



814 Thornwick Drive
Houston, TX 77079
www.Civil-PEs.com

January 26, 2024

James Mason, CM, A.C.E.
Bay City Regional Airport
3598 FM 2540 North
Bay City, Texas 77414

Permit Application Technical Review: Permit Application: Structure PC2239 – Wind Turbine

Transmitted via email to jmason@cityofbaycity.org on January 26, 2024

Dear James.

We have completed a review of the structure reference above. This structure was previously studied under FAA's airspace review as study 2023-WTW-15845-OE. It is also noteworthy that this structure is under current study under airspace review as study 2024-WTW-1119-OE; which has not been determined at this time. This review is organized around the following sections of the ordinance:

Zoning Ordinance Section 18-41 – Height Limitations

Subsection: N/A

Reasons: We have no objection to the proposed structure based on the Part 77 surfaces identified in this Section.

Zoning Ordinance Section 18-42 – Compatible Land Use Area

Subsection: N/A

Reasons: We have no objection to the proposed structure based on noise compatibility requirements in this Section.

Zoning Ordinance Section 18-44 – Other Use Restrictions

Subsection: (1) Airport Safety

Reasons: This section does not permit use of land or water in the entirety of Matagorda County that might impair visibility in the vicinity of the airport, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. This proposed item will affect landing and taking off from the airport in multiple ways:

1. This proposed structure is located 3.57 nm from the end of Runway 31, its departure end. This structure is within the "Diverse Departure Assessment Area" as defined under FAA Order 8260.3D and may require an Obstacle Departure Procedure. For southbound departures from the runway toward the proposed structure, the climb gradient needed to provide proper clearance over the structure will exceed the standard climb gradient; this has been noted in the airspace determination letter of December 20, 2023. Such a requirement interferes with operating out of the airport compared to the operating requirements today. As noted above, this structure is also under a current airspace study of which it is unknown as to the FAA's determination on it.

Based on the information provided above, we find this proposed structure to be contradictory to the zoning ordinance and hereby do not recommend approval of this structure.

Civil PEs, LLC

Thomas D Dodson, PE
Project Leader



www.FlyBayCity.com

3598 FM 2540 N Bay City, Texas 77414

(979) 244-5037

Airport Hazard and Land Use Permit

In accordance with Texas Local Government Code, Chapter 241, also known as the Airport Zoning Act, the Consolidated Hazard Area and Compatible Land Use Zoning Regulations have been revised by the Bay City Regional Airport Zoning Board. Revisions now include maps which allow for timelier identification of real properties within hazard and zoning areas.

The Airport Zoning Act found that airport hazards and obstructions have the potential for endangering the lives and property of users of Bay City Regional Airport and property or occupants of land in its vicinity. Obstructions may impact the size of areas available for the landing, taking off and maneuvering of aircraft and may affect aircraft instrument approach minimums.

The real property for which you are submitting a permit application is located within the Compatible Land Use Area and/or Hazard Area of the Bay City Regional Airport. Applications for building, electrical, plumbing, or mechanical permit(s) within these areas require an "Airport Hazard and Land Use Permit" be approved before any other permit will be issued. Airport Hazard and Land Use permits may restrict some aspects of the potential use, size, height, lighting, glare potential or construction of your building.

Any cost associated with a permit that requires the assistance of any person not employed by the City of Bay City or the County of Matagorda shall be paid by the permittee. The permit fee shall be calculated by the Bay City Regional Airport Manager and shall be paid before the permit will be reviewed or issued.

Please complete the attached permit application and submit to the Bay City Regional Airport in person or by mail or email (contact information below). The Bay City Regional Airport shall consider and provide an approval or denial within a reasonable period of time.

Bay City Regional Airport
Attention: Airport Manager
3598 FM 2540 N
Bay City, TX 77414
Airport@cityofbaycity.org
(979) 244-5037

The Consolidated Hazard Area and Compatible Land Use Zoning Regulations can be found in the *City of Bay City Municipal Code of Ordinances, Chapter 18 – Aviation.*

x _____ PRIVATE (Individual, corporation, nonprofit institution, etc.)

_____ PUBLIC (Federal, state or local government)

ATTACH SURVEY/DRAWING/DEPICTION/MAP OF THE PROPERTY AND PROPOSED IMPROVEMENT

DESCRIPTION OF IMPROVEMENT OR PROJECT AND INTENDED USE OF LAND(ATTACH SEPARATE SHEETS IF NEEDED)

Install Wind Turbine Generator - PC2239

Will the property be used for any of the following purposes:

- Residential? (Y/N): N
- Educational (including child care and vocational)? (Y/N): N
- Medical, Institutional, Convalescent, or Rehabilitative Care? (Y/N): N
- Nursing Homes? (Y/N): N

If you answered "Yes" to any of the above, please describe further the proposed use: _____

Will any improvement or use create or cause electrical interference with communications between aircrafts and the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use create or cause difficulty for pilots to distinguish aircraft and the proposed improvement or the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use result in glare in the eyes of pilots or otherwise impair visibility in the vicinity of the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use increase the likelihood of bird strikes? (Y/N): N

If "Yes," explain: _____

Will any improvement or use endanger or interfere with the landing, taking off, or maneuvering of aircraft? (Y/N): N

If "Yes," explain: _____

yes, include take-off minimums / Obstacle departure procedure

FAA AIRSPACE REVIEW:

Does this project require an airspace review by the FAA? Yes: X No: _____

Date FAA Form 7460-1 Submitted*: 02/05/2024

*Please contact the Airport Manager at (979) 323-1115, for assistance completing FAA Form 7460-1

Date Determination Letter received from FAA: _____
(If received please attach a copy to this application)

NOTICE

I hereby certify that I have read and examined this application and know the same to be true and correct. The granting of a permit does not presume to give authority to violate or cancel any other Federal, State or local law regulating construction or the performance of construction.

DocuSigned by:

Applicant's Signature

Richard Suanders

Print Name

Date: 3/5/2024

Return completed Application to:

Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
(979) 244-5037
airport@cityofbaycity.org

Should you have any questions please contact the Aviation Director at (979) 244-5037 or email at airport@cityofbaycity.org

For Office Use Only:

Date Application Received: 3/11/24

Is project consistent with the Airport Zoning Regulation: Yes _____ No X

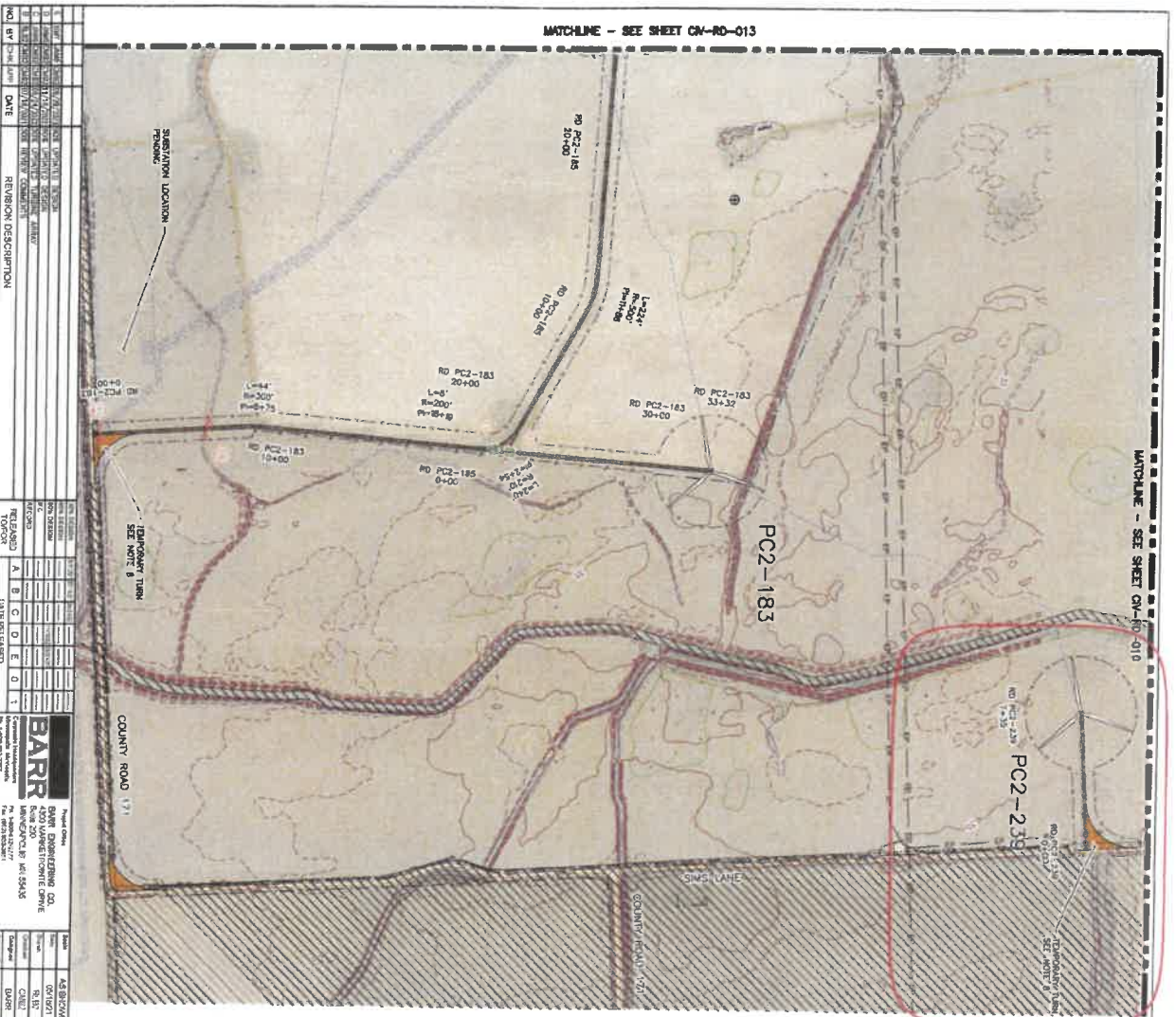
Reason for project not being considered consistent with zoning regulation:
INCREASE TAKE-OFF HEIGHTS & OBSTACLE DEPARTURE PROCEDURES

Airport Director Signature: _____

Date Application Considered by Administrative Agency Court.: _____

Permit Approved: Yes _____ No X

Permit Returned to Applicant 3/12/24 Via Mail Service.



PLAN: TURBINES PC2-183 & PC2-238

SCALE: HORIZONTAL 1" = 30' VERTICAL 1" = 30'

LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- EXISTING POWERLINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- EXISTING PUBLIC ROAD
- EXISTING DRAINAGE
- EXISTING DITCH
- EXISTING CULVERT
- EXISTING BRIDGE
- EXISTING RAILROAD
- EXISTING EASEMENT
- EXISTING TREE LINE
- EXISTING WETLAND
- EXISTING WATER BODY
- EXISTING WATER COURSE
- EXISTING DISPERSED FENCE
- WETLAND
- NON-DEVELOPED FLOOD ZONE A
- DEVELOPED FLOOD ZONE A2
- NON-DEVELOPED FLOOD ZONE B
- NON-PARTICIPANT/BOUNDARY QUARTER
- EXISTING CONCRETE
- CALUMBA BOTTOMLAND WOODLANDS
- BUILDING
- PROPOSED ACCESS ROAD
- PROPOSED TEMPORARY TURN
- PROPOSED COLLECTION LINE (BY OTHERS)
- EXISTING WELL
- EXISTING POWER POLE
- FENCE CROSSING LOCATION
- UTILITY CROSSING LOCATION
- VESTAS V163 TURBINE (PRIMARY)
- VESTAS V163 TURBINE (ALTERNATE)
- PROPOSED CULVERT LOCATION
- PROPOSED LOW WATER CROSSING LOCATION

NOTES:

1. PRELIMINARY ROADS SHOWN. LOCATION OF ROADS TO BE DETERMINED DURING FINAL DESIGN.
2. LOCATION OF ALL CULVERTS AND LOW WATER CROSSINGS SHOWN FOR PLANNING PURPOSES ONLY. FINAL LOCATION & SIZE TO BE DETERMINED DURING FINAL DESIGN.
3. CULVERTS AT INTERSECTIONS WITH PUBLIC ROADS TO FOLLOW FOOT OF LOCAL AGENCY REQUIREMENTS.
4. EROSION CONTROL TRENCHES NOT SHOWN. CONTRIBUTION TO INSTANT EROSION CONTROL PER PROJECT BMP'S.
5. UNDERGROUND COLLECTION LINES NOT SHOWN. SEE ELECTRICAL CONSULTANT PLANS FOR CONSTRUCTION DETAILS. INCLUDING ANY SPECIAL REQUIREMENTS.
6. UTILITY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE UTILITY CROSSING AGREEMENTS.
7. CONSULT WITH UTILITY OWNERS TO DETERMINE EXISTING UTILITY LOCATIONS AND DEPTHS.
8. TEMPORARY TURN BASED ON STANDARD TEMPLATES. SEE CV-DE-009.
9. EXISTING CULVERTS SHALL BE PROTECTED, DIVERTED AND/OR REPLACED AS REQUIRED.
10. PUBLIC ACCESS ROADS SHALL BE BASED A MINIMUM OF 30' AHEAD OF ANY EXISTING ROAD. SEE CV-DE-007.
11. COORDINATE WITH AGENCIES SITE REPRESENTATIVE AND LANDOWNERS FOR REQUIREMENTS/SCHEDULE FOR INSTALLATION LINE WORK.

KEY MAP

001	002	003	007	008	009	010	018	019	027
004	005	006	011	012	013	014	022	023	028
							024	025	026
							015	016	029

017

80% DESIGN
NOT FOR CONSTRUCTION

DATE: 08/29/2023
DRAWN: J. HARRIS
CHECKED: J. HARRIS
SCALE: 1/8" = 100'

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS
ROADS RD PC2-183, RD PC2-185 & RD PC2-238

DATE: 08/29/23
SCALE: 1/8" = 100'

Peyton Creek II

WTG Foundation PC2-239

218

2540

Legend
● PC2-239

170

166

168

PC2-239

169

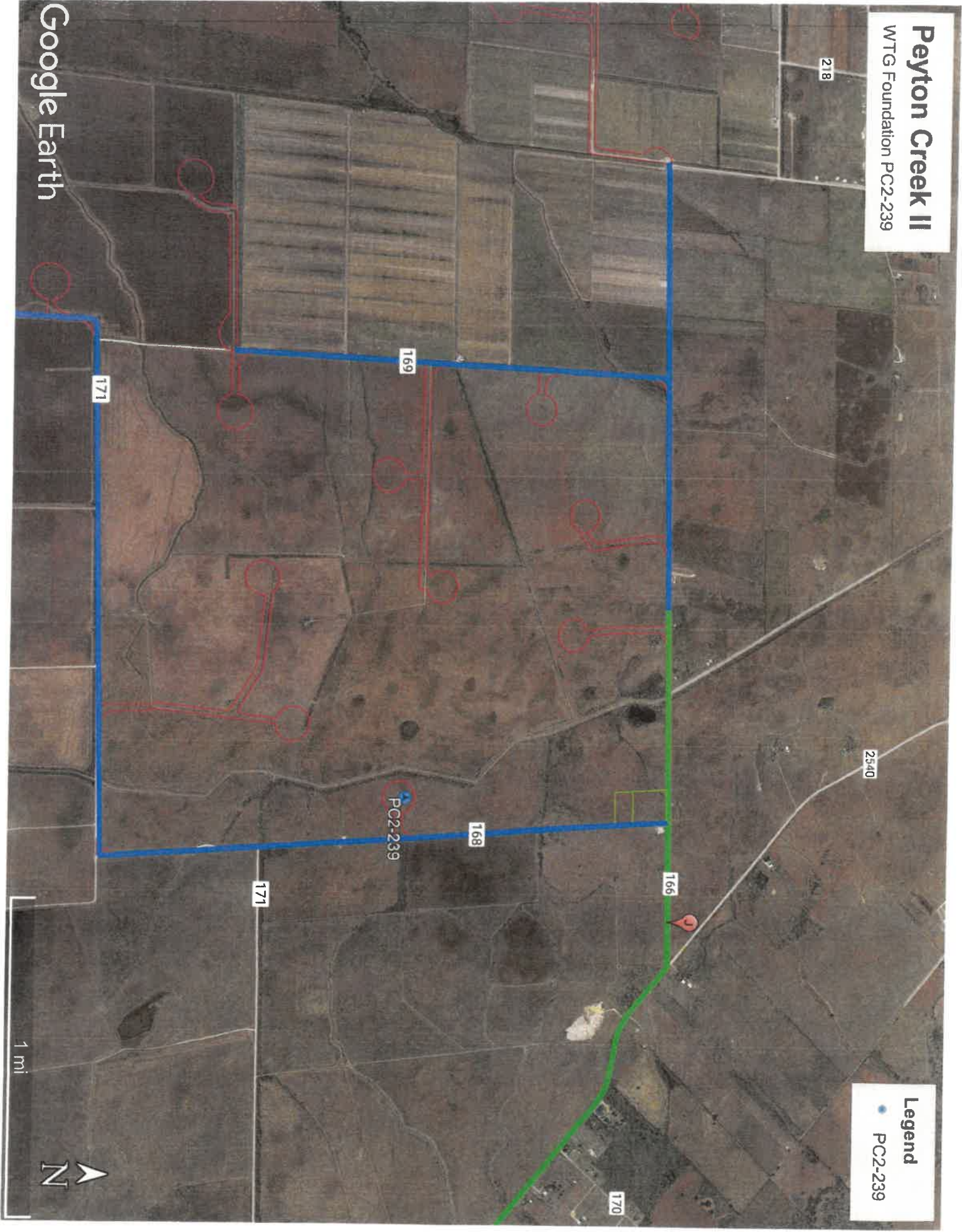
171

171

1 mi



Google Earth





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2023-WTW-15845-OE

Issued Date: 12/20/2023

Rich Saunders
 Peyton Creek II
 701 Brazos St
 Suite 1400
 Austin, TX 78701

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine PC2239
 Location: Bay City, TX
 Latitude: 28-54-41.99N NAD 83
 Longitude: 95-51-23.33W
 Heights: 35 feet site elevation (SE)
 656 feet above ground level (AGL)
 691 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 06/20/2025 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before January 19, 2024. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW., Washington, DC 20591. FAA encourages the use of email to ensure timely processing.

This determination becomes final on January 29, 2024 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. Any questions regarding your petition, contact Rules and Regulations Group via telephone (202) 267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should

be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Buck Reynolds, at (847) 294-7576, or Wayne.Reynolds@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-WTW-15845-OE.

Signature Control No: 606506173-607756155

(DNH -WT)

David Maddox
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2023-WTW-15845-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; <https://oeaaa.faa.gov>. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf.

1. PROPOSAL DESCRIPTION

This proposal is for 2 turbines within a proposed wind farm project that would be located 5.4 NM east extending clockwise to points 3.4 NM south through 8 NM southwest of the airport reference point for the Bay City Regional Airport (BYY), Bay City, Texas. The project had been previously studied and favorable determinations issued on 03/15/2023.

For the sake of efficiency, all of the wind turbines in this project that have similar impacts are included in this narrative.

The proposed wind turbines' described heights and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude (LAT)/longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2023-WTW-15844-OE	/	656	/	688	/	28-54-38.34N	/	95-52-28.21W
2023-WTW-15845-OE	/	656	/	691	/	28-54-41.99N	/	95-51-23.33W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object. The proposals would all exceed this standard by 157 feet.

b. Section 77.17(a)(2): a height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 NM miles of the established reference point of BBY, and that height increases in the proportion of 100 feet for each additional NM from the airport up to a maximum of 499 feet. The following would exceed by:

2023-WTW-15844-OE 364 feet
2023-WTW-15845-OE 376 feet

c. Section 77.17 (a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

The following proposal would increase TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES for RWY 13 at BYY. The increase would be from standard (200/1 ceiling/visibility) to standard with a minimum climb gradient of 231 ft. per NM until reaching 900 ft. AMSL.

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3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1): impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of potential VFR Routes as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR Route would have an adverse effect upon VFR air navigation.

The following proposed turbines would lie within the lateral boundaries and exceed traffic pattern airspace (TPA) for CAT D aircraft at BYY (aircraft with approach speeds between 141-165 knots):

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2023-WTW-15845-OE

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with FAA Order 7400.2, circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. The associated wind farm was not circularized for public comment because the effect to the BBY RWY 13 departure procedure is less of an impact than previously favorably determined studies in this project. Air traffic has no objection to the proposal(s).

5. BASIS FOR DETERMINATION

a. IFR EFFECTS

The aeronautical study identified an IFR effect(s) for BBY. The increase to the BBY Runway 13 climb gradient is not considered excessive. Increasing the climb gradient would ensure the required obstacle clearances are maintained and would not have a significant impact on a pilot's ability to safely execute the procedures. Therefore, the proposed wind farm would not have a substantial adverse effect on IFR operations for BBY.

The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR EFFECTS

The aeronautical study identified no substantial adverse effect on any existing or proposed VFR arrival or

departure operations. A portion of the proposals would be located within CAT D traffic pattern airspace but beyond the normally utilized traffic pattern airspace for BYY or any other known public use or military airports. At 656 feet AGL, the structures would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. Therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations.

c. RADAR EFFECTS

The aeronautical study identified no effect on ATC radar, direction finders, ATC tower line-of-sight visibility, air navigation, communication facilities, and other surveillance systems for any known public-use or military airports.

d. CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any substantial adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

6. DETERMINATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, ten (10) days prior to beginning construction, at the OE/AAA website (<http://oeaaa.faa.gov>) for the following wind turbines reviewed as ASNs:

2023-WTW-15845-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (<http://oeaaa.faa.gov>). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

ACRONYMS & ABBREVIATIONS

- AGL, Above Ground Level
- AMSL, Above Mean Sea Level
- ARP, Airport Reference Point
- ARSR, Air Route Surveillance Radar
- ARTCC, Air Route Traffic Control Center
- ASN, Aeronautical Study Number
- ASR, Airport Surveillance Radar
- ATC, Air Traffic Control

ATCT, Air Traffic Control Tower
CARSR, Common Air Route Surveillance Radar
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude
NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in

SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2023-WTW-15845-OE

