

taller than 200 feet from ground level, will require review by the ALUC and FAA.

The following conditions were added at the October 11, 2018 ALUC hearing.

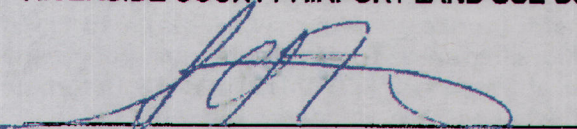
6. The Federal Aviation Administration has conducted an aeronautical study of the proposed project (Aeronautical Study Nos. 2018-WTW-8741-OE through 2018-WTW-8754-OE) and has determined that each of the structures shall be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights – Chapters 4, 12, & 13 (Turbines), unless superseded by subsequent FAA determination(s) in writing.
7. 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 a least one light at each level. The use of NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.
8. 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 Airmen (NOTAM) can be issued. As soon as normal operation is restored, notify the same number.
9. The maximum height and top point elevations specified below shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.

<b>Turbine Number</b>	<b>Maximum Feet Above Mean Sea Level (AMSL)</b>
Turbine 1	2,154
Turbine 2	2,335
Turbine 3	2,480
Turbine 4	2,184
Turbine 5	2,135
Turbine 6	2,058
Turbine 7	2,031
Turbine 8	2,000
Turbine 9	2,136
Turbine 10	2,166
Turbine 11	2,211
Turbine 12	2,288
Turbine 13	2,387
Turbine 14	2,499

10. Temporary construction equipment used during actual construction of the structures shall not exceed 499 feet in height and a maximum elevation (above mean sea level) not to exceed the above turbine table above, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.
11. Within five (5) days after construction reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <https://oeaaa.faa.gov> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the structure.
12. To the maximum extent possible, in compliance with FAA guidelines regarding lighting, mitigation measures shall be incorporated into the project that would minimize light pollution to the people on the ground.

If you have any questions, please contact Paul Rull, ALUC Principal Planner, at (951) 955-6893.

Sincerely,  
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



Simon A. Housman, ALUC Director

Attachments: Notice of Airport in Vicinity  
Aeronautical Study Nos. 2018-WTW-8741-OE through 2018-WTW-8754-OE

cc: Painted Hills Wind, LLC, Robert Skaggs (applicant/representative)  
Terra-Gen Development, Co., LLC – New York (fee-payer)  
Kathleen Ann Guzinski (property owner) (Half Moon Bay address)  
James D. Etchason (property owner) (Palm Springs address)  
Jason K. Etchason (property owner) (Phoenix address)  
Sean D. Etchason (property owner) (Las Vegas address)  
Mr. Thomas Nolan, Executive Director, Palm Springs International Airport  
ALUC Case File

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# **NOTICE OF AIRPORT IN VICINITY**

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



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

Aeronautical Study No.  
2018-WTW-8741-OE

Issued Date: 10/09/2018

Robert Skaggs  
Painted Hills Wind, LLC  
11512 El Camino Real  
Suite 370  
San Diego, CA 92130

**\*\* 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 T1
Location:	Palm Springs, CA
Latitude:	33-56-28.76N NAD 83
Longitude:	116-37-04.33W
Heights:	1655 feet site elevation (SE) 499 feet above ground level (AGL) 2154 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8741-OE.

**Signature Control No: 367548294-386991498**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8741-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8741-OE







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

Aeronautical Study No.  
 2018-WTW-8742-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T2  
 Location: Palm Springs, CA  
 Latitude: 33-56-36.23N NAD 83  
 Longitude: 116-37-08.88W  
 Heights: 1836 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2335 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4, 12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8742-OE.

**Signature Control No: 367548295-386991505**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8742-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8742-OE





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

Aeronautical Study No.  
 2018-WTW-8743-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T3
Location:	Palm Springs, CA
Latitude:	33-56-41.47N NAD 83
Longitude:	116-37-12.46W
Heights:	1981 feet site elevation (SE)
	499 feet above ground level (AGL)
	2480 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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.**

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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.

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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.

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If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8743-OE.

**Signature Control No: 367548296-386991501**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

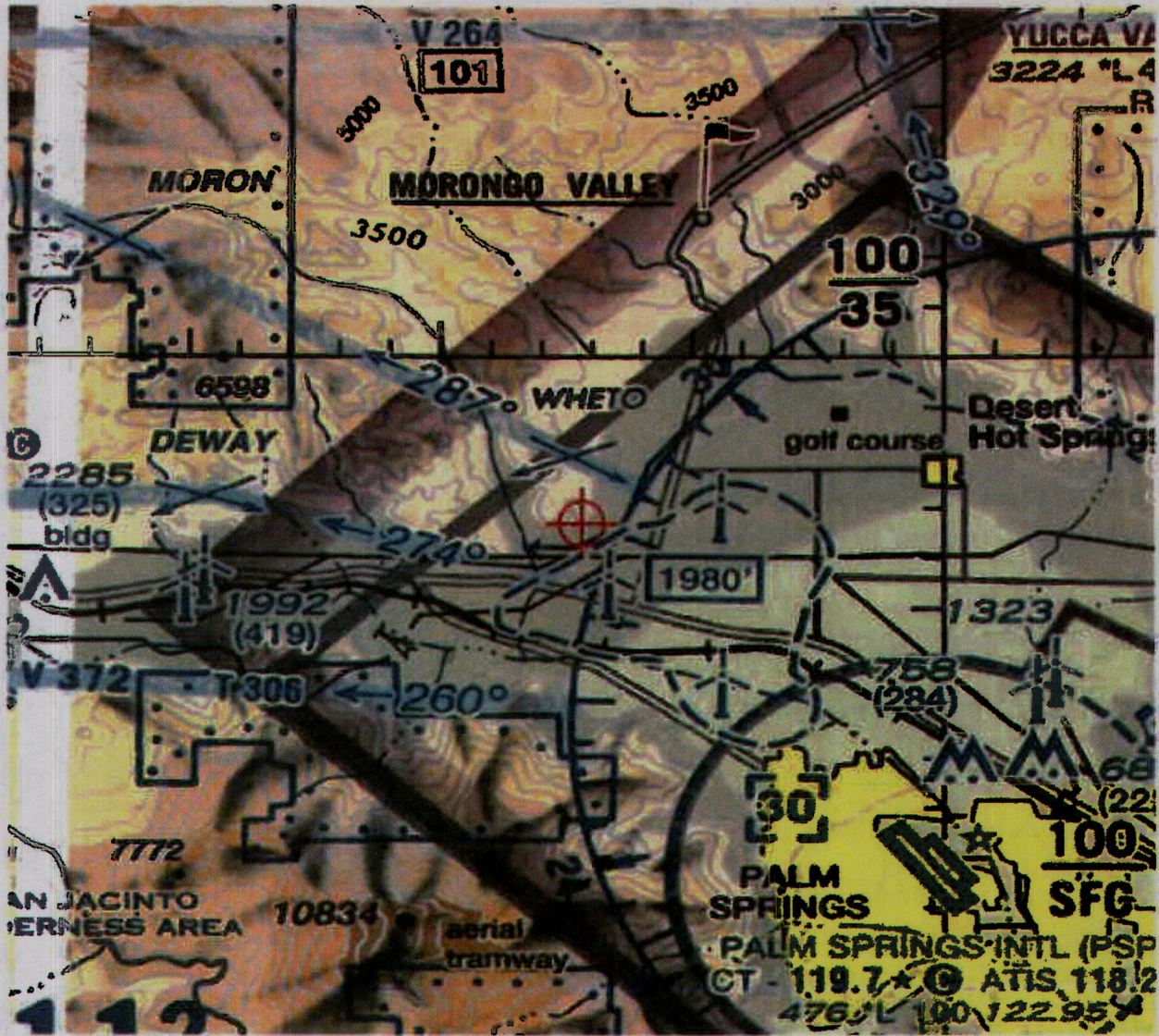


**Additional information for ASN 2018-WTW-8743-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

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Sectional Map for ASN 2018-WTW-8743-OE





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

Aeronautical Study No.  
 2018-WTW-8744-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T4  
 Location: Palm Springs, CA  
 Latitude: 33-56-31.48N NAD 83  
 Longitude: 116-37-24.50W  
 Heights: 1685 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2184 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

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- 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 04/09/2020 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.

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**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.**

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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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8744-OE.

**Signature Control No: 367548297-386991495**

( DNE -WT )

Steve Phillips  
Specialist

Attachment(s)  
Additional Information  
Map(s)

**Additional Information for ASN 2018-WTW-8744-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8744-OE





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

Aeronautical Study No.  
 2018-WTW-8745-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T5  
 Location: Palm Springs, CA  
 Latitude: 33-56-25.98N NAD 83  
 Longitude: 116-37-23.93W  
 Heights: 1636 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2135 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8745-OE.

**Signature Control No: 367548298-386991497**  
Steve Phillips  
Specialist

( DNE -WT )

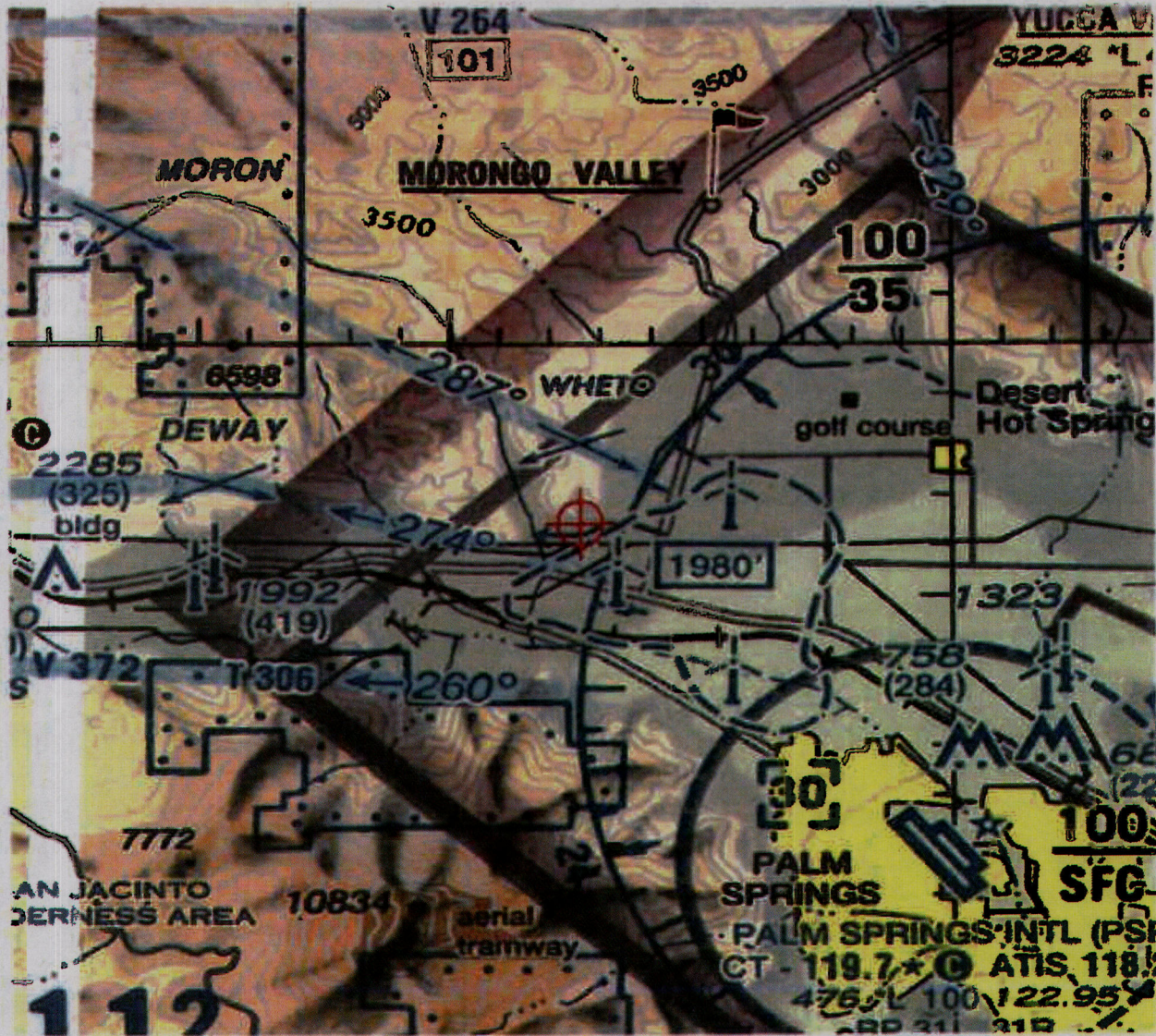
Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8745-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8745-OE





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

Aeronautical Study No.  
2018-WTW-8746-OE

Issued Date: 10/09/2018

Robert Skaggs  
Painted Hills Wind, LLC  
11512 El Camino Real  
Suite 370  
San Diego, CA 92130

**\*\* 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 T6
Location:	Palm Springs, CA
Latitude:	33-56-15.79N NAD 83
Longitude:	116-37-18.65W
Heights:	1559 feet site elevation (SE) 499 feet above ground level (AGL) 2058 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8746-OE.

**Signature Control No: 367548299-386991507**

( DNE -WT )

Steve Phillips  
Specialist

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8746-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.



Sectional Map for ASN 2018-WTW-8746-OE





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

Aeronautical Study No.  
2018-WTW-8747-OE

Issued Date: 10/09/2018

Robert Skaggs  
Painted Hills Wind, LLC  
11512 El Camino Real  
Suite 370  
San Diego, CA 92130

**\*\* 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 T7  
Location: Palm Springs, CA  
Latitude: 33-56-10.74N NAD 83  
Longitude: 116-37-22.05W  
Heights: 1532 feet site elevation (SE)  
499 feet above ground level (AGL)  
2031 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8747-OE.

**Signature Control No: 367548300-386991499**

Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8747-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8747-OE





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

Aeronautical Study No.  
 2018-WTW-8748-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T8
Location:	Palm Springs, CA
Latitude:	33-56-05.58N NAD 83
Longitude:	116-37-21.79W
Heights:	1501 feet site elevation (SE) 499 feet above ground level (AGL) 2000 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8748-OE.

**Signature Control No: 367548301-386991502**

( DNE -WT )

Steve Phillips  
Specialist

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8748-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8748-OE





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

Aeronautical Study No.  
 2018-WTW-8749-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T9  
 Location: Palm Springs, CA  
 Latitude: 33-56-06.24N NAD 83  
 Longitude: 116-37-49.95W  
 Heights: 1637 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2136 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov).  
On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8749-OE.

**Signature Control No: 367548312-386991504**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8749-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8749-OE







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

Aeronautical Study No.  
 2018-WTW-8750-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T10  
 Location: Palm Springs, CA  
 Latitude: 33-56-17.88N NAD 83  
 Longitude: 116-37-49.93W  
 Heights: 1667 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2166 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8750-OE.

**Signature Control No: 367548313-386991506**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8750-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8750-OE





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

Aeronautical Study No.  
 2018-WTW-8751-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T11  
 Location: Palm Springs, CA  
 Latitude: 33-56-23.54N NAD 83  
 Longitude: 116-37-49.84W  
 Heights: 1712 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2211 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8751-OE.

**Signature Control No: 367548314-386991496**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)



**Additional information for ASN 2018-WTW-8751-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.





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

Aeronautical Study No.  
 2018-WTW-8752-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T12  
 Location: Palm Springs, CA  
 Latitude: 33-56-29.51N NAD 83  
 Longitude: 116-37-49.92W  
 Heights: 1789 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2288 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

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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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8752-OE.

**Signature Control No: 367548315-386991503**

( DNE -WT )

Steve Phillips  
Specialist

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8752-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

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Sectional Map for ASN 2018-WTW-8752-OE





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

Aeronautical Study No.  
2018-WTW-8753-OE

Issued Date: 10/09/2018

Robert Skaggs  
Painted Hills Wind, LLC  
11512 El Camino Real  
Suite 370  
San Diego, CA 92130

**\*\* 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 T13
Location:	Palm Springs, CA
Latitude:	33-56-36.14N NAD 83
Longitude:	116-37-42.00W
Heights:	1888 feet site elevation (SE) 499 feet above ground level (AGL) 2387 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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This determination expires on 04/09/2020 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.



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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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8753-OE.

**Signature Control No: 367548316-386991494**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8753-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.

Sectional Map for ASN 2018-WTW-8753-OE





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

Aeronautical Study No.  
 2018-WTW-8754-OE

Issued Date: 10/09/2018

Robert Skaggs  
 Painted Hills Wind, LLC  
 11512 El Camino Real  
 Suite 370  
 San Diego, CA 92130

**\*\* 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 T14  
 Location: Palm Springs, CA  
 Latitude: 33-56-42.02N NAD 83  
 Longitude: 116-37-39.79W  
 Heights: 2000 feet site elevation (SE)  
 499 feet above ground level (AGL)  
 2499 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, 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 L Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

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 Airmen (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 04/09/2020 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 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 (provided the AGL height does not exceed 499 feet). 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.

If we can be of further assistance, please contact our office at (816) 329-2523, or [steve.phillips@faa.gov](mailto:steve.phillips@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-WTW-8754-OE.

**Signature Control No: 367548317-386991500**  
Steve Phillips  
Specialist

( DNE -WT )

Attachment(s)  
Additional Information  
Map(s)

**Additional information for ASN 2018-WTW-8754-OE**

Aeronautical study indicates that the turbines will be within the radar line of sight for the Palm Springs, CA (PSP) Airport Surveillance Radar (ASR-9) facility. They could cause unwanted primary targets (clutter) and primary-only target drops in the immediate vicinity of the wind turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines. However, this would not cause an unacceptable adverse impact on Air Traffic Control operations at this time.

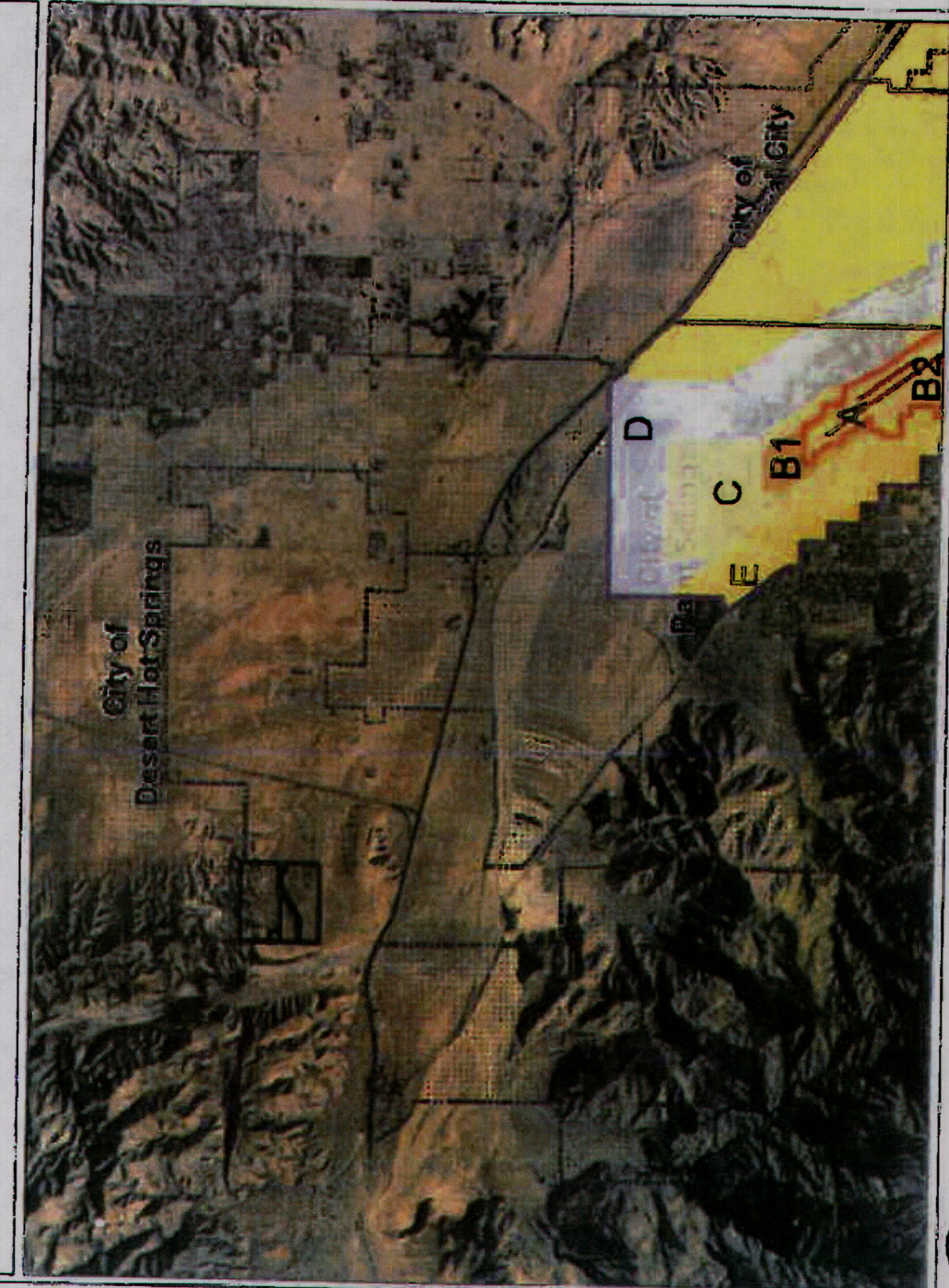
NOTE: A recommendation for white paint/synchronized red lights will be made for all turbines until such time as the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height. At that time, the proponent may contact this office and request a re-evaluation of the marking and lighting recommendations for the turbines within this project and a portion of the turbines may qualify for the removal of the lighting recommendation.



Sectional Map for ASN 2018-WTW-8754-OE



# Map My County Map



- Legend**
- Runways
  - Airports
  - Airport Influence Areas
  - Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
- |    |                |  |
|----|----------------|--|
| A  | A-EXC1         |  |
| B1 | B1-APZ I       |  |
|    | B1-APZ I-EXC1  |  |
|    | B1-APZ II      |  |
|    | B1-APZ II-EXC1 |  |
|    | B1-EXC1        |  |
| B2 | B2-EXC1        |  |
| C  | C              |  |
| C1 | C1-EXC1        |  |
|    | C1-EXC3        |  |
|    | C1-EXC4        |  |
|    | C1-HIGHT       |  |
| C2 | C2-EXC1        |  |
|    | C2-EXC2        |  |
|    | C2-EXC3        |  |
|    | C2-EXC5        |  |
|    | C2-EXC6        |  |

**Notes**

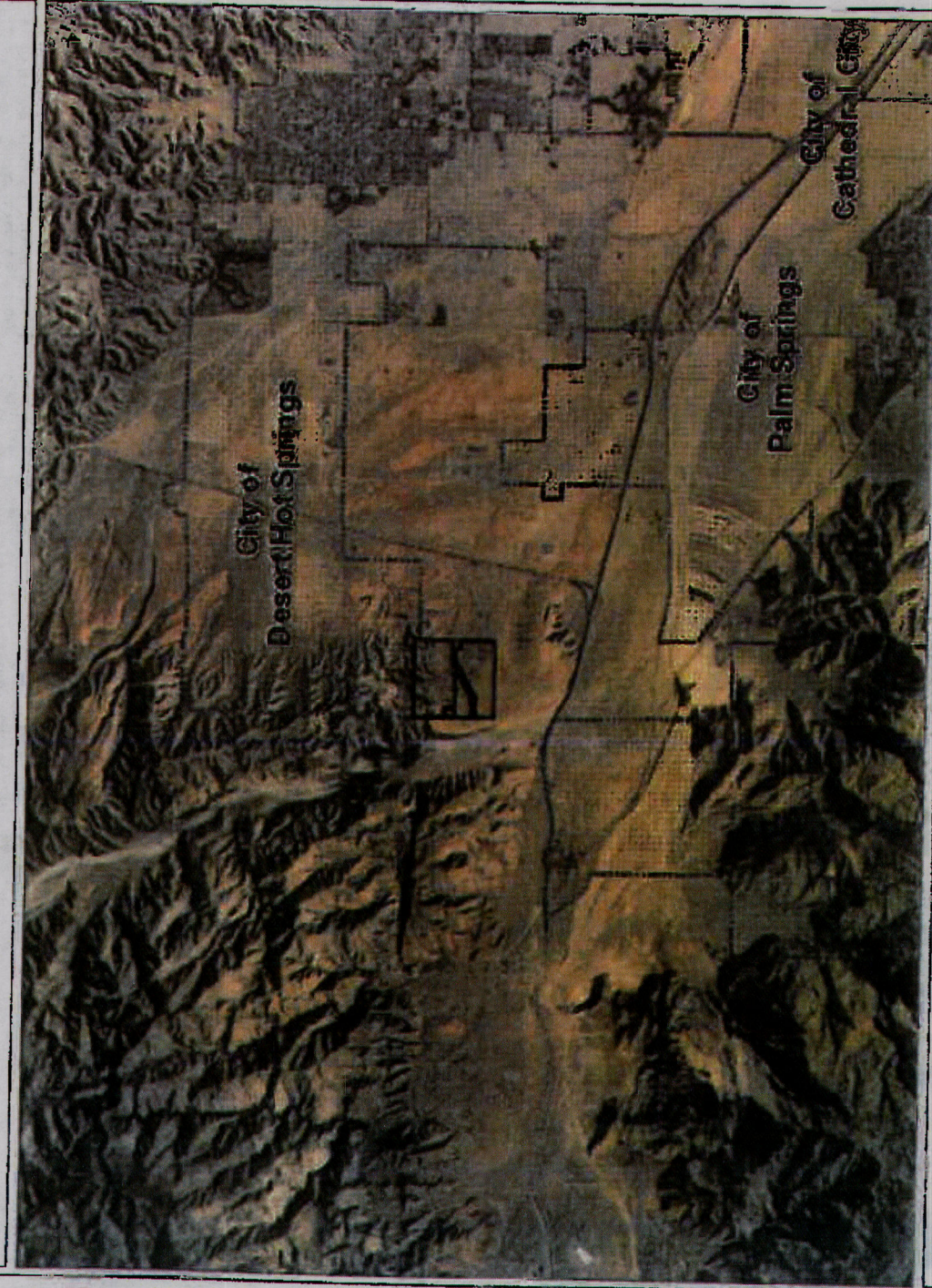
"IMPORTANT" Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

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0 12 24,629 Feet

# Map My County Map



## Legend

- City Area
- World Street Map

## Notes

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24,529 Feet

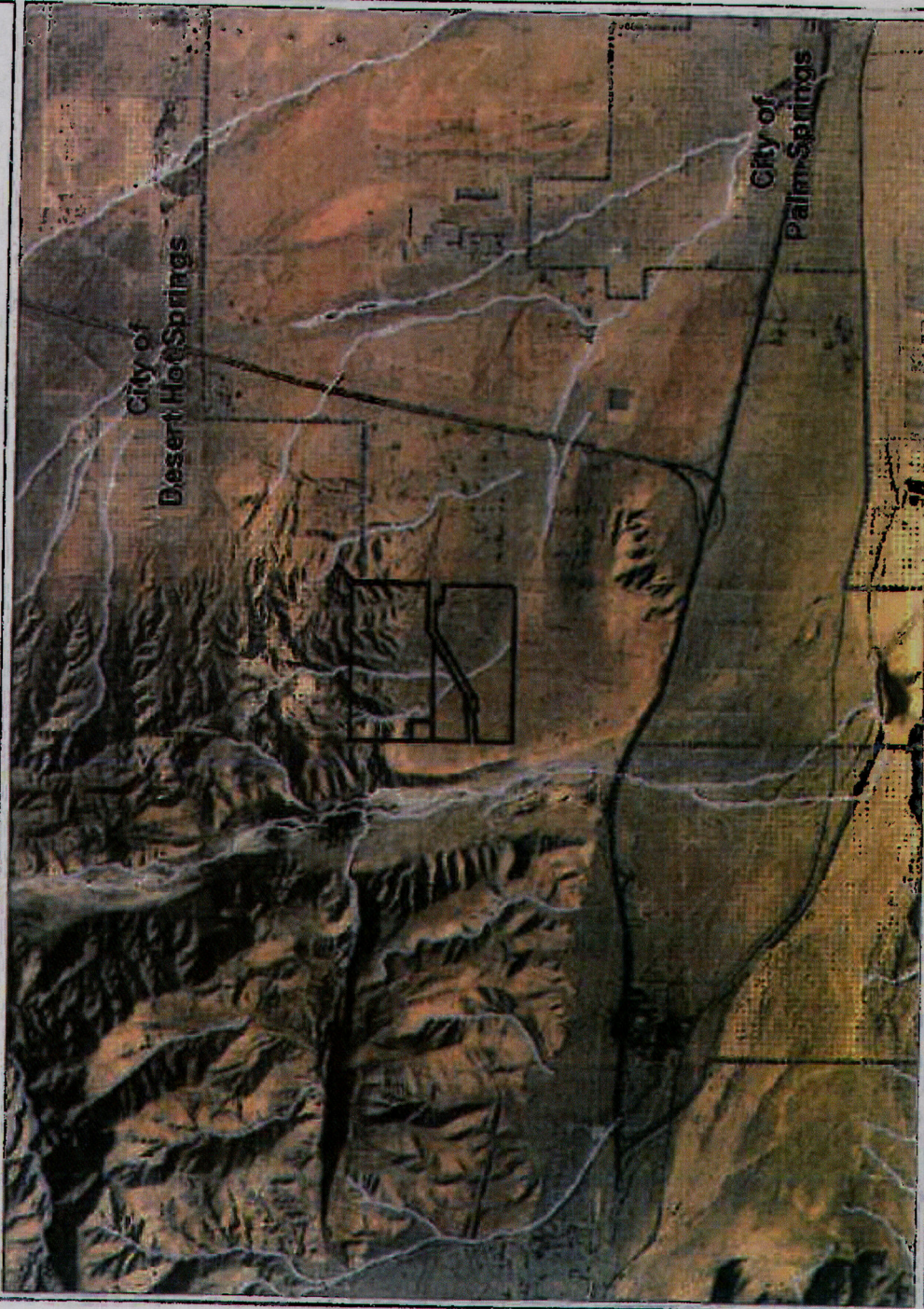
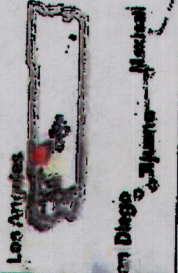
12

314

0



# Map My County Map



- Legend**
- Runways
  - Airports
  - Airport Influence Areas
  - Airport Compatibility Zones
  - ▨ OTHER COMPATIBILITY ZONE

- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC8

**Notes**

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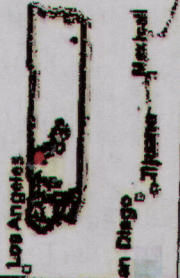


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# Map My County Map



- Legend**
- Blue Line Streams
  - City Areas
  - World Street Map

## Notes

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## **Attachment B: Project Description**

Painted Hills Wind, LLC (Applicant) proposes to construct the Painted Hills Wind Energy Repowering Project (Project) located in western Riverside County (County), California. The Project is generally bounded by the Super Creek Mine and undeveloped foothills (i.e., Painted Hills) to the north, rural single-family residential uses and State Route (SR-) 62 to the east, existing Wind Energy Conversion System (WECS) facilities and Interstate (I-) 10 to the south, and an existing WECS facility and the unincorporated Whitewater area to the west. (see Exhibit A, Site Plan). The Project site is located within the San Gorgonio Wind Resource Area (SGWRA) and the County's San Gorgonio Pass Wind Energy Policy Area, an area that maintains winds that support economically viable wind energy projects and in which wind turbines are an established use. The Project site supports an existing wind farm and is an excellent location for generating electrical power from wind based on the strong predictable wind resource. The existing wind farm is associated with Commercial WECS Permits 25, 52, and 53.

### **Project Overview**

The Project comprises the following components and activities:

- Decommission and remove the approximately 291 existing, antiquated turbines from the Project site.
- Install up to 14 new wind turbines and related infrastructure with a per-turbine generating capacity of between 2.0 megawatts (MW) and 4.2 MW on land within the County's Wind Energy Resource (W-E) Zone.
- Install up to 2 new permanent, lattice meteorological (met) towers to support operations of the wind development.
- Install up to 3 new temporary, guyed lattice met towers to support the power curve testing of the wind development.
- Install WECS and met tower foundations and erection of the WECS and met towers.
- Construct pad areas for individual turbines and met towers to accommodate cranes and heavy equipment needed for turbine and met tower installation.
- Construct a temporary expansion of the existing laydown yard for use during the decommissioning of existing turbines and the construction of the Project.
- Temporarily widen and improve portions of the existing internal road system.
- Construct new temporary and permanent roads outside of the existing road system footprint to accommodate cranes and heavy equipment needed for turbine and met tower installations and access to the proposed turbine and met tower foundations. Temporary new

roads and existing roads that would not be used by the Project would be restored after the construction phase and permanent new roads will be reduced to a width of 16 feet.

- Install new 12-kilovolt (kV) underground and/or overhead electrical collection lines to collect energy from the Project's new turbines. All or a portion of these lines may interconnect directly into the Southern California Edison (SCE) 115 kV Venwind substation located inside the Project boundary. Alternatively, one or more of these collection lines may tie directly into the existing, SCE-owned, 12 kV overhead collection lines inside the Project boundary that are used by the existing wind farm to interconnect into Venwind.
- Decommission and remove the new wind turbines at the end of their useful life cycle.

### **Project Positive Impacts**

The Project would have a net positive environmental impact for the following reasons:

- The overall development intensity and visual "clutter" within the Project site would decrease as a result of the proposed repowering given that the approximately 291 existing turbines would be replaced by only 14 new turbines, which equates to a 1-to-20 (new-to-existing) replacement ratio.
- The Project would generate significantly more energy than the existing turbines operating on the Project site, which, due to their age and technology, are more inefficient and less reliable than the new turbines.
- No new buildings would be constructed, and the overall amount of impervious surfaces is not expected to increase. To the greatest extent feasible, new construction would be limited to existing disturbed and developed areas, minimizing plant and wildlife impacts.
- New, modern turbines have lower turbine rotational speeds. This, in combination with higher rotor height and greater spacing distances, would allow more visibility to avian species and increase avoidance potential.
- Fewer turbines with a wider spacing would allow for more avian passage between the turbines, eliminating the existing wind turbine wall.

### **Project Components**

The Painted Hills Wind Energy Repowering Project ("Project") would consist of up to 14, three-bladed, upwind, horizontal-axis wind turbines ranging from 2.0 MW to 4.2 MW in nameplate capacity per turbine. Each wind turbine would be mounted on a concrete pedestal supported by a permanent concrete foundation. Each turbine would include four main physical components that would be assembled and erected during construction: the tower, the nacelle, the hub, and the three

blades. Other main turbine components include the turbine foundation, transformer, and safety features.

The turbine towers consist of three to five (depending on make, model and overall height) pre-fabricated tubular steel sections that are tapered from base to top. The Project would use turbine towers up to 94 meters (309 feet) in height. The nacelle houses equipment, including the gearbox, the electrical generator, and control equipment. It also supports the turbine blades and hub. A yaw system keeps the turbine pointed into the wind to maximize energy capture. A wind vane and anemometer are mounted at the rear of the nacelle to signal the controller with wind speed and direction information.

The three turbine blades and hub make up the rotor. The rotor is connected to the gearbox housed in the nacelle. This system powers the wind turbine. The Project would use turbines with rotor diameters of up to 130 meters (427 feet). The total height of any Project wind turbine as measured from the turbine base to the top of turbine blade in the twelve o'clock position would not exceed 152 meters (500 feet). Figure 1, Typical Wind Turbine Dimensions, provides a schematic illustration of a proposed turbine. Technical/physical specifications for the proposed turbines have been provided in the Project Description Information Sheet included in the Application for Commercial WECS.

The wind turbines would be grouped in rows and would be connected by a network of collection lines that may be partially or entirely underground. Turbines would be arranged within the row in accordance with applicable industry siting recommendations for optimum energy production and minimal land disturbance. The proposed turbine layout is shown in Exhibit A.

To promote visual continuity, all turbine structures would use uniform light-gray or off-white colors and matte finishes in conformance with FAA requirements. No reflective surfaces, logos, or markings would be used.



Up to two new permanent met towers would be erected within the Project site to monitor and document wind conditions. These towers would be up to 309 feet high and would be equipped with applicable FAA-compliant marking or lighting for aviation safety. Up to three new temporary met towers would also be erected within the Project site as part of the Project's wind turbine power curve testing campaign that would occur prior to commercial operations. These temporary met towers would be constructed atop targeted wind turbine locations (prior to the erection of those wind turbines) to collect turbine site specific wind data that would be used to calibrate these locations prior to performing power curve testing. These towers would also be up to 309 feet high and would be equipped with applicable FAA-compliant marking or lighting for aviation safety. The permanent met towers would be free-standing lattice towers constructed atop a concrete foundation. The temporary met towers would be guyed-lattice towers constructed atop a relatively smaller, temporary concrete foundation.

### **Project Operations and Maintenance**

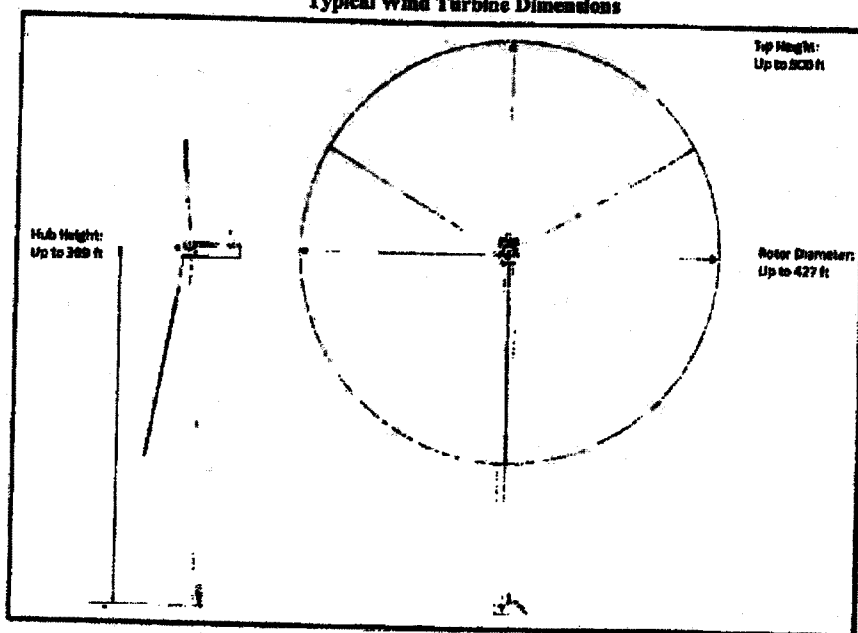
Operations and maintenance (O&M) activities for the Project would remain similar to the O&M activities conducted for the existing facility. Regularly scheduled maintenance of the Project would generally include lubrication of mechanical parts, cleaning of blades, and changing of fluids, performed in conformity with the manufacturer's guidelines. Occasionally, major overhauls or component replacements would be required, necessitating use of cranes or other equipment similar to that used during construction. Maintenance personnel would be onsite on a regular basis to service turbines, replace parts, and perform other maintenance duties.







**Figure 1**  
**Typical Wind Turbine Dimensions**

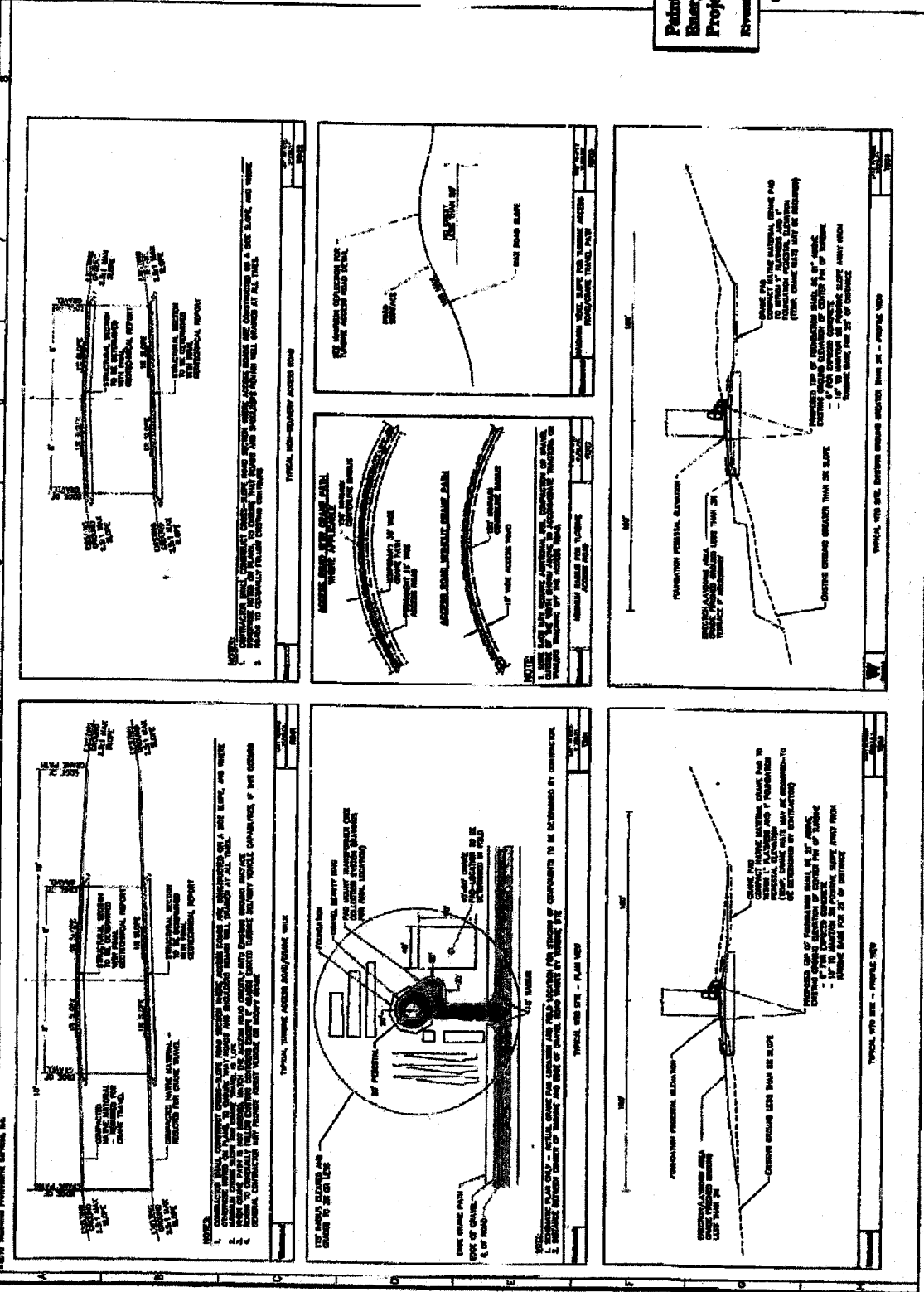


Project No. \_\_\_\_\_  
 Date \_\_\_\_\_  
 Scale \_\_\_\_\_  
 Drawing No. \_\_\_\_\_  
 Revision \_\_\_\_\_  
 Prepared by \_\_\_\_\_  
 Checked by \_\_\_\_\_  
 Approved by \_\_\_\_\_

**Printed Hills Wind, LLC**  
 1000 S. Orange Ave., Suite 100  
 San Diego, CA 92108

**Printed Hills Wind Energy Repowering Project**  
 Riverside County, California  
 Construction Details

**SEND FOR PERMITTING NOT FOR CONSTRUCTION**  
 Date: 07/12/2018  
 Sheet: 4 of 08





Sheet No. \_\_\_\_\_

Project Name: \_\_\_\_\_  
Client: \_\_\_\_\_  
Date: \_\_\_\_\_

Printed Hills  
Wind, LLC  
10000 E. 1st Ave. Suite 200  
Denver, CO 80231

Printed Hills Wind  
Energy Empowering  
Project

Riverside County, California

Construction Details

ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION

Rev: 04/20/08

Rev: 1 0 0 8

