

Wavetech Helium Inc.
1 Wavetech Burlington Farms 32-11
Alternative Location Analysis Narrative
Section 11 T12S R43W

Proposed Expansion to Existing Oil and Gas Location Name: 1 Wavetech Burlington Farms 32-11

Total Disturbed Area within Project: 3.5 Acres

Size of Location After Interim Reclamation: 1.2 Acres

Surface Owner: FPI Burlington Farms

Relevant Local Government: Cheyenne County

Relevant Local Government Zoning: Agriculture

Current Land Use: Non-irrigated crop land

Future Land Use: Non-irrigated crop land

Description of Potential Impacts to Health, Safety, Welfare, Wildlife and Environment related to the Development of this Oil and Gas Location:

There are no Residential Building Units (RBUs) within 2,000' of the working pad surface of the proposed location.

Potential impacts to health, safety, welfare, and the environment are minimal due to the remote nature of the location. Impacts to wildlife are anticipated to be minimal due to the presence of ongoing wind facility operations and seasonal agriculture activities.

Description of Advantages and Disadvantages associated with Oil and Gas Location:

Advantages:

1. There are no RBUs within 1 mile of the location.
2. The location is almost 3 miles from the nearest CPW mapped Lesser Prairie Chicken Lek Buffer.
3. There are four (4) wind turbines within 1,800 meters of the proposed location. The United States Fish and Wildlife Services has suggested the impact disturbance from a wind turbine to be 1,800m. Due to the proximity of multiple wind turbines the area has been deemed not considerably highly suitable habitat. Due to the proximity of multiple wind turbines the area has been deemed not considerably highly suitable habitat. The closest wind turbine is 3,939' (approximately 1220.1m) to the preferred location.
4. The proposed location is not within the Lesser Prairie Chicken Focal Area or Connectivity Area.

Disadvantages:

1. The proposed Wavetech location lie within the Lesser Prairie Chicken Estimated Occupied Range (EOR).

Permitting Considerations for the Oil and Gas Location:

The majority of Cheyenne County is covered by the EOR. It is impossible to move the proposed locations

outside of the EOR while still developing the helium leases owned by Wavetech. Wavetech does not have any proposed locations within a mapped Lek.

Geologically, the locations chosen cannot be moved. Oil and gas production, and associated helium, in the Morrow Formation of eastern Colorado occurs from conventional traps. These conventional traps result from Morrow channel sandstone bodies draping across structurally high areas to allow buoyancy trapping to occur. The traps have sharp, boundaries defined by the presence of the reservoir sandstone and specific elevations above a structural datum below which water is present in the reservoir.

The reservoir sandstones were deposited from river channels and like modern rivers which occupy narrow regions of the landscape (Morrow reservoir sandstone bodies average approximately one-half mile in width in eastern Colorado). As such, drilling targets require detailed mapping to define potential sandstone boundaries and proposed well locations are specific and precise.

Minimal location moves, even less than 100', from the axis of the reservoir channel systems exponentially increases the possibility of dry holes. Helium fields in eastern Colorado producing from the Morrow formation are usually one or at most two locations wide and run longitudinally as far as the sandstone remains above a datum elevation that defines the water contact (less than one to several miles along its axis). Reservoir sandstones, when present, have high porosity and high permeability and neither horizontal drilling nor fracking is required to produce. The footprint of Morrow formation within the landscape of Cheyenne County is minimal.

Tier III-A.

304.b.(2).B- x Criteria Met									
i	ii	iii	iv	v	vi	vii	viii	ix	x
							X		X

Conditions or Factors that make the Oil and Gas Location Unavailable:

Wavetech does not believe there are any conditions or factors that make the subject Oil and Gas Location unavailable for development.

Any Other Considerations for Subject Oil and Gas Location:

Wavetech is committed to Best Management Practices that will minimize and mitigate impacts to the Lesser Prairie Chicken. Traffic and traffic emissions will be reduced due to existing gas pipeline infrastructure.

Please see the enclosed map showing the proximity to the existing wind turbines.

Alternative Location No. 1:**Legal Description:** T1S R66W Section 29 SWNE**Surface Owner:** FPI Burlington Farms**Relevant Local Government:** Cheyenne County**Relevant Local Government Zoning:** Agriculture**Current Land Use:** Non-irrigated crop land**Future Land Use:** Non-irrigated crop land**Description of Potential Impacts to Health, Safety, Welfare, Wildlife and Environment related to the Development of this Oil and Gas Location:**

The alternative location triggers the same criteria as the proposed location. There is no alternative location that can reach the proposed mineral development that is not located within the Lesser Prairie Chicken EOR.

Description of Advantages and Disadvantages associated with Oil and Gas Location:**Advantages:**

1. There are no RBUs within 1 mile of the location.
2. The location is almost 2 miles from the nearest Lesser Prairie Chicken Lek.
3. There are two (2) wind turbines within 1,800 meters of the proposed location. The United States Fish and Wildlife Services has suggested the impact disturbance from a wind turbine to be 1,800m. Due to the proximity of multiple wind turbines the area has been deemed not considerably highly suitable habitat.
4. The proposed location is not within the Lesser Prairie Chicken Focal Area or Connectivity Area.

Disadvantages:

1. The proposed Wavetech location lie within the Lesser Prairie Chicken Estimated Occupied Range (EOR).
2. The alternative location is closer to the Lek Buffer.

Permitting Considerations for the Oil and Gas Location:

Tier III-A.

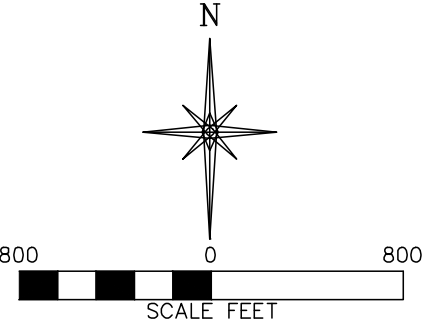
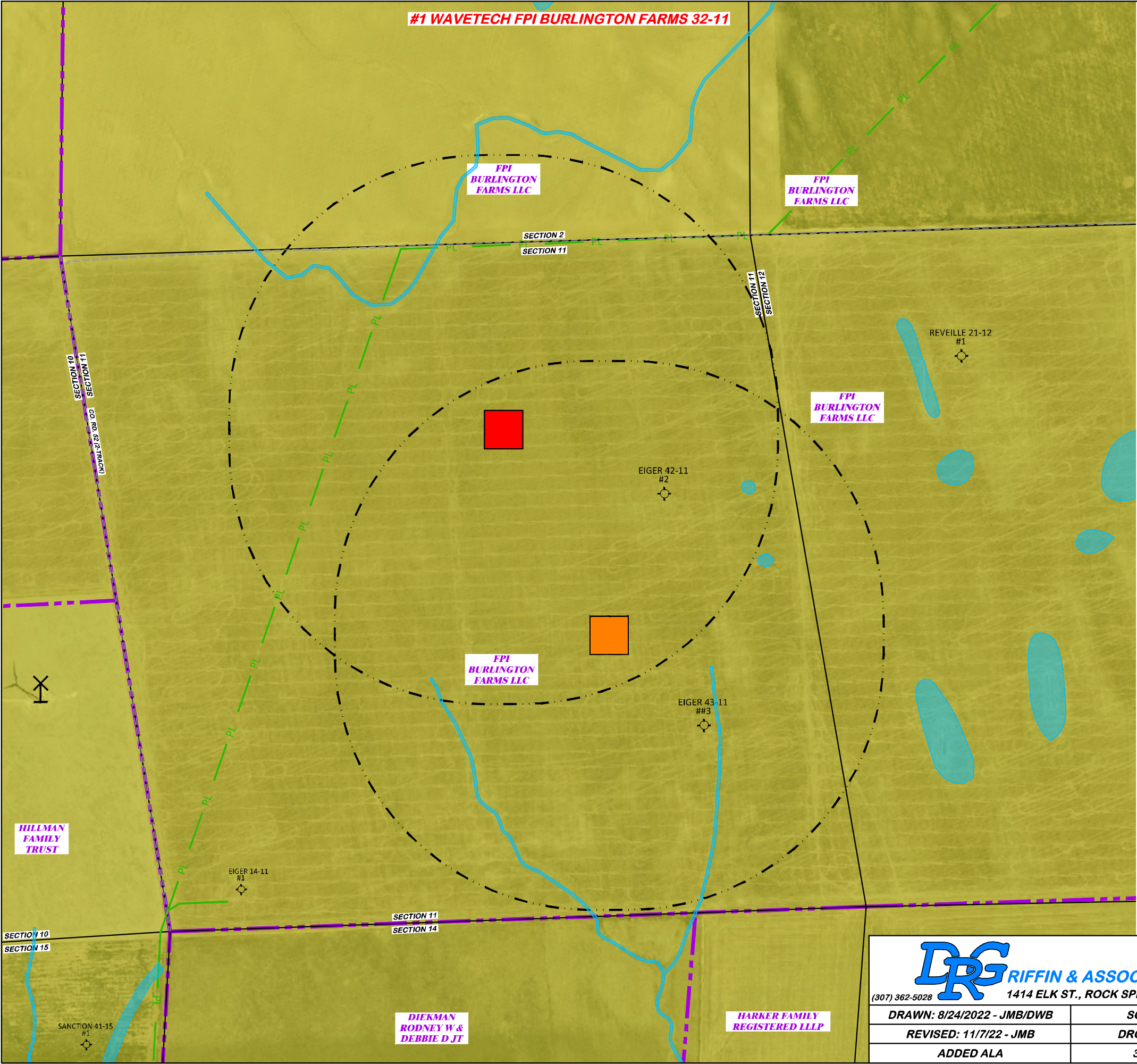
304.b.(2).B- x Criteria Met									
i	ii	iii	iv	v	vi	vii	viii	ix	x
							X		

Conditions or Factors that make the Oil and Gas Location Unavailable:

1. There are no conditions or factor that make the location unavailable.

Any Other Considerations for Subject Oil and Gas Location:

None

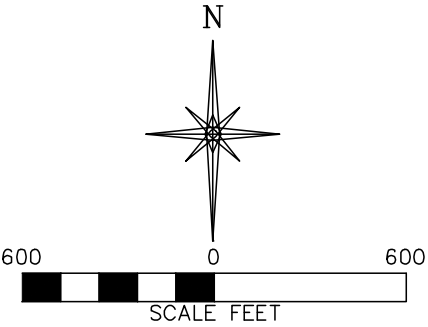
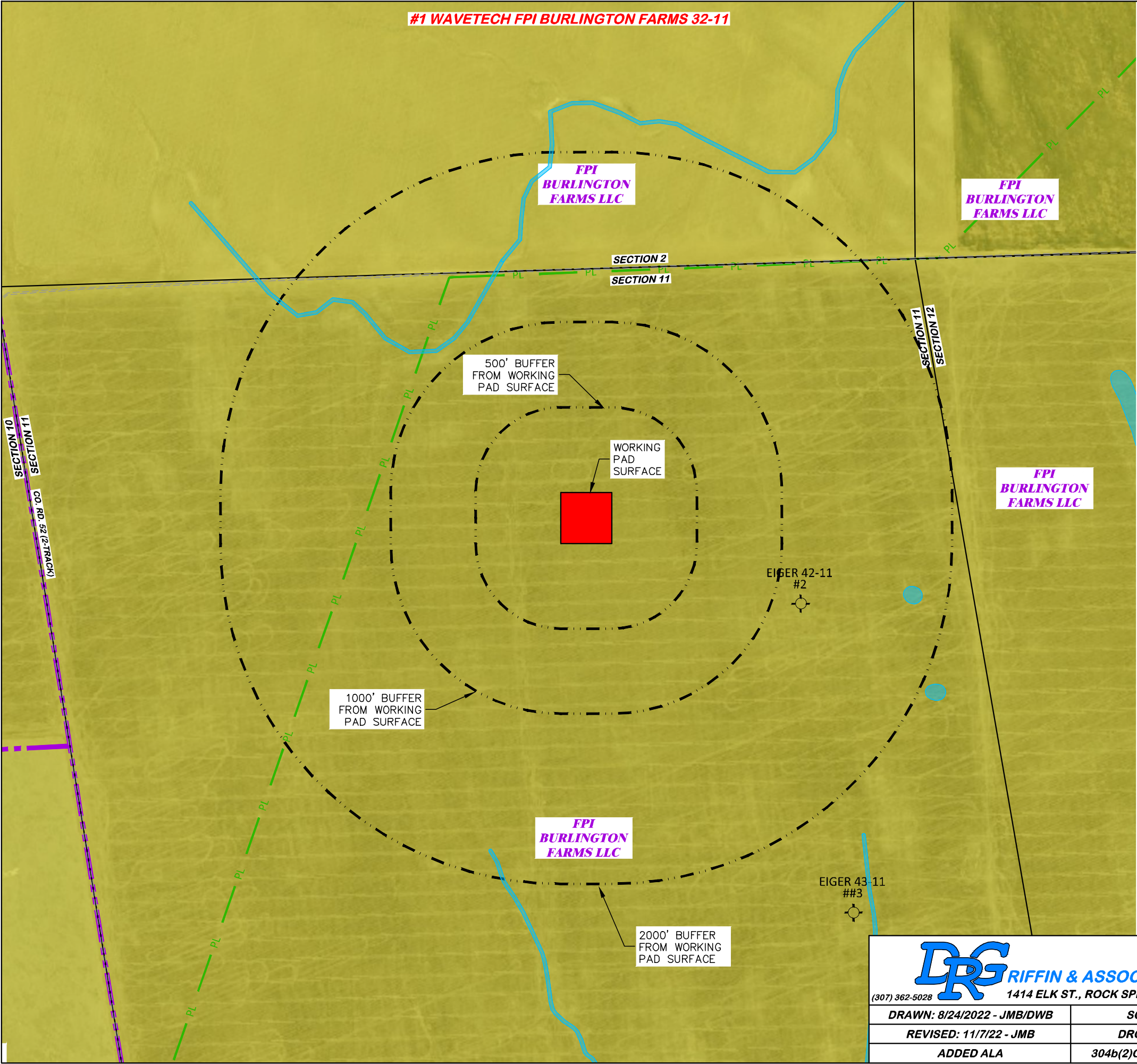


	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
PROPOSED LOCATION	N 39.027872	W 102.193016
ALTERNATE LOCATION	N 39.023365	W 102.190312

	PROPOSED WORKING PAD SURFACE
	ALTERNATE WORKING PAD SURFACE
	PROPERTY LINE
	2000' WORKING PAD SURFACE BUFFER
	COUNTY ROAD / EXISTING 2-TRACK ROAD
	EXISTING UNDERGROUND PIPELINE
	PLUGGED OIL & GAS (P&A) WELL
	WETLANDS AREA PROVIDED BY USFWS
	RULE 309.e.1 OTHER CONSULTATION HABITAT - LESSER PRAIRIE CHICKEN ESTIMATED OCCUPIED RANGE

DRG RIFFIN & ASSOCIATES, INC. (307) 362-5028 1414 ELK ST., ROCK SPRINGS, WY 82901	
DRAWN: 8/24/2022 - JMB/DWB	SCALE: 1" = 800'
REVISED: 11/7/22 - JMB	DRG JOB No. 22272
ADDED ALA	304b(2)Ci ALA

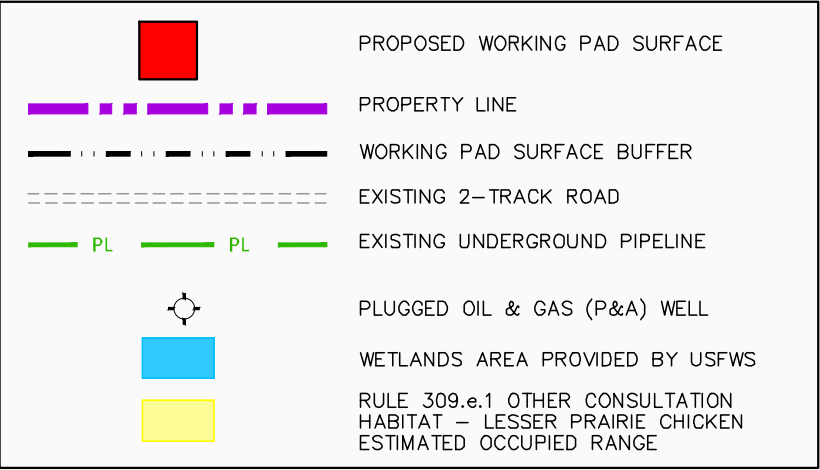
ALTERNATIVE LOCATION ANALYSIS
WAVETECH HELIUM, INC. #1 WAVETECH FPI BURLINGTON FARMS 32-11 SWNE, SECTION 11, T. 12 S., R. 43 W., 6th P.M., CHEYENNE COUNTY, COLORADO



	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
PROPOSED LOCATION	N 39.027872	W 102.193016

CULTURAL ITEMS: MEASURED FROM NEAREST EDGE OF THE PROPOSED WORKING PAD SURFACE	
BUILDING	5280' +
RESIDENTIAL BUILDING	5280' +
HIGH OCCUPANCY BUILDING	5280' +
DOAA	5280' +
PUBLIC ROAD	3039' W
ABOVE GROUND UTILITY	4004' SW
RAILROAD	5280' +
PROPERTY LINE	3121' SW
SCHOOL FACILITY	5280' +
SCHOOL PROPERTY LINE	5280' +
CHILDCARE FACILITY	5280' +
SCHOOL PROPERTY LINE	5280' +
DI COMMUNITY	5280' +
USFWS WETLANDS	1092' NW

CULTURAL FEATURE INFORMATION			
PRODUCTION FEATURE	0-500 FEET	501 - 1,000 FEET	1,001 - 2,000 FEET
	NUMBER	NUMBER	NUMBER
BUILDING	0	0	0
RESIDENTIAL BUILDING	0	0	0
HIGH OCCUPANCY BUILDING	0	0	0
SCHOOL PROPERTIES	0	0	0
SCHOOL FACILITIES	0	0	0
DOAA	0	0	0

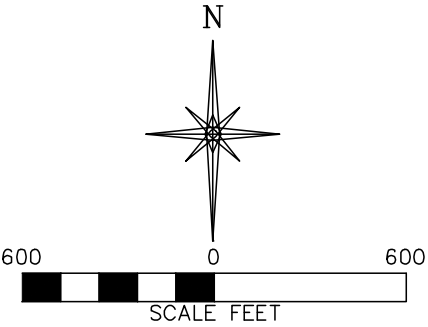
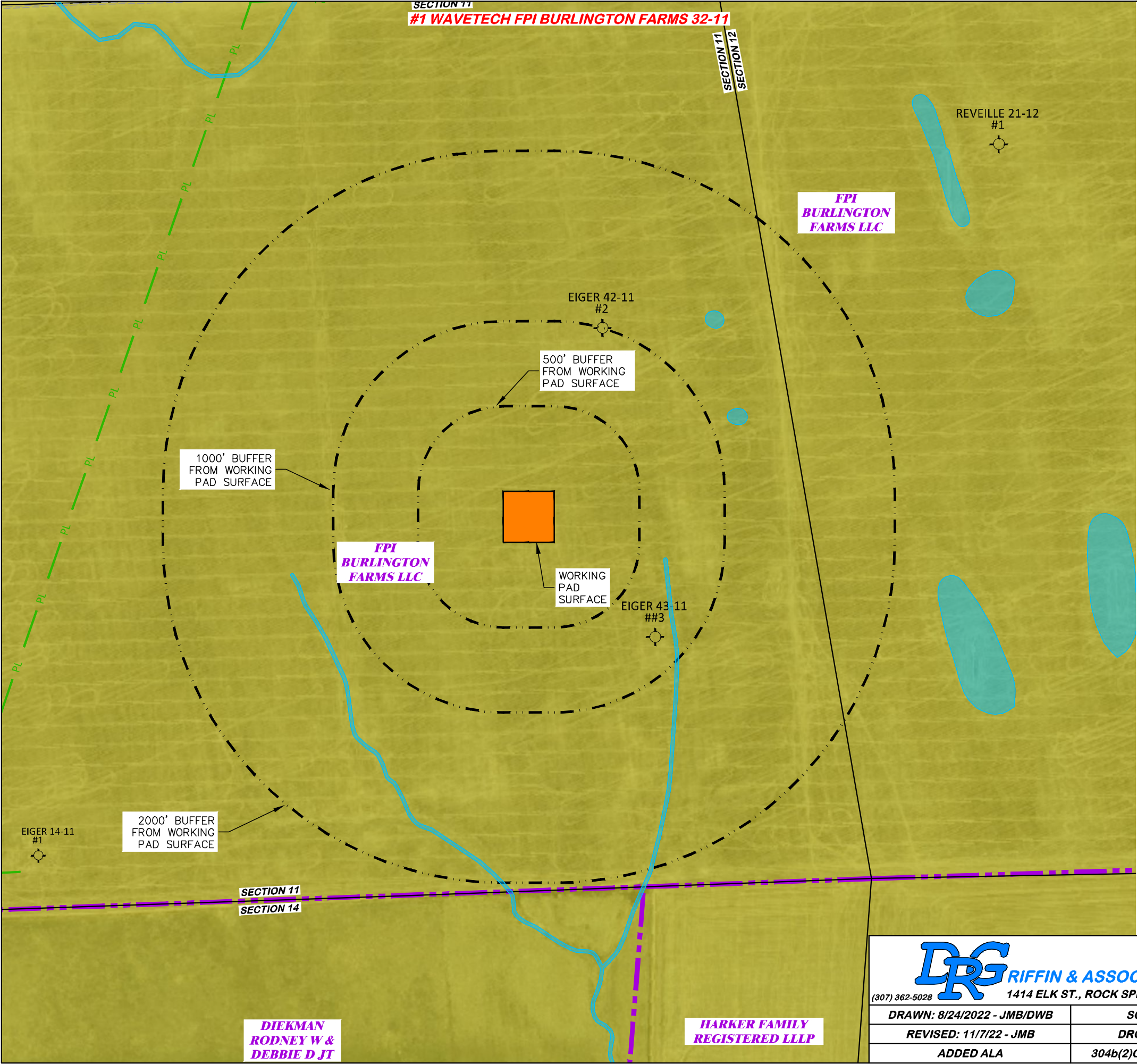


DRG**RIFFIN & ASSOCIATES, INC.**
(307) 362-5028 1414 ELK ST., ROCK SPRINGS, WY 82901

DRAWN: 8/24/2022 - JMB/DWB	SCALE: 1" = 600'
REVISED: 11/7/22 - JMB	DRG JOB No. 22272
ADDED ALA	304b(2)Ciii ALA SHEET 1 OF 2

ALTERNATIVE LOCATION ANALYSIS


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SWNE, SECTION 11, T. 12 S., R. 43 W., 6th P.M.,
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	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
ALTERNATE LOCATION	N 39.023365	W 102.190312


CULTURAL ITEMS: MEASURED FROM NEAREST EDGE OF THE PROPOSED WORKING PAD SURFACE	
BUILDING	5280' +
RESIDENTIAL BUILDING	5280' +
HIGH OCCUPANCY BUILDING	5280'+
DOAA	5280'+
PUBLIC ROAD	3591' W
ABOVE GROUND UTILITY	4321' SW
RAILROAD	5280'+
PROPERTY LINE	2040' S
SCHOOL FACILITY	5280'+
SCHOOL PROPERTY LINE	5280'+
CHILDCARE FACILITY	5280'+
SCHOOL PROPERTY LINE	5280'+
DI COMMUNITY	5280'+
USFWS WETLANDS	651' SE

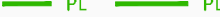
CULTURAL FEATURE INFORMATION			
PRODUCTION FEATURE	0-500 FEET	501 - 1,000 FEET	1,001 - 2,000 FEET
	NUMBER	NUMBER	NUMBER
BUILDING	0	0	0
RESIDENTIAL BUILDING	0	0	0
HIGH OCCUPANCY BUILDING	0	0	0
SCHOOL PROPERTIES	0	0	0
SCHOOL FACILITIES	0	0	0
DOAA	0	0	0


ALTERNATE WORKING PAD SURFACE


PROPERTY LINE


WORKING PAD SURFACE BUFFER


EXISTING 2-TRACK ROAD

EXISTING UNDERGROUND PIPELINE

PLUGGED OIL & GAS (P&A) WELL

WETLANDS AREA PROVIDED BY USFWS

RULE 309.e.1 OTHER CONSULTATION
HABITAT – LESSER PRAIRIE CHICKEN
ESTIMATED OCCUPIED RANGE

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ADDED ALA	304b(2)Cii ALA SHEET 2 OF 2

ALTERNATIVE LOCATION ANALYSIS

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SWNE, SECTION 11, T. 12 S., R. 43 W., 6th P.M.,
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