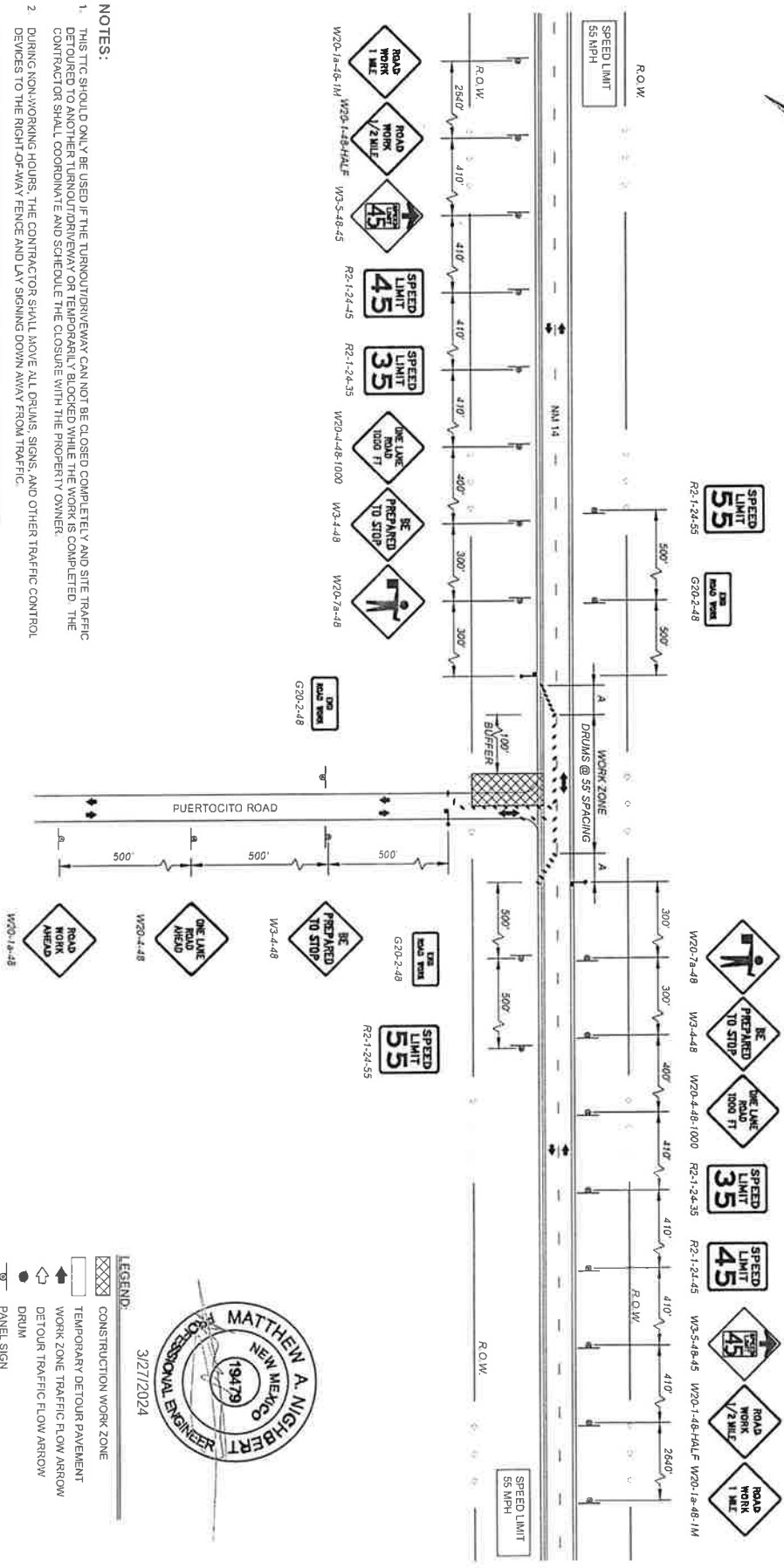


PROJECT NAME: 037179 SOLUNTA, MI I FR & ASSOCIATES DRAWING SCALE: 1"=50' SHEET NO. 2



9232296	DATE	BY	REVISION
03/29/2024	04/01	CA	ISSUE FOR PERMIT
03/29/2024	04/01	CA	ISSUE FOR PERMIT
03/29/2024	04/01	CA	ISSUE FOR PERMIT
03/29/2024	04/01	CA	ISSUE FOR PERMIT

PCR INVESTMENTS



- NOTES:**
1. THIS TTC SHOULD ONLY BE USED IF THE TURNOUT/DRIVEWAY CAN NOT BE CLOSED COMPLETELY AND SITE TRAFFIC DETOURED TO ANOTHER TURNOUT/DRIVEWAY OR TEMPORARILY BLOCKED WHILE THE WORK IS COMPLETED. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE THE CLOSURE WITH THE PROPERTY OWNER.
 2. DURING NON-WORKING HOURS, THE CONTRACTOR SHALL MOVE ALL DRUMS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES TO THE NIGHT-OF-WAY FENCE AND LAY SIGNING DOWN AWAY FROM TRAFFIC.
 3. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL DRIVEWAYS AND TURNOUTS AT ALL TIMES.
 4. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 5. STORAGE OF EQUIPMENT, MATERIALS AND VEHICLES ARE NOT ALLOWED WITHIN THE MDDOT RIGHT OF WAY.
 6. EXCEPT DURING AN EMERGENCY OR WITH PRIOR WRITTEN MDDOT APPROVAL, NIGHT-TIME WORK IS NOT PERMITTED.
 7. PRIORITY SHALL BE GIVEN TO INBOUND RIGHT-TURN. OUTBOUND SHALL BE HELD AT FLAGGER UNTIL SUFFICIENT GAP ON MAINLINE TO ALLOW FOR UNHINDERED MOVEMENT.

LEGEND:

- CONSTRUCTION WORK ZONE
- TEMPORARY DETOUR PAVEMENT
- WORK ZONE TRAFFIC FLOW ARROW
- DETOUR TRAFFIC FLOW ARROW
- DRUM
- PANEL SIGN
- PORTABLE CHANGEABLE MESSAGE BOARD
- TRAFFIC CONE
- SEQUENTIAL ARROW DISPLAY
- TUBULAR MARKER
- VERTICAL PANEL
- TYPE III BARRICADE
- TEMPORARY CONCRETE WALL BARRIER (TCWB)
- FLAGGER STATION
- 100' FLAGGING TAPER 6 DRUMS @ 15' SPACING

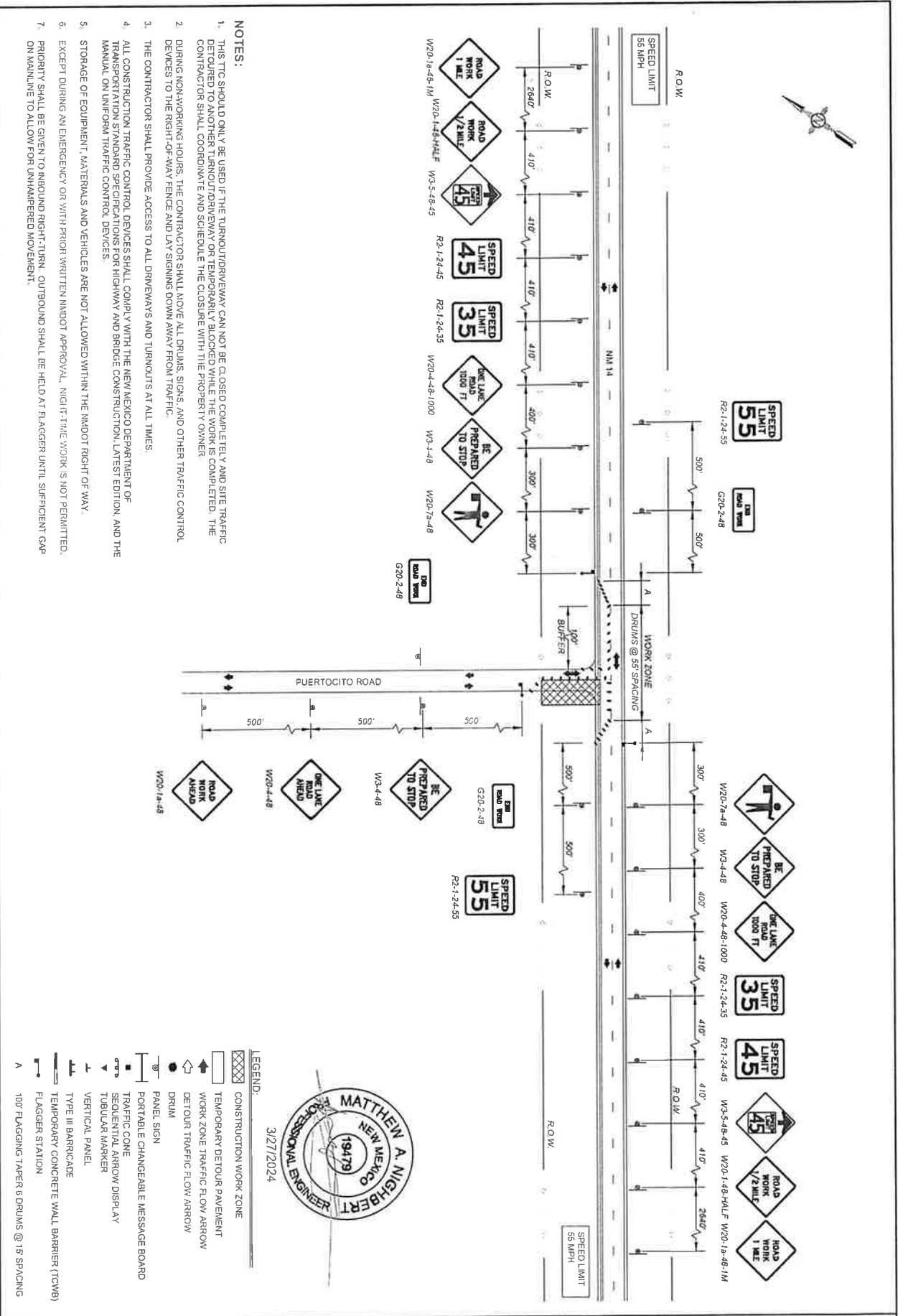


NO	DESCRIPTION	DATE	BY
4			
3			
2			
1			
NO			

9232296
DIAMOND TAIL SOLAR
TTCP TURNOUT APPROACH CLOSURE

PCR INVESTMENTS



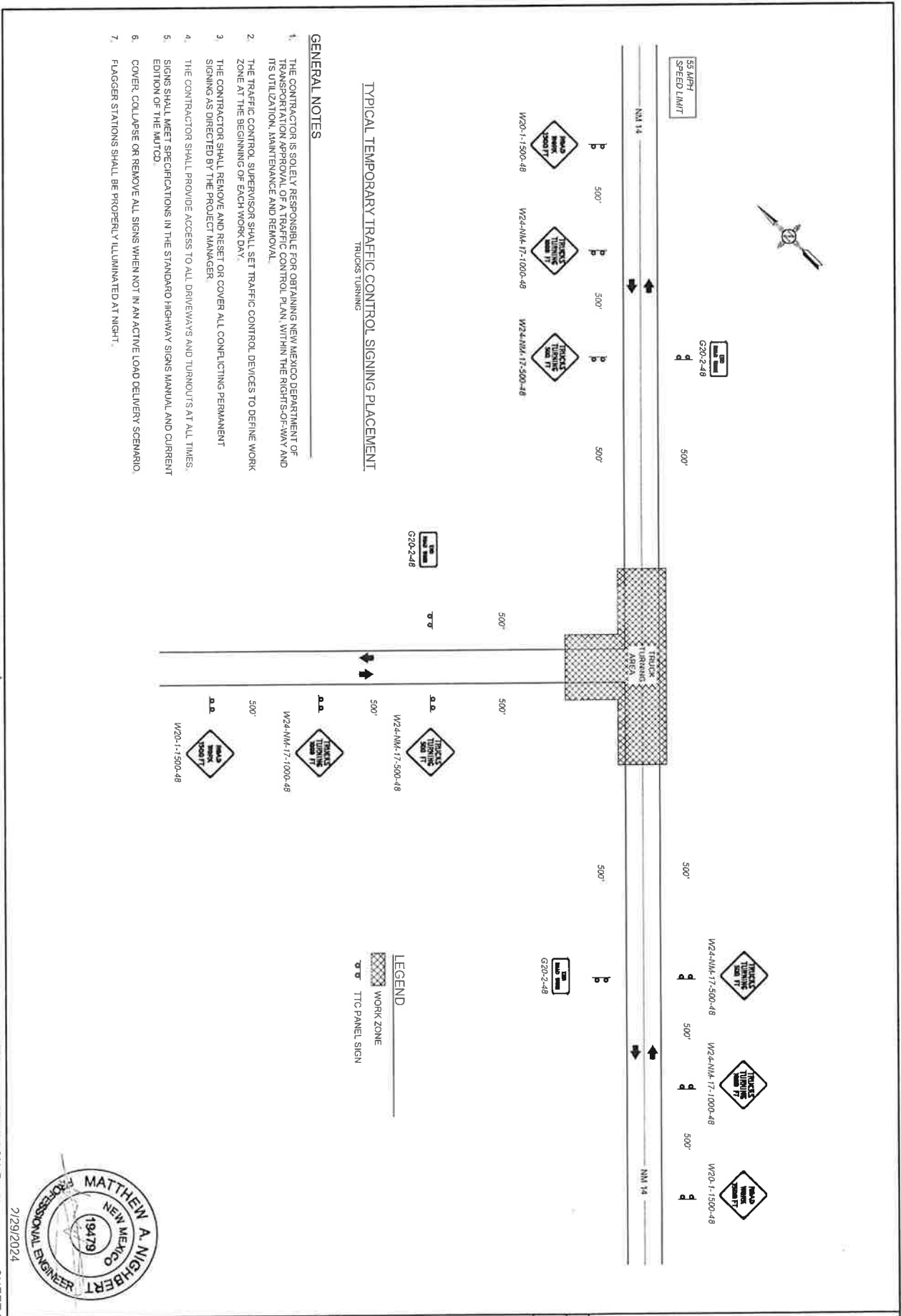


- NOTES:**
1. THIS TTC SHOULD ONLY BE USED IF THE TURNOUT/DRIVEWAY CAN NOT BE CLOSED COMPLETELY AND SITE TRAFFIC DETOURED TO ANOTHER TURNOUT/DRIVEWAY OR TEMPORARILY BLOCKED WHILE THE WORK IS COMPLETED. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE THE CLOSURE WITH THE PROPERTY OWNER.
 2. DURING NON-WORKING HOURS, THE CONTRACTOR SHALL MOVE ALL DRUMS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES TO THE RIGHT-OF-WAY FENCE AND LAY SIGNING DOWN AWAY FROM TRAFFIC.
 3. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL DRIVEWAYS AND TURNOUTS AT ALL TIMES.
 4. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 5. STORAGE OF EQUIPMENT, MATERIALS AND VEHICLES ARE NOT ALLOWED WITHIN THE MDDOT RIGHT OF WAY.
 6. EXCEPT DURING AN EMERGENCY OR WITH PRIOR WRITTEN MDDOT APPROVAL, NIGHT-TIME WORK IS NOT PERMITTED.
 7. PRIORITY SHALL BE GIVEN TO INBOUND RIGHT-TURN. OUTBOUND SHALL BE HELD AT FLAGGER UNTIL SUFFICIENT GAP ON MAINLINE TO ALLOW FOR UNHINDERED MOVEMENT.



- LEGEND:**
- CONSTRUCTION WORK ZONE
 - TEMPORARY DETOUR PAVEMENT
 - WORK ZONE TRAFFIC FLOW ARROW
 - DETOUR TRAFFIC FLOW ARROW
 - DRUM
 - PANEL SIGN
 - PORTABLE CHANGEABLE MESSAGE BOARD
 - TRAFFIC CONE
 - SEQUENTIAL ARROW DISPLAY
 - TUBULAR MARKER
 - VERTICAL PANEL
 - TYPE III BARRICADE
 - TEMPORARY CONCRETE WALL BARRIER (TCWB)
 - FLAGGER STATION
 - 100' FLAGGING TAPE @ 15' SPACING

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1			



TYPICAL TEMPORARY TRAFFIC CONTROL SIGNING PLACEMENT
TRUCKS TURNING

GENERAL NOTES

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING NEW MEXICO DEPARTMENT OF TRANSPORTATION APPROVAL OF A TRAFFIC CONTROL PLAN WITHIN THE RIGHTS-OF-WAY AND ITS UTILIZATION, MAINTENANCE AND REMOVAL.
2. THE TRAFFIC CONTROL SUPERVISOR SHALL SET TRAFFIC CONTROL DEVICES TO DEFINE WORK ZONE AT THE BEGINNING OF EACH WORK DAY.
3. THE CONTRACTOR SHALL REMOVE AND RESET OR COVER ALL CONFLICTING PERMANENT SIGNING AS DIRECTED BY THE PROJECT MANAGER.
4. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL DRIVEWAYS AND TURNOUTS AT ALL TIMES.
5. SIGNS SHALL MEET SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL AND CURRENT EDITION OF THE MUTCD.
6. COVER, COLLAPSE OR REMOVE ALL SIGNS WHEN NOT IN AN ACTIVE LOAD DELIVERY SCENARIO.
7. FLAGGER STATIONS SHALL BE PROPERLY ILLUMINATED AT NIGHT.



2/29/2024

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1			

PCR INVESTMENTS

9232296
DIAMOND TAIL SOLAR
TTCP TURNING



TURQUOISE TRAIL REGIONAL ALLIANCE

ALLIANCE MEMBERS LINKS

[Earthworks Action](#)

[Wild Earth Guardians](#)

[East Mountain Regional Trail Council](#)

[Turquoise Trail Association](#)

[Santa Fe Green Chamber of Commerce](#)

[East Mountain Coalition of Neighborhood Associations](#)

[San Pedro Neighborhood Association](#)

[Galisteo Community Association](#)

[Coalition for La Bajada Mesa](#)

[Highway 285 Sustainability Alliance](#)

[Rural Conservation Alliance](#)

[Rio Grande Chapter of the Sierra Club](#)

[Pathways Wildlife Corridor](#)

[Concerned Citizens of Cerrillos](#)

[San Marcos Association](#)

[Madrid Merchants Association](#)

[Madrid Cultural Projects](#)

[Las Candelas de Los Cerrillos](#)

[Hamaatsa](#)

Along with HOAs and Traditional Communities Along NM14

Turquoise Trail Regional Alliance

My name is Karen Yank, and I am the president of the Turquoise Trail Regional Alliance and I'm happy to say that this year we are celebrating our 20th year in existence. I moved to Golden, New Mexico from Wisconsin in 1991, and I have to say, I was so pleased that I was able to find property at the absolute center point of our only National Scenic Byway that connects our International Airport to Santa Fe our State Capital. It didn't take me long to realize that I had moved to a magical place and that the Turquoise Trail needed protection and preservation. I founded our organization in 2004 and have been working with our many member groups along the Trail to preserve the view shed and way of life on this important National Scenic Byway. Around that same time, the Bureau of Land Management that care takes our public lands on the top of the San Pedro Mountains was considering a large-scale gravel operation right at the base of the mountain and along the Turquoise Trail. My group worked to partner with BLM to redo their resource management plan, that was long overdue, for this unique area along NM 14. Their decision came out in favor of preservation of our public lands along the Turquoise Trail. BLM cited that the best use of these lands would be for viewshed preservation and human renewal, such as hiking and outdoor recreation for New Mexico residence and tourists alike. After this decision came out, we continued to work as partners with BLM to find a source of land to provide trailheads and parking to this previously landlocked public land. The TTRA reached out to the largest landowner along this portion of the Turquoise Trail which is the Campbell Farming Corporation. Campbell Farming owned 320 acres of land at the base of the San Pedro Mountains and directly off our National Scenic Byway. They agreed to put a joint application into Santa Fe County open space to purchase the land for preservation and to provide trailheads in parking for these hiking trails into the San Pedro Mountains. After many site visits and the approval of the Santa Fe County Commissioners, Santa Fe County Open Space purchased these 320 acres. The viewshed from the top of Cerro Colombo Peak in the San Pedro Mountains would be destroyed by a large panoramic view of this proposed solar plant. The TTRA is also working with BLM and Albuquerque Open Space on the other side of NM 14 just south of the proposed solar plant to create more trails and eventually to connect these trails all the way from the Sandia Mountains to the San Pedro Mountains. As you can see the TTRA has been in partnership with federal, state, city, and county agencies to create a preservation zone at the center point or heart of our National Scenic Byway the Turquoise Trail. Voting no to the needed zoning change for the Diamond Tail Ranch is a win for all New Mexico. You will be voting yes to preserving our only National Scenic Byway the Turquoise Trail connecting our two largest metropolitan cities that create the land of enchantment for New Mexicans and tourists alike. You would be voting yes to partnering with BLM, Santa Fe County Open Space, Albuquerque Open Space, Santa Fe County, Campbell Farming Corporation, the Turquoise Trail Regional Alliance, and local communities to continue our preservation efforts at the heart of the Turquoise Trail. Furthermore, you would be encouraging PCR to seek a better location in Sandoval County that would provide for the success needed for their solar project, while providing success for New Mexico in green energy.

Respectfully,
Karen Yank
President Turquoise Trail Regional Alliance



Campbell Management

December 2, 2024

Planning & Zoning Department
Sandoval County Administration Planning & Zoning Department
Sandoval County Administration Building
1500 Idalia Road, Building "D" 2nd floor
Bernalillo NM, 87004
State of New Mexico
Attn: Director

Re: ZNCH-24-005

Dear Director and P&Z Commissioners:

Thank you for taking the time to read and review our letter of concern.

The Campbell family has been a large if not the largest landowner along NM state hwy 14 since prior to its existence. In fact, Campbell specifically granting a right of easement for its path and construction while still retaining ownership. Campbell has always been a strong proponent of this scenic byway which has reached national prominence as the scenic and artful way for residents and annual tourist the travel to and from Albuquerque and Santa Fe.

One of the biggest strengths of this treasured asset for New Mexico is the striking natural beauty and vistas. The Campbells have always been proponents of rational alternative energy sources in particular solar. We are currently involved with several at different locations in the state. However, the common location characteristic among them, besides access to strong sunlight, they are all located in remote locations not easily visible from the majority of the public or along tourist corridors.

The proposed location of this current proposed zone change not only seems to defy the economic feasibility with remote locations its visual impact on one of New Mexico's greatest tourist assets defies logic.

No doubt the project itself has merits but placing it at this location considering the cost benefit of damaging one of the greatest tourist corridors and asset for the state can not be overstated.

We humbly recommend moving the project location to one of the MANY available sites better suited for this type of land use in order to preserve the beauty of arguably one of the best national scenic byways in the United States.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Gately", written over a horizontal line.

Robert Gately
President
Campbell Farming Corporation

Justin S. Greene
Commissioner, District 1

Anna Hansen
Commissioner, District 2

Camilla Bustamante
Commissioner, District 3



Anna T. Hamilton
Commissioner, District 4

Hank Hughes
Commissioner, District 5

Gregory S. Shaffer
County Manager

December 10, 2024

**Sandoval County Planning and Zoning Commission
Via Email**

RE: Rezoning for Diamond Trail Ranch

Dear Sandoval County Planning and Zoning Commissioners,

I write to request a denial of the rezoning of Diamond Tail Ranch from Residential Agriculture Ranching to Special Zoning to accommodate large scale solar proximate to the Turquoise Trail National Scenic Byway – a border shared with Santa Fe County District 3.

As solar energy is critical to the transition to renewable energy, we must take into consideration that housing, agriculture and ranching remain in the highest priorities for the residents of our state.

I offer that both Sandoval and Santa Fe Counties have vast landscapes that may be more appropriate for utility scale solar and that consideration of a more appropriate location can be a win-win for all of our residents.

Respectfully,

Camilla M. Bustamante, PhD. MPH
Santa Fe County Commissioner
District 3

Cc: Karen Yank, President Turquoise Trail Regional Alliance

Wetland and Waters of the United States Delineation Report

**Diamond Tail Solar
Northwest of Golden, New Mexico**

December 30, 2022

Terracon Project No. 66227139



PREPARED FOR:
INVESTMENTS SP 4
Houston, Texas

there was significantly more bare ground and cactus species such as club cholla (*Grusonia clavate*) and plains prickly pear (*Opuntia polyacantha*).

4.2 Wetlands

No wetlands were observed within the site boundary and transmission line corridor. Two of the four sample points were found to have upland plants like sideoats grama (*Bouteloua curtipendula*) and oneseed juniper (*Juniperus monosperma*) but none of the sample points indicators for hydric soils. The sample points collected did have hydrology indicators that consisted of the primary indicators of drift and sediment deposit but there were no hydric soils or hydrophytic vegetation present. Photographs of the site are located in Appendix B and datasheets are located in Appendix C.

4.3 Streams

A total of ±14.64 acres of ephemeral and intermittent tributaries were mapped within the project area (Appendix D). Two arroyo intermittent tributary are located within the site. The Arroyo Una de Gato (IT-1 and IT-2) traverses the southern portion of the transmission line corridor while the other intermittent tributary, Arroyo Coyote (IT-3 and IT-4) traverses the northern portion of the transmission line corridor; both total approximately 8,381.79 linear feet. A total of 42 ephemeral tributaries (ET) were mapped within the project area and transmission line corridor. All of the ephemeral tributaries mapped inside the transmission line corridor had ordinary high water marks (OHWM) with established bed and bank along with all the ephemeral tributaries inside the proposed solar array area except for ET-4, 5, and 6. During the field visit all of these ephemeral tributaries had evidence of recent hydrology in the form of sediment and drift deposits due to a large scale rain event the week both. These ephemeral tributaries within the transmission line corridor and on the west side of the project area flow into the two intermittent arroyos. In total, approximately 46,299.9 linear feet of ephemeral tributaries were documented within the project area and a table with the information for these features can be found in Appendix D. Based on its connection to the Arroyo Una de Gato and Arroyo Coyote, it is Terracon's opinion that the intermittent arroyos and ephemeral tributaries with connection to the intermittent arroyos, excluding tributaries ET-4, 5, and 6, will likely to be considered jurisdictional by USACE.

5.0 CONCLUSION AND RECOMMENDATIONS

According to the Federal Register (33CFR §328.3(a)), WOTUS may include intrastate rivers and streams, including impoundments and other waters. Since the 2006 Supreme Court decision (*Rapanos v. U.S.*, 547 S. Ct. 715), the USACE and EPA have continued to assert jurisdiction over traditionally navigable waters, non-navigable tributaries of traditionally navigable waters (TNWs)

where the tributaries are relatively permanent waters (RPWs) (i.e., streams with perennial or intermittent tributaries), impoundments of TNWs and RPWs, and wetlands directly abutting and adjacent to such tributaries.

According to our preliminary site visit observations, two intermittent tributaries with two crossings totaling ±8, 381.79 linear feet (±12.67 acres) are present within the project area (Appendix D). It is Terracon's opinion that the intermittent tributaries Arroyo Una de Gato and Arroyo Coyote, are likely to be considered jurisdictional. The segments of intermittent tributaries Arroyo Una de Gato and Arroyo Coyote would be considered relatively permanent tributaries within the Rio Grande tributary system. Therefore, consistent with the rule and guidance IT-1, IT-2, IT-3, and IT-4 within the study area would likely be considered WOTUS and subject to USACE jurisdiction under Section 404.

Current USACE guidelines require a significant nexus evaluation for: (1) waterbodies and tributaries that are not relatively permanent waters (i.e., ephemeral), including adjacent wetlands if present; and (2) wetlands adjacent to, but not directly abutting, a traditionally navigable or relatively permanent water. A significant nexus exists if the aquatic features in question have more than a speculative or insubstantial effect on the chemical, physical, or biological integrity of a traditionally navigable water. Establishment of a significant nexus is necessary to establish jurisdiction as a WOTUS.

Following the Rapanos decision, the USACE and the EPA released a series of guidance documents summarizing the types of features that would typically be considered jurisdictional, features that would be evaluated on a case-by-case basis via significant nexus determinations, and features that are generally not considered jurisdictional even when a significant nexus may exist. The guidance document states that agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow);
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

All of the ephemeral tributaries, except for ET-4, ET-5, and ET-6, could be considered jurisdictional due to the connectivity to the potentially jurisdictional intermittent tributaries Arroyo Una de Gato and Arroyo Coyote as well as the observable hydrologic features. ET-4, ET-5, and ET-6 would not likely be considered jurisdictional under the prevailing guidance document because these tributaries do not have a direct connection downstream to a navigable water of the United States.

However, the USACE is the regulatory authority regarding jurisdiction of wetlands and other protected waters. The USACE makes the final determination regarding regulatory status of

waterbodies and the potential need for a permit. As a result, Terracon recommends a jurisdictional determination be made by the USACE and a permit be obtained prior to impacting any of these features.

6.0 REFERENCES

Environmental Protection Agency (EPA). 1972. Overview of Clean Water Act Section 404. Available at: <https://www.epa.gov/cwa-404/overview-clean-water-act-section-404>

United States Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Available at: <https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Website%20Organization/Arid%20West%20Regional%20Supplement.pdf>

EPA. 2021. Pre-2015 Regulatory Definition and Practice. Available at: <https://www.epa.gov/wotus/current-implementation-waters-united-states#Pre-2015>

USDA Natural Resources Conservation Service (NRCS). 2022. Plant List of Accepted Nomenclature, Taxonomy, and Symbols (PLANTS) Database. Available at: <https://plants.usda.gov/home>

Tesla Megapack on fire in 'minor incident' at battery storage site in Australia

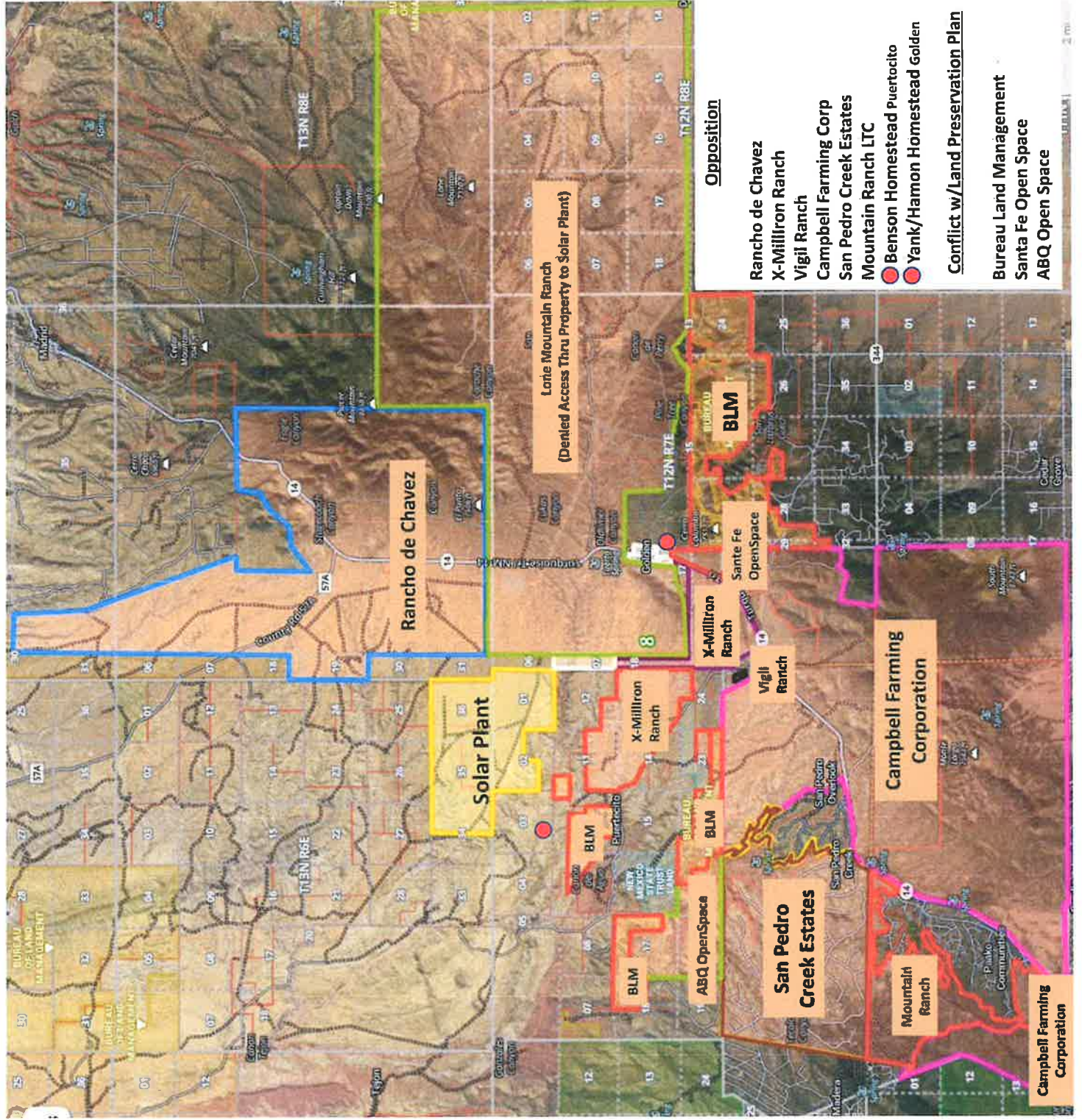
September 27, 2023

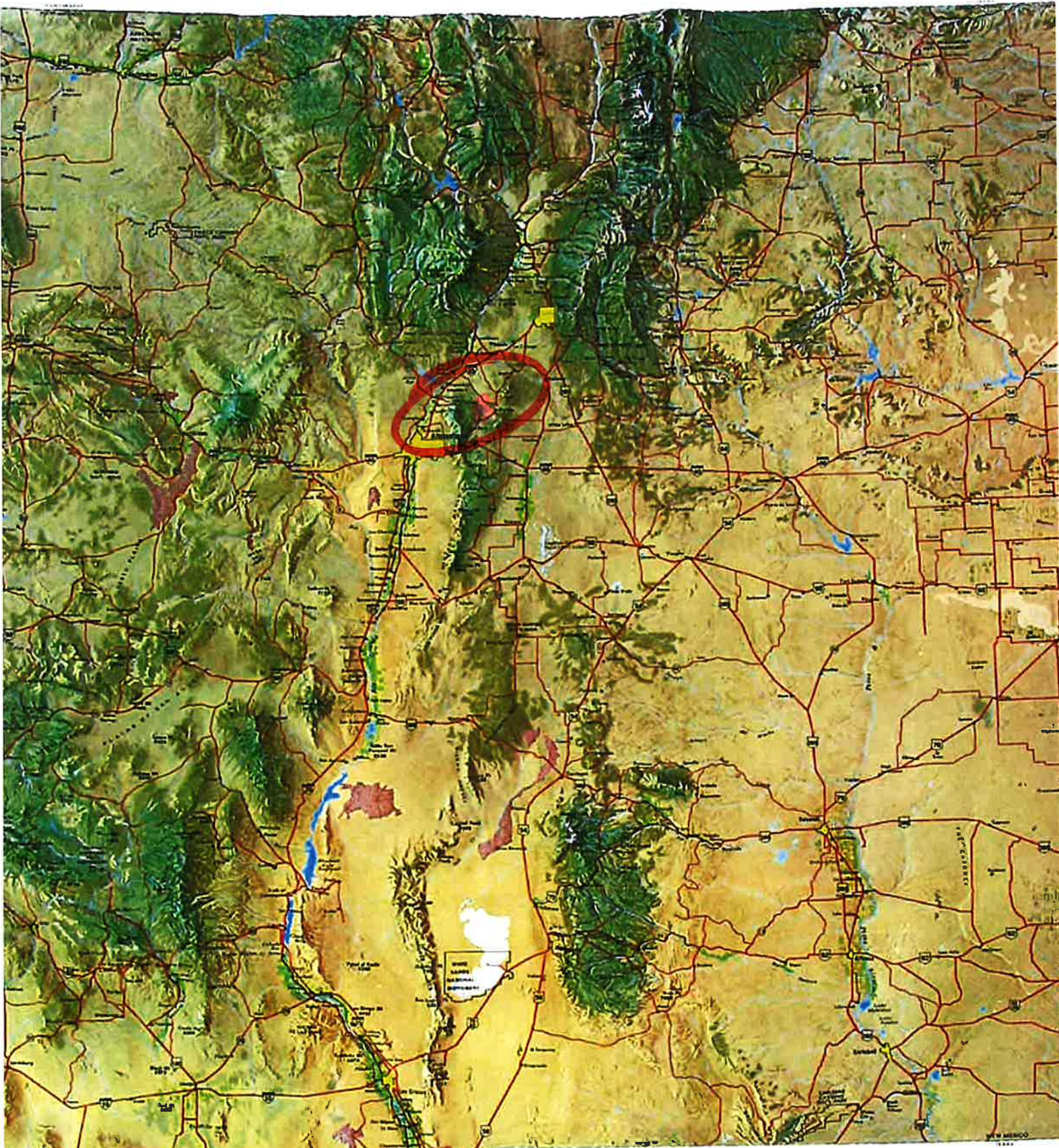


<https://www.energy-storage.news/tesla-megapack-on-fire-in-minor-incident-at-battery-storage-site-in-australia/> There was a Tesla Megapack battery energy storage system (BESS) units caught fire last night at Bouldercombe Battery Project in Rockhampton, around 640 km from the state capital Brisbane. ABC said police had urged nearby residents to “stay indoors and keep respiratory medication close by”. The ABC report noted officers said hazardous smoke was spread across the local area. The incident marks the latest unfortunate occurrence of fire at a large-scale battery storage facility this year with perhaps the most notable being the spate of three that happened in the space of a couple of months in spring and summer in New York State, US. It is also thought to be the **second fire to occur involving Tesla Megapacks, with the first, also in Australia, happening during pre-commissioning testing** at the Victorian Big Battery, the country’s biggest lithium-ion battery project to date at 300MW/450MWh.

Note: The Tesla Megapack is the PCR choice for the solar farm near Golden. The Sandia Mt. is only 1.7 miles away!!! These fires occurred before the solar farms were even brought online.

Adjacent Land Owners - Opposing Solar Plant





Culture

State	1/4"
Neighboring States	1/4"
U.S. Highways	1/4"
Interstate Highways	1/4"
Low Through Highways	1/4"
Transit Routes	1/4"

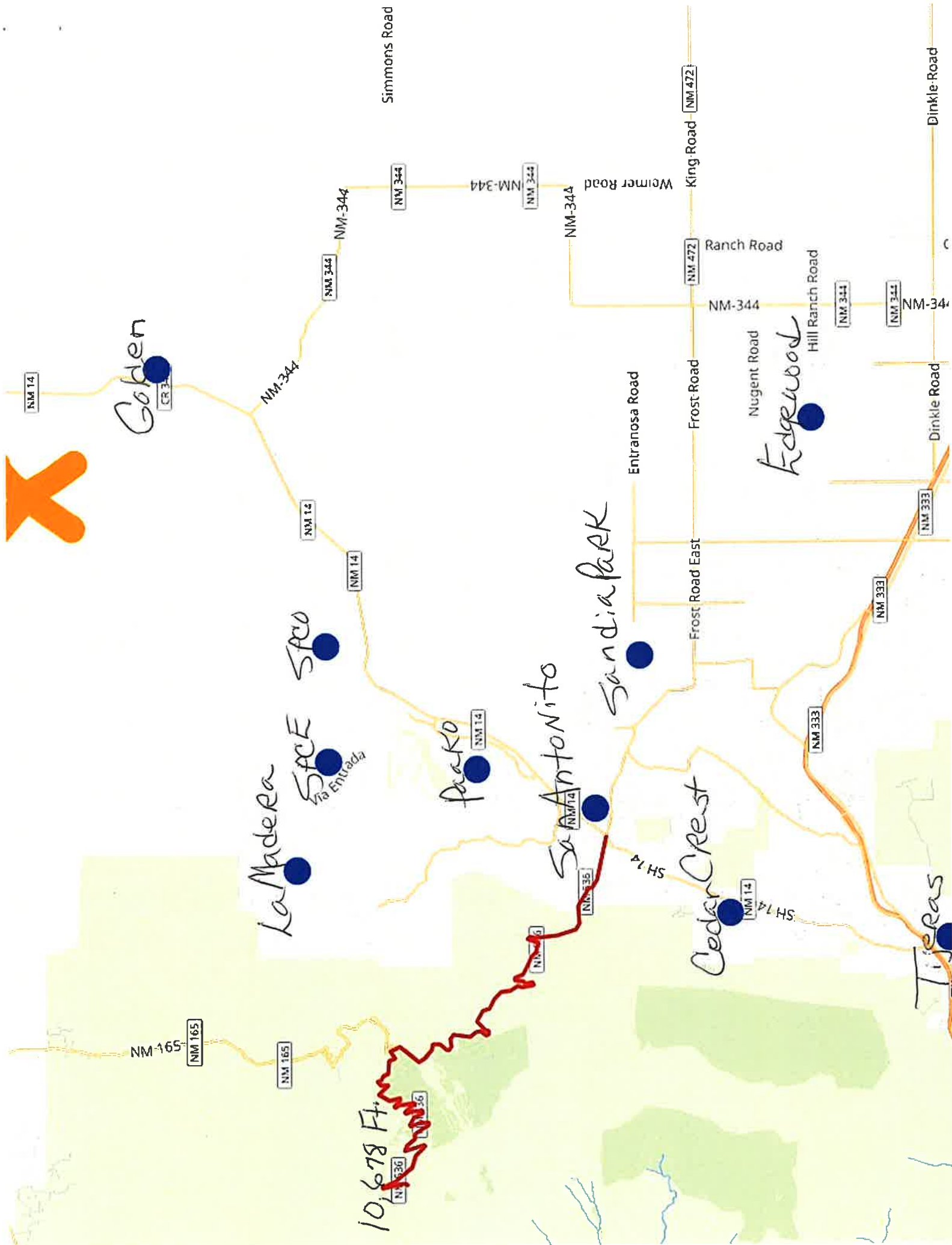
New Mexico

MANUFACTURED IN U.S.A.

Vertical Scale 1:167 - Approx. 1000' Horizontal Scale 1" = Approx. 25 Miles

Manufactured and Produced by
HUBBARD
 11111 11111 (Original File: 11111)





Golden

La Madera

SPCF
Via Entrada

SPO

Peko

San Antonio

Sandia Park

Cedar Crest

Edgewood

Tijeras

10,678 Ft.

Simmons Road

NM 344

NM 344

NM 344

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

NM 14

Entranosa Road

Frost Road East

Frost Road

King Road

Weimer Road

Ranch Road

Nugent Road

Hill Ranch Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

Dinkie Road

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

NM 165

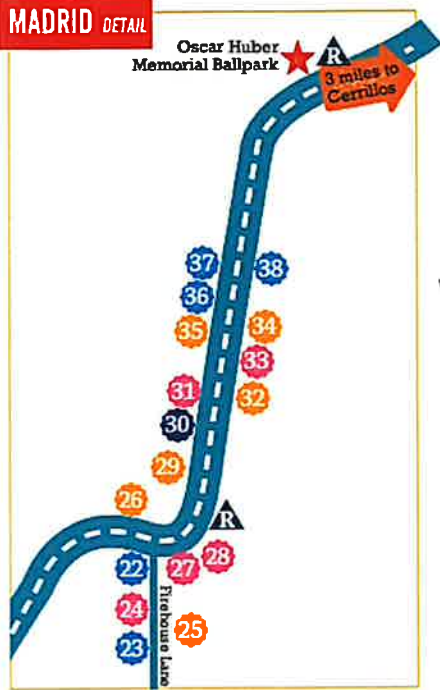
NM 165

NM 165

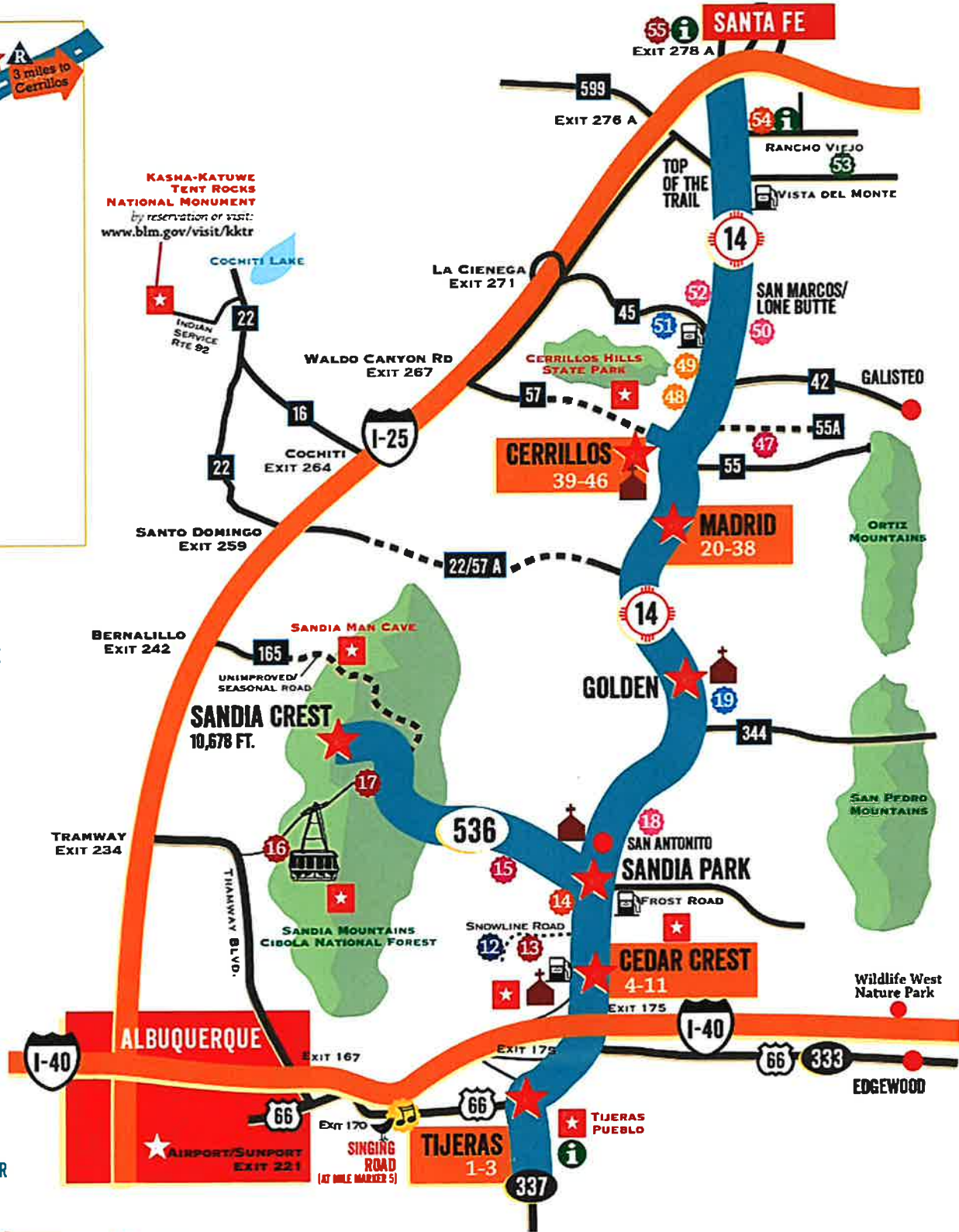
NM 165

NM 165

MADRID DETAIL



KASHA-KATUWE TENT ROCKS NATIONAL MONUMENT
by reservation or visit:
www.blm.gov/visit/lktr



- CAMPING/RV
- ENTERTAINMENT/RECREATION
- GALLERY
- LODGING
- MUSEUM
- RESTAURANT/BREWERY
- REAL ESTATE
- SERVICES
- SHOPPING
- HISTORIC CHURCH
- GAS STATION
- PUBLIC RESTROOM
- HIKING OPPORTUNITIES
- INFORMATION/VISITOR CENTER



MILEAGE

HWY 14 & NM 536 = 67 MILES, 107.8K
 HWY 14 = 54 MILES, 86.9K
 Cedar Crest - Sandia Park = 6m/10k
 Sandia Park - Golden = 15m/24k
 Golden - Madrid = 11m/18k
 Madrid - Cerrillos = 3m/5k
 Cerrillos - Santa Fe = 19m/31k
 NM 536 = 13 MILES, 20.9K

FOR MORE INFORMATION
 ABOUT THE TURQUOISE TRAIL, VISIT
WWW.TURQUOISETRAIL.ORG
 OR EMAIL: TRAIL@TURQUOISETRAIL.ORG



Diamond Tail Ranch a Movie

Location

May 8, 2016

I think we have some of the best undisturbed back drops around. Of course I'm partial, but have the photos to prove it.

16



1



Most relevant



Melany Luna Sarafis
Yes you do!

8y Like Reply



Write a comment...





This photo is from a post.

View post



Diamond Tail Ranch a Movie

Location

March 1, 2015 ·



4



Write a comment...





Diamond Tail Ranch a Movie

Location

March 14, 2015

Never Alone

This day I was scouting out a shorter length tour option by myself. And even though I do this almost everyday I still find the joy in my friends who live out there.

12

1



Most relevant



Diamond Tail Ranch a Movie Location
Thanks Sarah.

9y Like



Write a comment...





Diamond Tail Ranch a Movie

Location

October 26, 2015 · 🌐

A Famous Diamond Tail Resident
Fabio, one of wild ones. And he knows it.

👍 7



Write a comment...



NOVA FLORA



Diamond Tail Ranch a Movie Location

February 27, 2015 · 🌐

While most parts of the ranch are open to filming we do have **sacred sites** that makes this place special. Although you can see our dramatic backdrops to these treasures.

👍 18

👤 2



Most relevant ▾



Patricia Brown
awesome

9y Like Reply 2 👍

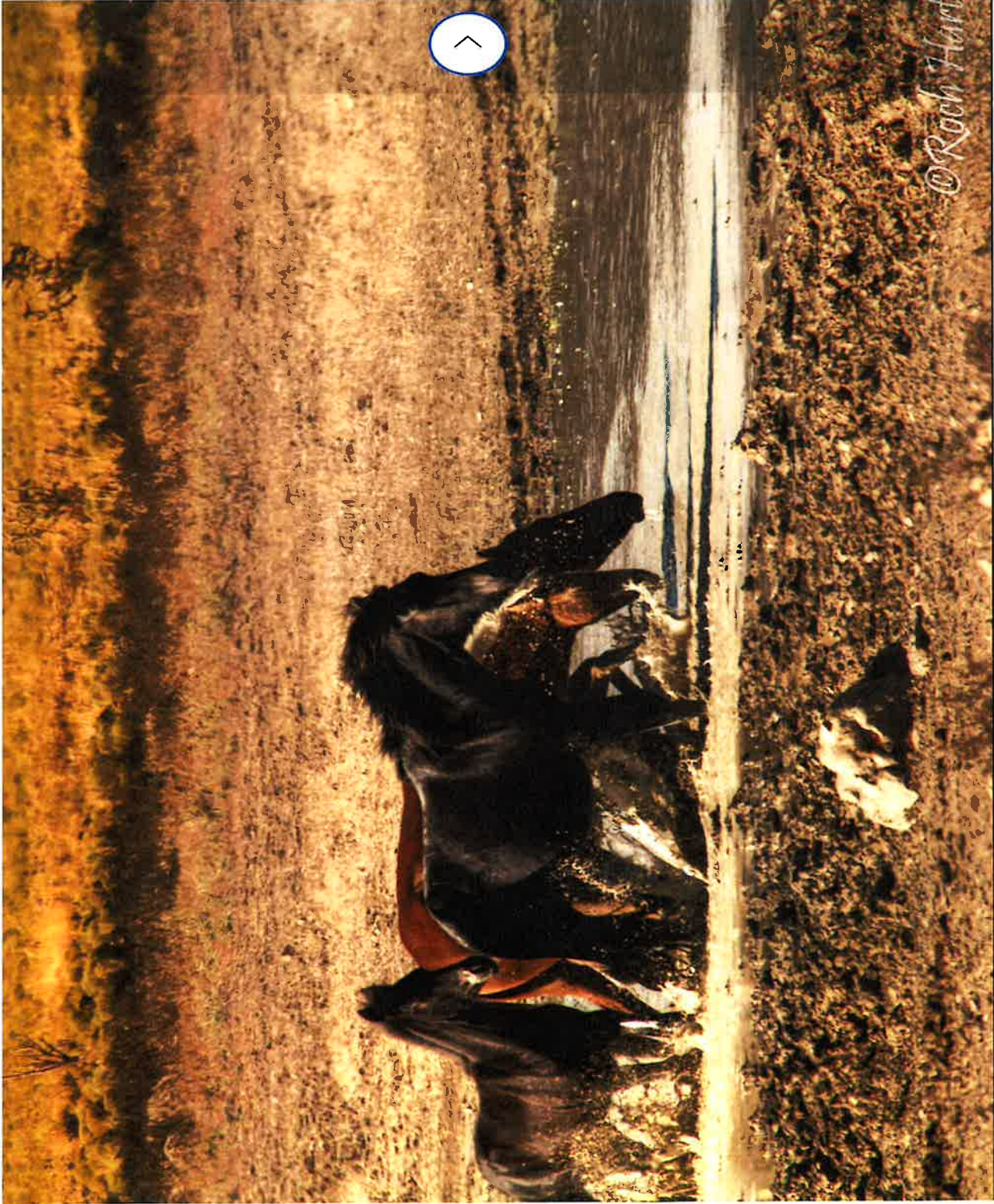


Diamond Tail Ranch a Movie Location · 1 Repl



Write a comment...





Diamond Tail Ranch a Movie

Location

October 27, 2015 · 🌐

It was Fun

Fun in the mud. Some of our wild horses in the high desert of New Mexico.

7

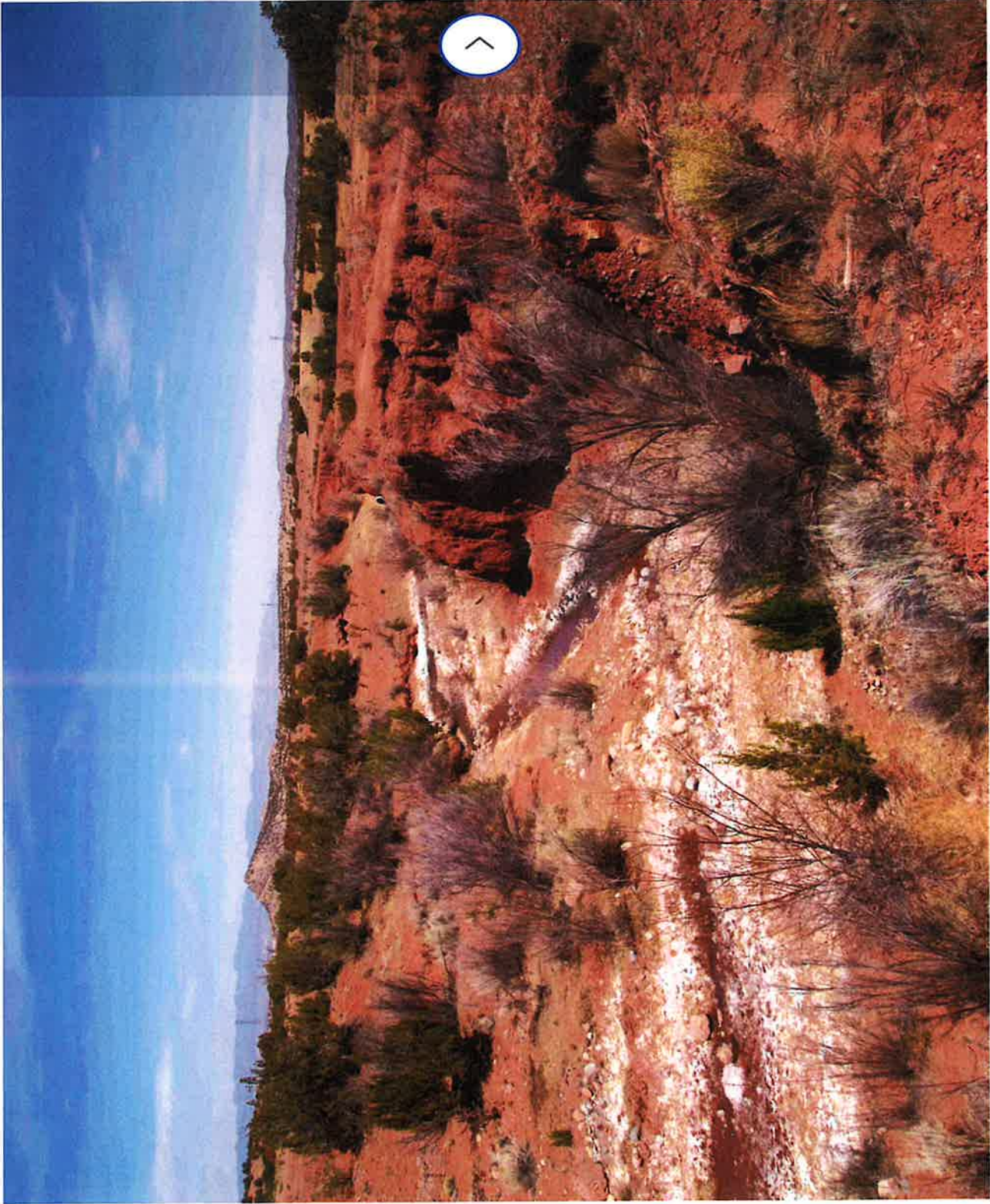
8



Write a comment...







Diamond Tail Ranch a Movie Location

February 27, 2015 · 🌐

One of our intermittent springs.

👍 7



Write a comment...



Diamond Tail Ranch a Movie

Location

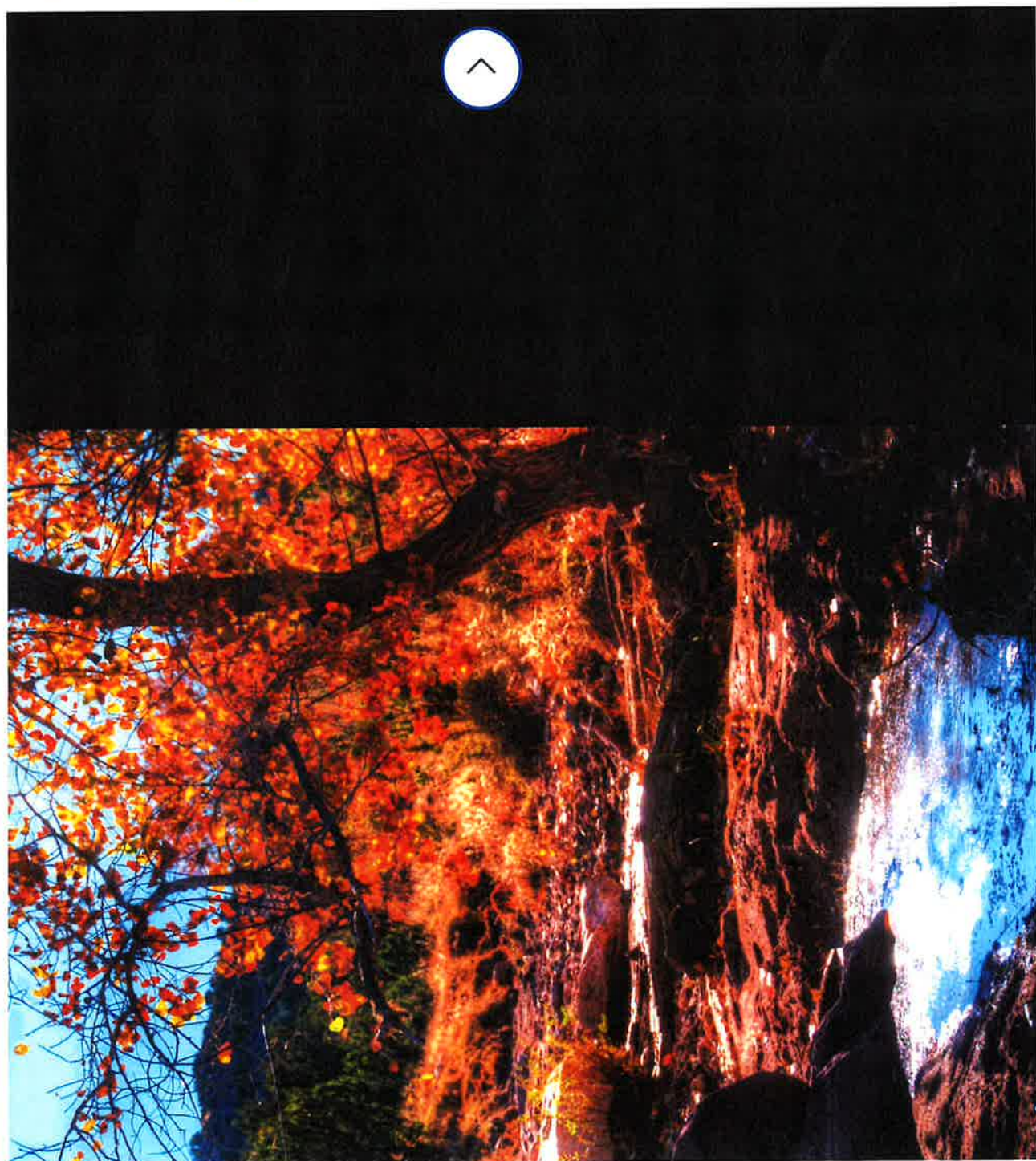
November 14, 2015 · 🌐

A Pool of Sky
Somewhere on the ranch.

👍 10

👍 💬 ➦

👤 Write a comment...
😊 📷 📱 🗉





Diamond Tail Ranch a Movie

Location

February 27, 2015 · 🌐

One of our watering holes.



7



Most relevant ▾



Donald T. Marion

If that is a natural spring, there has to be broken pottery from occupation by the Anasazi scattered about.

9y Like Reply



Write a comment...



