



Rowan Percheron Data Center

Morrow County Planning Commission

Continued Hearing

July 25, 2023

(Docket No. AC-145-23, AC(Z)-146-22, AZM-147-23)

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Continued Presentation



- Introduction of Team
- Response to Planning Commission Questions
 - Tower Road: Construction Traffic and Road Safety
 - Project Parcel: Big Game and Wetland Habitat
 - Project Parcel: Soils and Agricultural Productivity
 - Alternatives Analysis: Deeper Dive
 - Goal 14 Exception: Further Evaluation
 - Water Supply and Water Supply Route
- Closing Remarks and Requested Recommendation to Board of County Commissioners

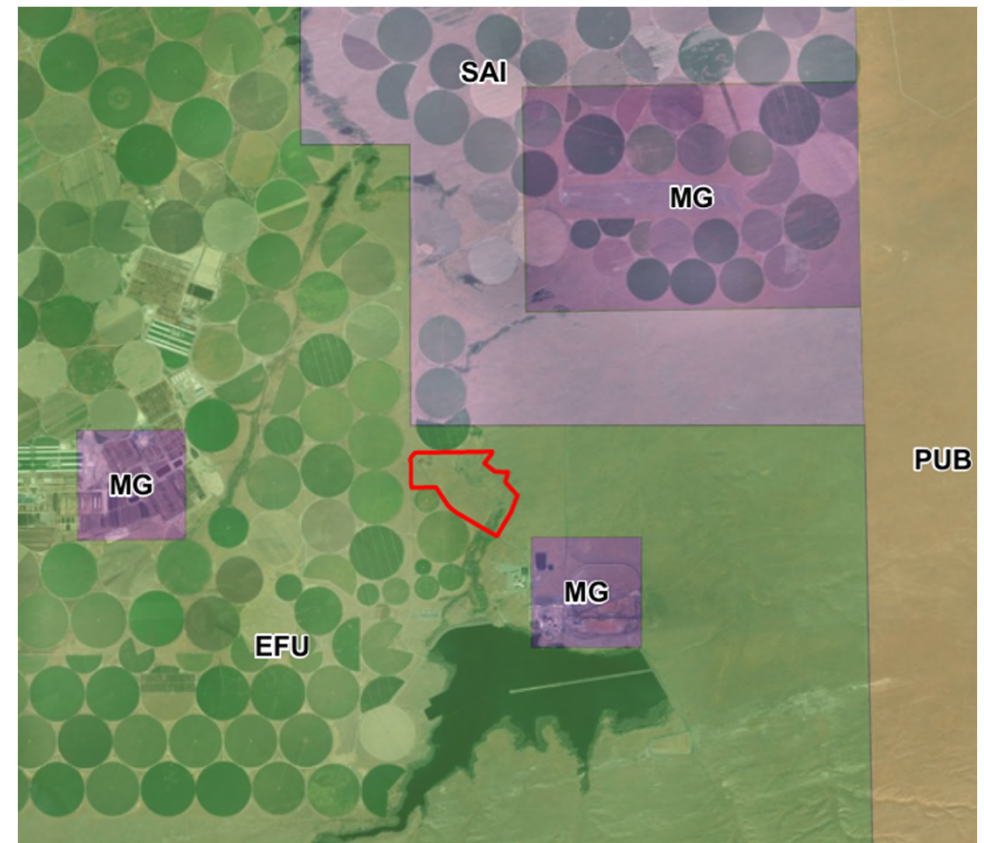
Recap: Applicant's Request

- Applicant seeks approval to develop and operate a data center campus on a parcel of nonproductive agricultural land near other utility and industrial infrastructure.
- Approval requires requested goal exceptions to allow data center use on up to 190 acres as industrial use. Approval would limit industrial uses only to the requested use only.



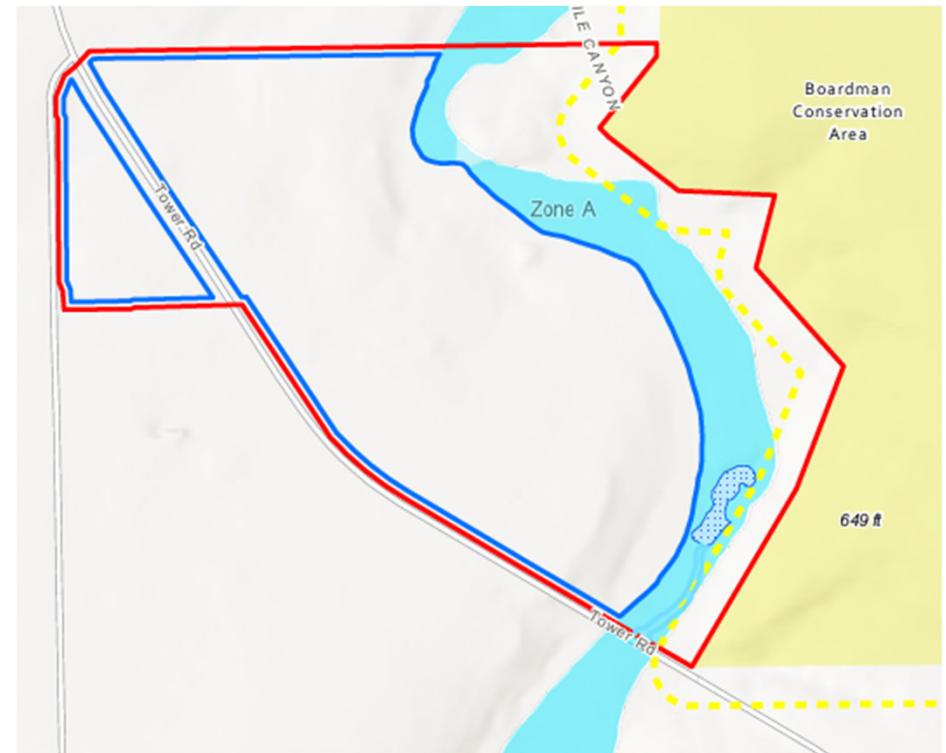
Recap: Project Parcel

- 274-acre parcel off Tower Road, ½ mile from Carty reservoir and power generation site
- Owned by Threemile Canyon Farm; no history of agricultural cultivation; no irrigation; poor soil quality
- Adjacent to existing transmission ROW, existing (Grassland Switch Station), and planned transmission infrastructure (Grassland Annex Substation) for power supply



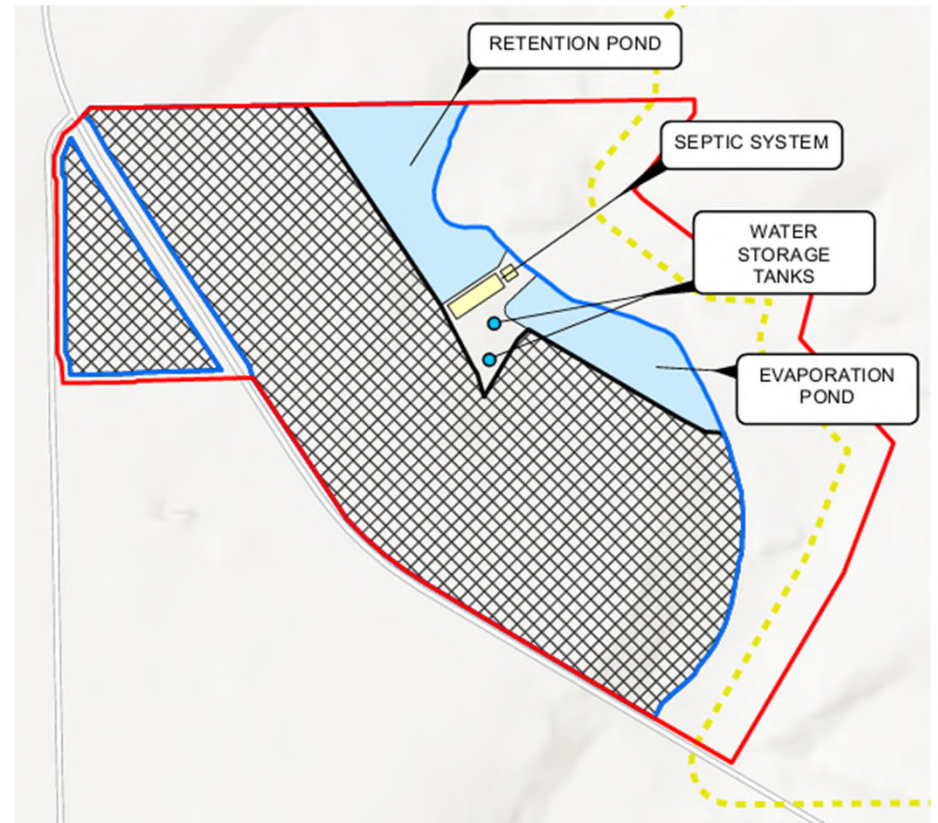
Recap: Project Footprint

- Project Footprint (blue) microsited within Project Parcel (red) to avoid environmental impacts
 - 190-acre footprint in Project Parcel
 - Avoids wetlands and drainages
 - Avoids floodplain
 - 250-foot buffer from conservation area
 - Predominately nonarable soils
 - Not irrigated



Recap: Project Components

- Data center campus with multiple data system warehouse buildings
- Parking for employees and internal access roads
- Onsite septic, stormwater, and wastewater (cooling water) management systems
- Fire protection system, including water storage tanks
- Back-up power supply
- Onsite substation and electrical interconnection equipment



June 27 to July 25: Applicant's Homework



- Outreach to Boardman Fire, Morrow County Sheriff, Public Works, ODFW, DLCD
- ERM Supplemental Technical Memos
 - See Exhibit S, T, U, and V.
- Kittelson Supplemental Tech Memo
 - See Exhibit W.
- Water Demand Calculations
 - See Exhibit X.
- Ongoing coordination with POM for water supply route.
- Developed information sharing website:
www.percherondatacenter.com



[Percheron Data Center](http://www.percherondatacenter.com)

Response to PC Questions

Tower Road Traffic and Safety

Steps of Analysis

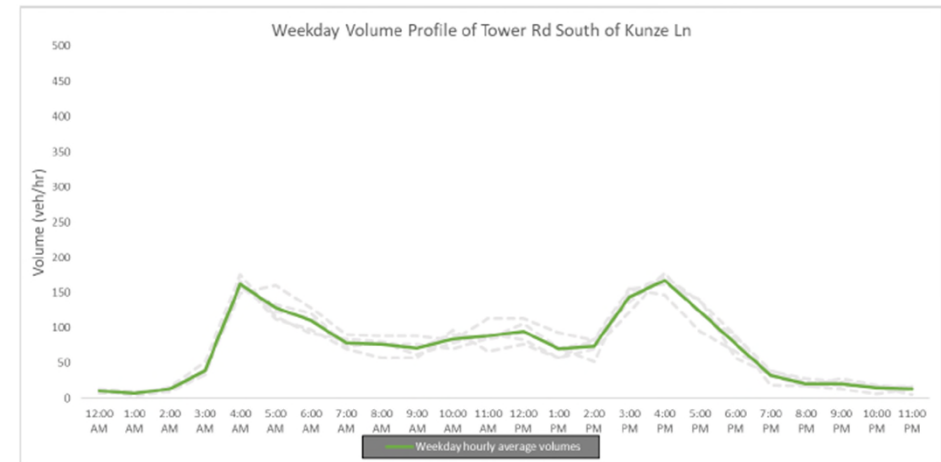
- Traffic Counts on Tower Road
- Current Traffic Volumes
 - Peak Travel Volumes @ 4 am and 4 pm (Exhibit 1)
- Construction Traffic Estimates
 - Phase 1 Site Development
 - Phase 2 Construction of Buildings
- Vehicle Category Classifications
- Equivalent Single Axle Load Calculations
- Findings

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Kittelson & Associates: Tower Road Traffic Volume Forest Tech Memo Record, Exhibit W

Exhibit 1 – Average Daily Weekday Volume Profile of Tower Road South of Kunze Lane



Response to PC Questions

Tower Road Traffic and Safety



Current Traffic Volumes and Trip Types

Table 1 – Existing Tower Road ESAL Calculation Summary

Vehicle Class	Percent of ADT	Number of Trucks*	Percent Total Trucks	ESAL Factor**	Directional Factor	Year 2023 ESAL's
1	0.70%	12		0		0
2	32.00%	549		0		0
3	12.55%	215		0		0
4	3.79%	65	6.91%	246	0.55	8,795
5	28.77%	494	52.55%	104	0.55	28,257
6	8.60%	148	15.74%	284	0.55	23,118
7	0.20%	3	0.32%	757	0.55	1,249
8	2.31%	40	4.26%	253	0.55	5,566
9	1.75%	30	3.19%	466	0.55	7,689
10	2.95%	51	5.43%	561	0.55	15,736
11	0.02%	0	0.00%	603	0.55	0
12	0.19%	3	0.32%	546	0.55	901
13	6.20%	106	11.28%	1037	0.55	60,457
Truck Count:		940	100%		Total ESAL:	151,767

*Bi-directional Truck Traffic
 **ESAL factor per ODOT pavement design guide, 2019 Table 8

Construction Traffic Volumes and Trip Types

Table 2 - Construction Traffic ESAL Calculation Summary

Vehicle Class	Percent of ADT	Number of Trucks*	Percent Total Trucks	ESAL Factor**	Directional Factor	Year 2023 ESAL's
1	0.00%	0		0		0
2	0.00%	0		0		0
3	0.00%	148		0		0
4	0.00%	0	0.00%	246	0.55	0
5	0.00%	0	0.00%	104	0.55	0
6	0.00%	26	92.51%	284	0.55	4,100
7	0.00%	0	0.00%	757	0.55	0
8	0.00%	0	0.00%	253	0.55	0
9	0.00%	2	7.49%	466	0.55	545
10	0.00%	0	0.00%	561	0.55	0
11	0.00%	0	0.00%	603	0.55	0
12	0.00%	0	0.00%	546	0.55	0
13	0.00%	0	0.00%	1037	0.55	0
Truck Count:		28	100%		Total ESAL:	4,645

*Bi-directional Truck Traffic
 **ESAL factor per ODOT pavement design guide, 2019 Table 8

Response to PC Questions

Tower Road Traffic and Safety



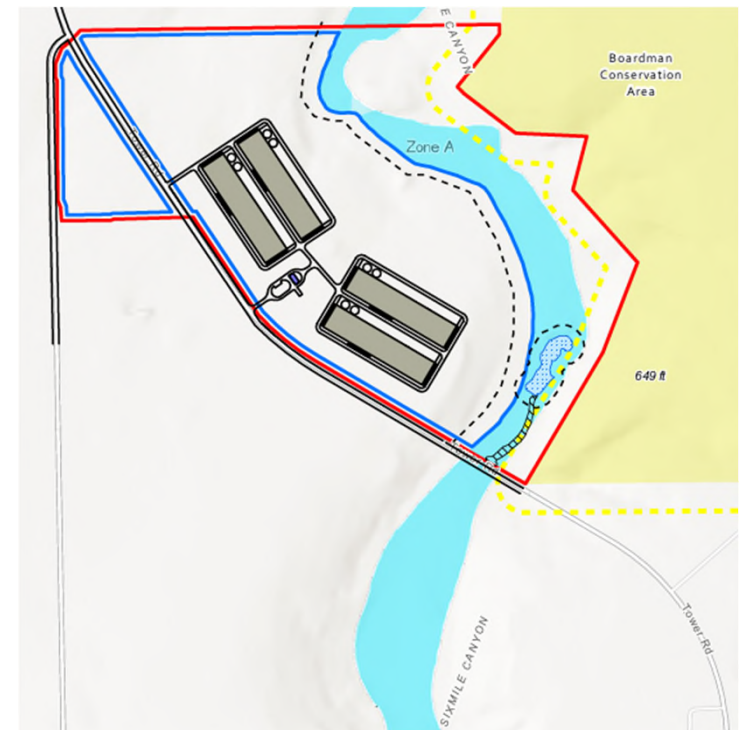
Conclusions

- **For Construction Traffic:**
 - Trips will occur during the site's initial site preparation/grading phase and the building construction phase
 - Construction is not expected to overlap with peak traffic volumes from existing area operations
 - Estimated number of trips is relatively small with minimal impact considering existing volumes
- **For Operational Traffic:**
 - Employee traffic is not likely to overlap with peak traffic volumes from existing area operations
 - Forecast to generate approximately 1,100 daily trips (passenger cars/trucks) or 17 % increase over existing volumes
- **Proposed Mitigation: Applicant's suggested conditions of approval**
 - Road Use Agreement
 - Traffic Management Plan
 - Coordination with Public Works & Sheriffs Department

Response to PC Questions

Big Game and Wetland Habitat

- Project Parcel in Columbia ecoregion with sections of shrub steppe, grassland, and wetland habitat.
- Evaluated Project Parcel location against mapped Goal 5 big game habitat and ODFW big game ranges. No mapped habitat.
- Consulted with ODFW and documented recommended 100-foot setback from wetlands and riparian habitat.
- Hosted ODFW at site on July 24.

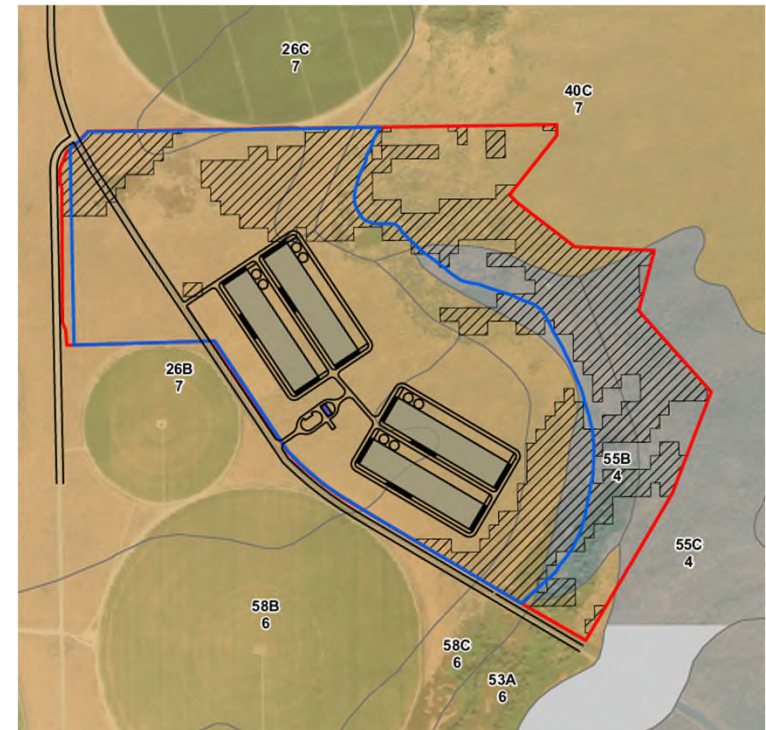


Updated Figure with New Setbacks

Response to PC Questions

Soils and Agricultural Productivity

- Mapped AVA soils within Project Parcel
- Further evaluated soil capability for nonirrigated agriculture and grazing to confirm no commercial, viable farm use.
- USDA soils mapping models indicate Project Parcel soils are severely limited in ability to produce crops or pasture.

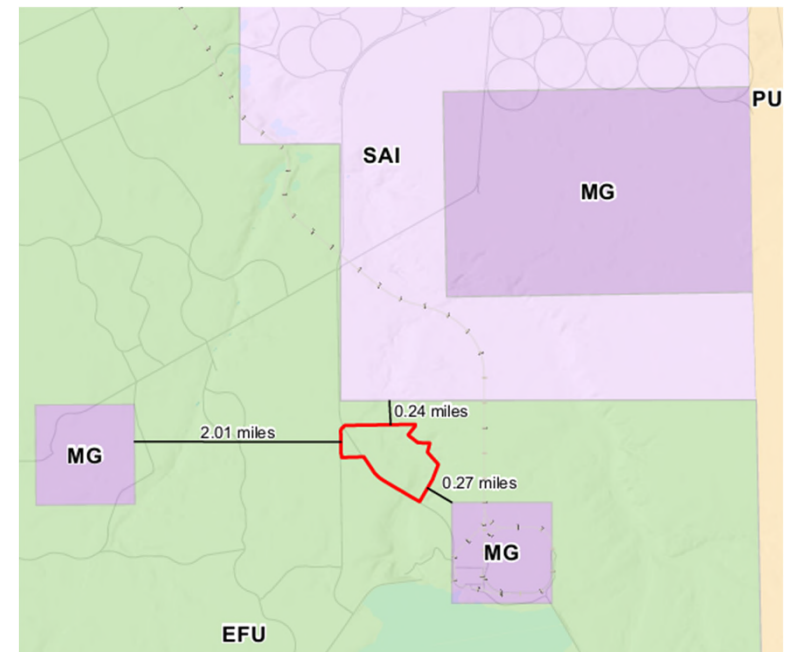


Updated Figure with NRSC and AVA Soils

Response to PC Questions

Alternatives Analysis: Deeper Dive

- MCZO only allows for the development of a data center in MG, PI and ALI zones. Data centers are allowed with a CUP in UADM zone.
- Data centers are prohibited in all other zones.
- The PI and UDAM zones were explored by the Applicant but, ultimately, no parcels in those zones were selected based on power capacity, clear title, buildable acreage available or financial feasibility of securing financing and insuring a previously contaminated site.



Response to PC Questions

Goal Exceptions: Additional Analysis

- The record demonstrates that the Project Parcel is located between existing industrial and utility uses, where the 'urbanization' would not be out of place.
- In order to meet the rising data center and cloud storage demand needs across all sectors, the Applicant entered into an agreement with the connecting utility to provide power and electrical infrastructure to the Project Parcel.
- The data center economic activity, resource management, is dependent on power service and capacity adjacent to the Project Parcel.



Response to PC Questions

Goal Exceptions: Additional Analysis

- The existing 230-kV transmission line right of way offers ready access to renewable energy resources in the region, such as the Idaho Power Boardman to Hemingway that will run along Bombing Range Road to the Longhorn Substation and the Carty Generating Station 50 MW solar farm.
- Access to and adjacency of the Project to renewable energy is crucial, the use of renewable energy resources for consistent and reliable supplemental power generation will limit the Project's power demand on existing infrastructure and support any new required transmission or distribution line upgrades or substation development required.

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Response to PC Questions

Water Supply and Route

- Commitment from Port of Morrow to supply the Project Parcel with commercial/industrial water from new facility at Boardman Airport Industrial Park
- Water supply route to follow Tower Road right of way to avoid and minimize impacts to ongoing agricultural operations
- Goal 11 exception request authorizes extension and service to Project Parcel only

Approximate Water Supply Route

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Evidence Supporting Recommendation of Approval



Recommend approval subject to conditions based on the following:

- Applicant provided reasons to justify the goal exception requests
 - Reason 1 Rural Industrial Development (Goals 3, 11, 14)
 - Reason 2 Minimal Impact to Productive Agriculture (Goals 3, 11, 14)
 - Reason 3 Comparative Economic Benefit (Goals 3, 11, 14)
 - Reason 4 Air and Water Suitability and Availability (Goal 14)
- Applicant analyzed alternative sites before selecting Project Parcel to show no other reasonable alternatives were available prior to securing the Project Parcel.
- Applicant evaluated the Environmental, Economic, Social and Energy consequences of the project on the Project Parcel to find no significant adverse EESE impacts.
- Applicant analyzed the potential impacts on surrounding lands to find the project compatible with surrounding land uses.

Applicant's Proposed Conditions

- *Prior to construction, Applicant shall enter into a Road Use Agreement with Morrow County Public Works to fund \$267,000 to pay for chip seal on the first nine (9) miles of Tower Road.*
- *Prior to construction, Applicant shall prepare in coordination with Morrow County Public Works and the Morrow County Sheriffs a Construction Traffic Management Plan.*
- *Prior to construction, Applicant shall provide notice to Threemile Canyon Farms of its construction traffic schedule and coordinate with Threemile Canyon Farms to minimize any potential impacts to farm traffic during harvest.*
- *Applicant shall obtain all local, state and federal permits and approvals for the data center campus construction and operation including but not limited to:*
 - *DEQ NPDES 1200-C Stormwater Permit*
 - *DEQ, Onsite Septic Permit*
 - *DEQ, Basic Air Contaminant Discharge Permit*

Questions?



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Rebuttal



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