

Sibilla Wind S.r.l.

**Parco Eolico "Sibilla" sito nei comuni di:
Canino e Montalto di Castro (VT) - Manciano (GR)**

Report dei Trasporti

Novembre 2022



Regione LAZIO comuni di:



Canino (VT)



Montalto di Castro (VT)



Regione TOSCANA comune di:



Manciano (GR)

Committente:

Sibilla Wind S.r.l.

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Titolo del Progetto:

**Parco Eolico "Sibilla" sito nei Comuni di:
Canino e Montalto di Castro (VT) - Manciano (GR)**

Documento:

REPORT DEI TRASPORTI

N° Documento:

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Progettista:



sede legale e operativa
San Martino Sannita (BN) Località Chianarile snc Area Industriale
sede operativa
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P.IVA 01465940623
Azienda con sistema gestione qualità Certificato N. 50 100 11873



Progettista
Dott. Ing. Nicola FORTE

Rev	Data Revisione	Descrizione	Redatto	Controllato	Approvato
00	NOVEMBRE 2022	Richiesta AU	-	-	-

Class I

Confidentiality Note: **Recipient's discretion**

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Issued on 03/05/2022

Executor: Leanzio GAMBUTI

Approver: Francesco DRAGONE

Customer: Vestas Development

Transport Road Survey Report

Project: Montalto di Castro (VT)

History of this document

Doc. and Rev. no.:	Date:	Description of changes	Exec.	Appr.
MED TTT001	03/05/2022	First issue	Leanzio GAMBUTI	FRADR

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Summary

According to Customer requested it has been analyzed turbine type V162 - HH 125 m configuration transport feasibility for catching up to the Montalto di Castro Wind Park Site.

Road Survey date: **08/03/2022**

Transport Supervisor: **Francesco DRAGONE (Vestas Italia)**

Attendants:

Transporter Representative: **Riccardo DI PALMA (La Molisana Trasporti)**

Specs Description

Project	Montalto
Country	Italy
Location	Montalto di Castro (VT) Lazio Region
Scope	Planning Stage – Transport Logistic – Feasibility Study
Turbine	<u>V162 125m</u>
Transport Mode	<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Transshipment <input checked="" type="checkbox"/> Blade Lifter <input type="checkbox"/> Tower <input type="checkbox"/> Nacelle
Start From	Civitavecchia Port (all components)

Weight and Dimension

V162 5.6 MW

Nacelle	length mm	width mm	height mm	Weight kgs
	18176	4200	4350	83670

Single blade	length mm	width mm	height mm	Weight kgs
	79350	4320	3294	21700

Hub	length mm	width mm	height mm	Weight kgs
	4980	4401	4040	64000

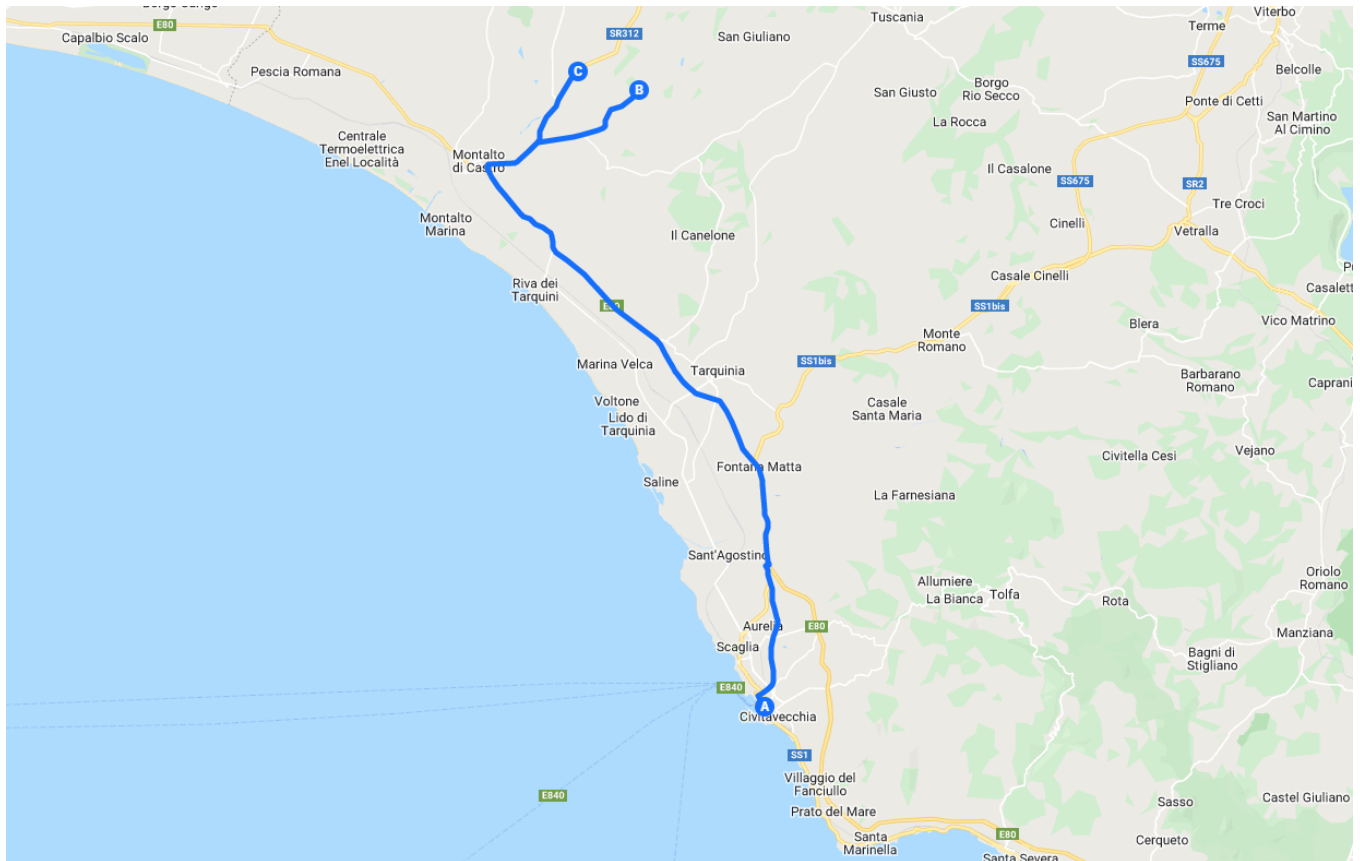
Drive train	length mm	width mm	height mm	Weight kgs
	7500	2700	3000	94040

HH125m

Tower	Bottom end mm.	top end mm.	length mm.	weight kgs.
Section 1	4500	4150	12500	80000
Section 2	4150	4150	14280	77000
Section 3	4150	4150	16800	77000
Section 4	4150	4150	20720	75000
Section 5	4150	4150	28000	73000
Section 6	4150	4000	30000	53000

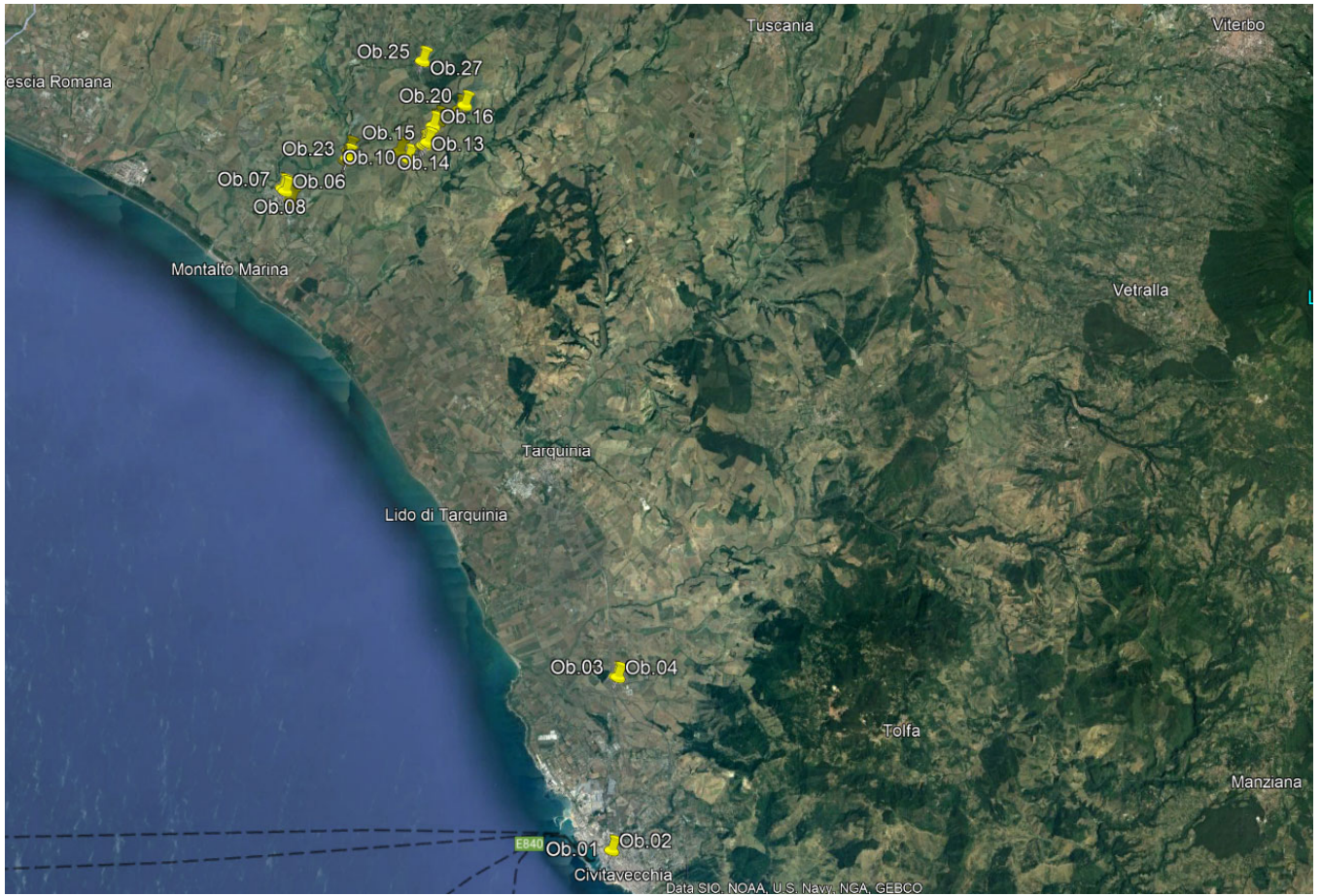
General Route Description

For the transport of the Wind Turbine, Civitavecchia Port has been considered as pick-up location for all component.



**Porto Civitavecchia ▶ Via del Lazzaretto ▶ SS698 ▶
▶ A12 ▶ SS1 ▶ Via Aurelia Tarquinia ▶ SR312 ▶
▶ SP4 ▶ Site Access ▶ T8/T9/T7/T6/T5/T4/T2
▶ SR312 ▶ Site Access ▶ T1/T3**

Observation Map Overview



Road Modifications

Observation 01

Exit Civitavecchia Port. From the port you need a carriageway with a width of 5.0 meters in the straight part of the road and 5,5 meters in the curves All NOT INDICATED (cables, limbs, etc..) must be over 6,0 m in height. In addition, close to the bends before 100 m and beyond 100 m, in the middle of the carriageway, it will be necessary to leave an aerial clearance without any obstacles (limbs and cables) to allow the lifting of the blade. In curves it is also necessary to ensure an overflight air space for lifting the blade with a maximum inclination between 20 °

Coord.: 42°05'49.18"N - 11°47'14.71"E



Observation 02

Carry out the inversion maneuver

Remove the road signals as per picture

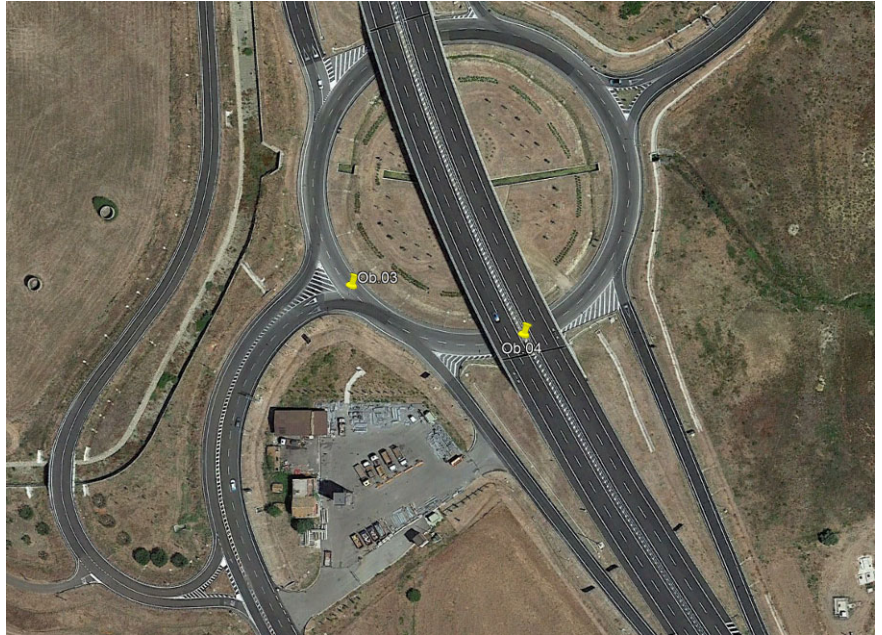
Coord.: 42°05'49.26"N - 11°47'14.89"E



Observation 03

Remove the streetlamp and the road signal as per picture

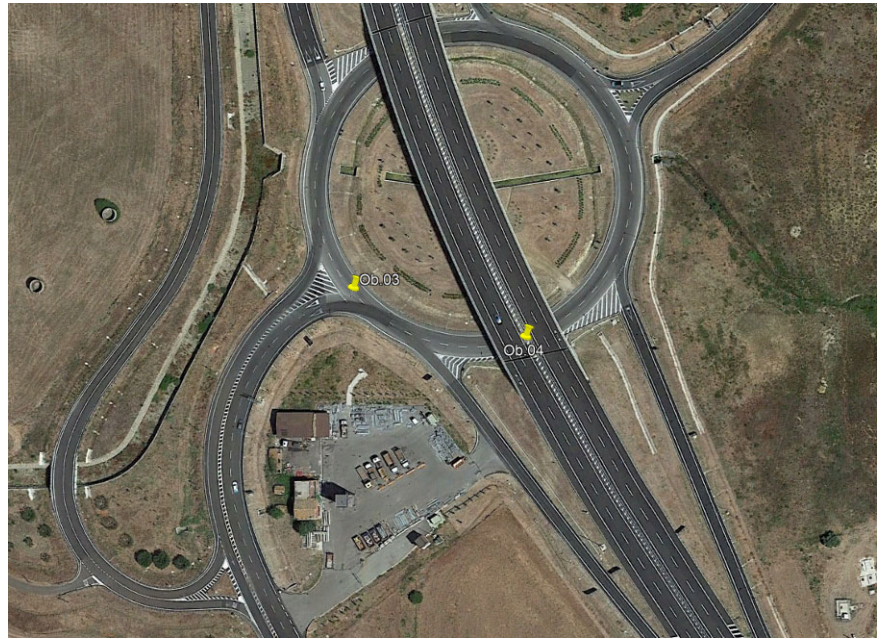
Coord.: 41°28'25.79"N - 15°30'31.9"E



Observation 04

Make enlargement 7mt on the left side

Coord.: 42°09'48.03"N - 11°47'21.69"E



Observation 05

Carry out the indicated maneuver

Coord.: 42°20'38.81"N - 11°36'55.68E



Observation 06

Carry out the maneuver indicated in the opposite direction

Coord.: 42°20'52.18"N - 11°36'45.32"E



Observation 07

It is necessary to prohibit parking in the indicated area

Coord.: 42°20'55.44"N - 11°36'40.99"E



Observation 08

Carry out the indicated maneuver

It is necessary to reopen the guard rail and remove the signage as in the photo

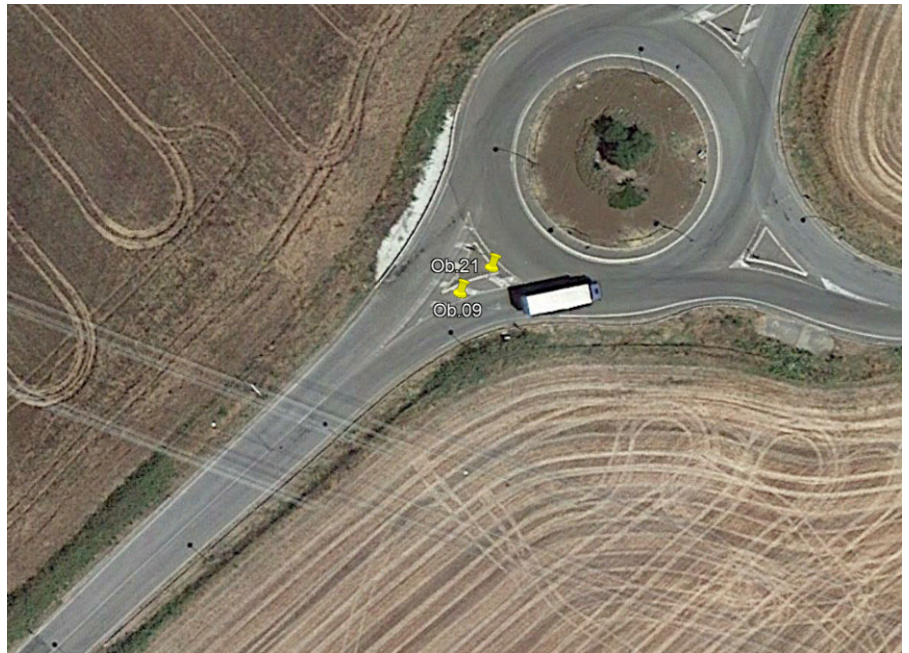
Coord.: 42°20'56.48"N - 11°36'39.53"E



Observation 09

Make enlargement, 4,00 meters on the right side.

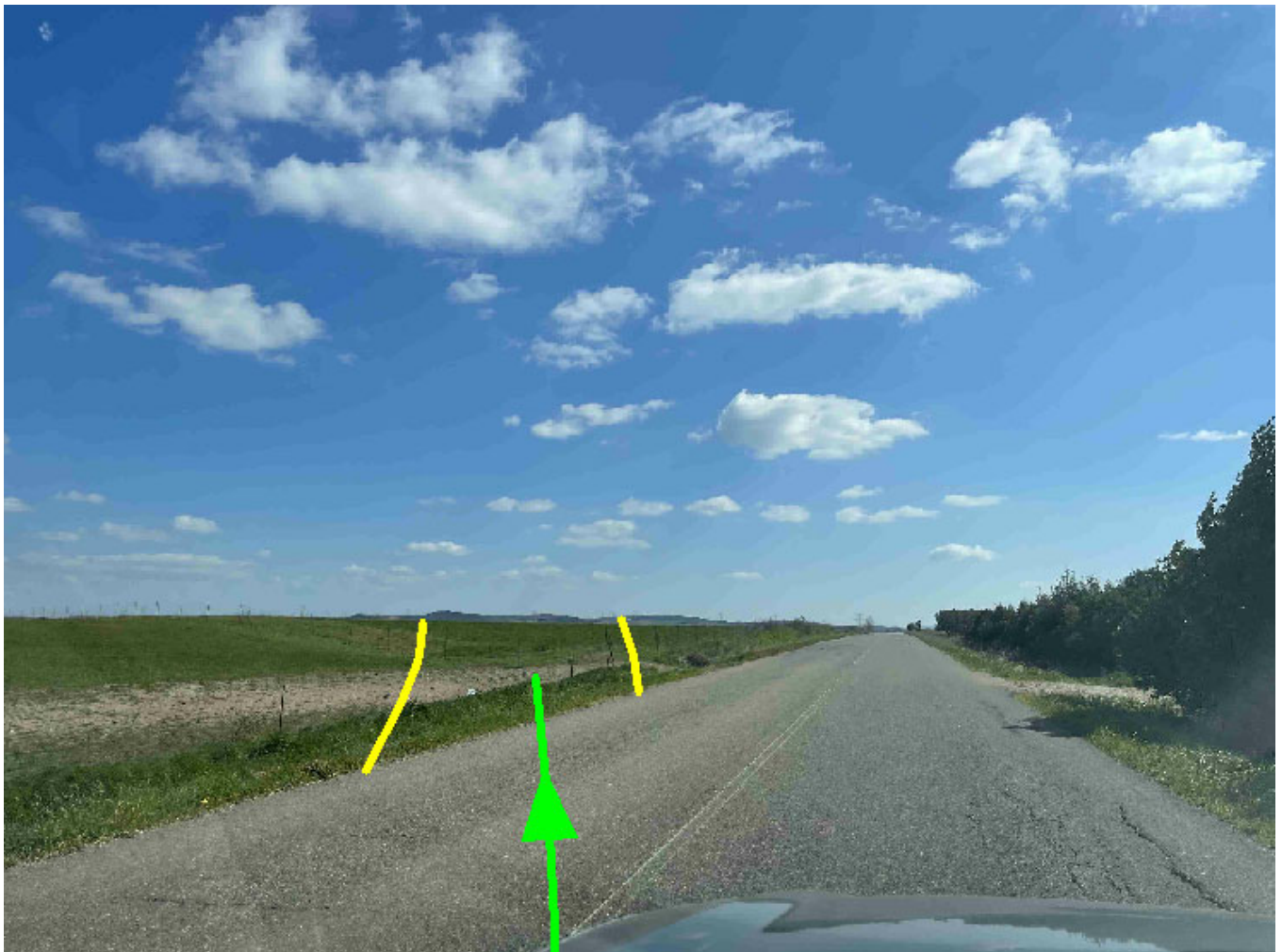
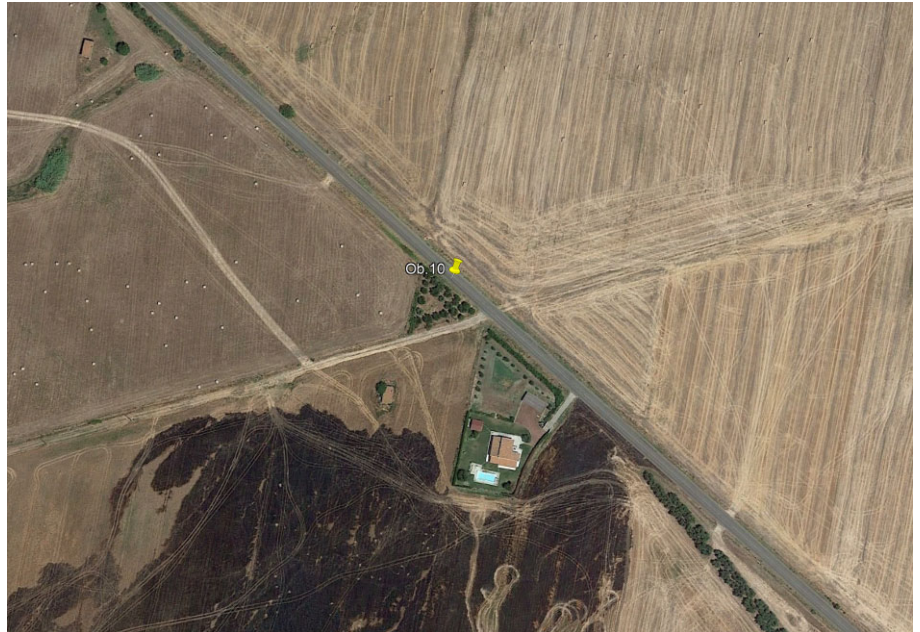
Coord.: 42°21'35.69"N - 11°38'37.2"E



Observation 10

On the left side create site access T8/T9 as per Vestas guidelines as described as the "0054-6051- Wind farm Roads Requirements"

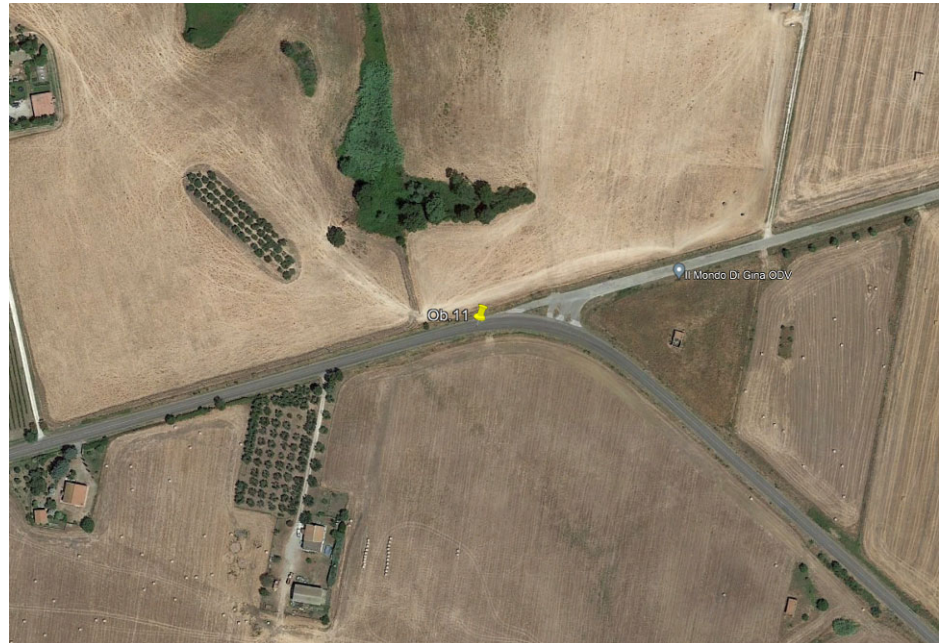
Coord.: 42°21'39.3"N - 11°40'35.13"E



Observation 11

Signal of work in progress in the next 350 meters

Coord.: 42°21'48.83"N - 11°40'18.08"E



Observation 12

Cut the vegetation indicated to ensure an overflight air space for lifting the blade with a maximum inclination between 15 and 20 °

Coord.: 42°21'57.66"N - 11°41'0.86"E



Observation 13

Make enlargement 8mt on the left side

Coord.: 42°21'58.28"N - 11°41'3.83"E



Observation 14

Cut the vegetation as per picture

Coord.: 42°22'0.23"N - 11°41'8.06"E



Observation 15

Make enlargement 6mt on the left side

Remove the pola as shown

Coord.: 42°22'2.41"N - 11°41'11.16"E



Observation 16

On the right side create site access T7 as per Vestas guidelines as described as the "0054-6051- Wind farm Roads Requirements"

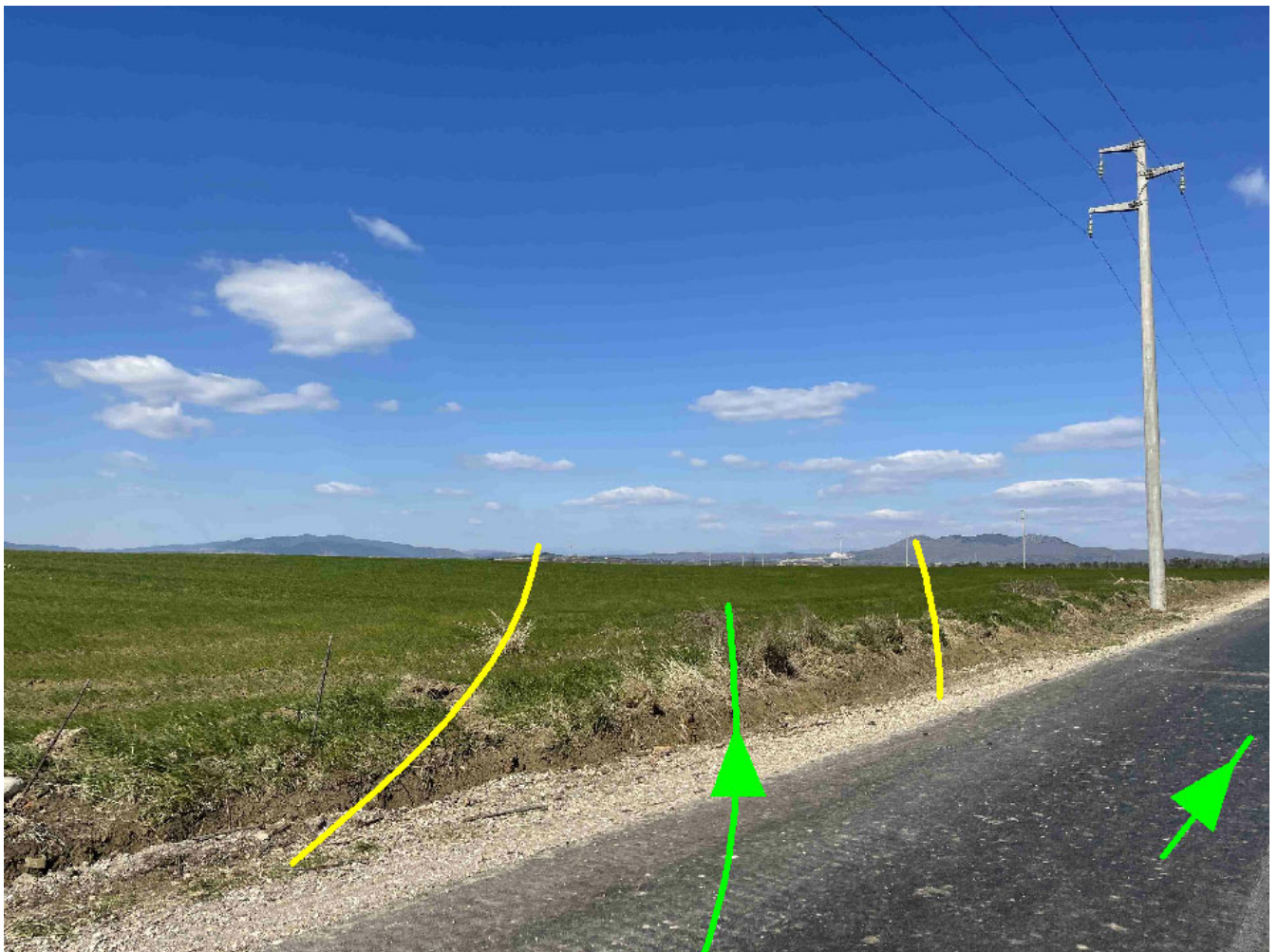
Coord.: 42°22'24.99"N - 11°41'20.42"E



Observation 17

On the left side create site access T6 as per Vestas guidelines as described as the "0054-6051- Wind farm Roads Requirements".

Coord.: 42°22'27.16"N - 11°41'21.66"E



Observation 18

Fix the road as specification

On the left side create site access T4/T5 as per Vestas guidelines as described as the "0054-6051- Wind farm Roads Requirements".

Coord.: 42°22'32.09"N - 11°41'30.37"E



Observation 19

Fix the road as specification

Coord.: 42°22'48.42"N - 11°42'8.79"E



Observation 20

On the left side create site access T2 as per Vestas guidelines as described as the "0054-6051- Wind farm Roads Requirements".

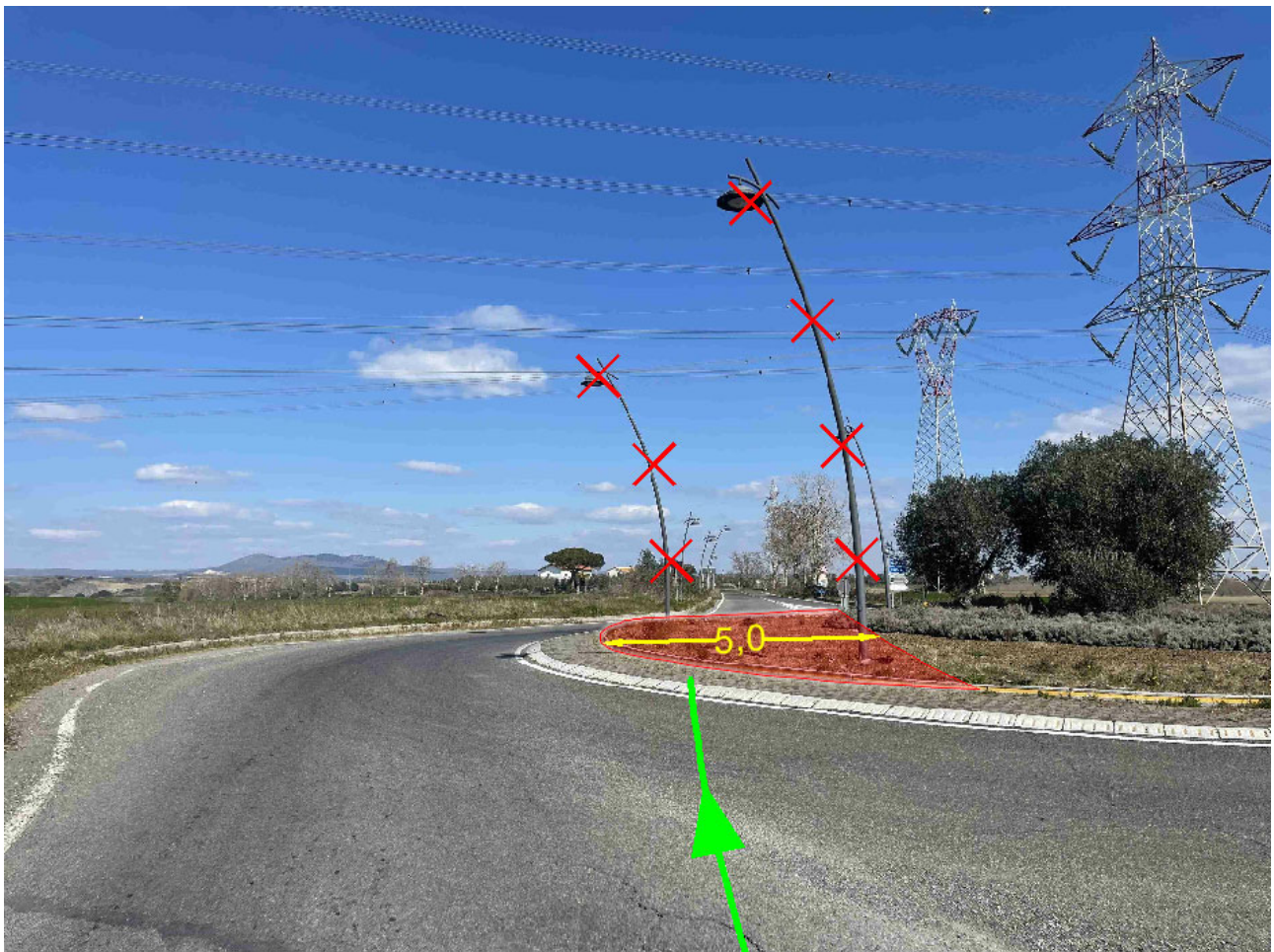
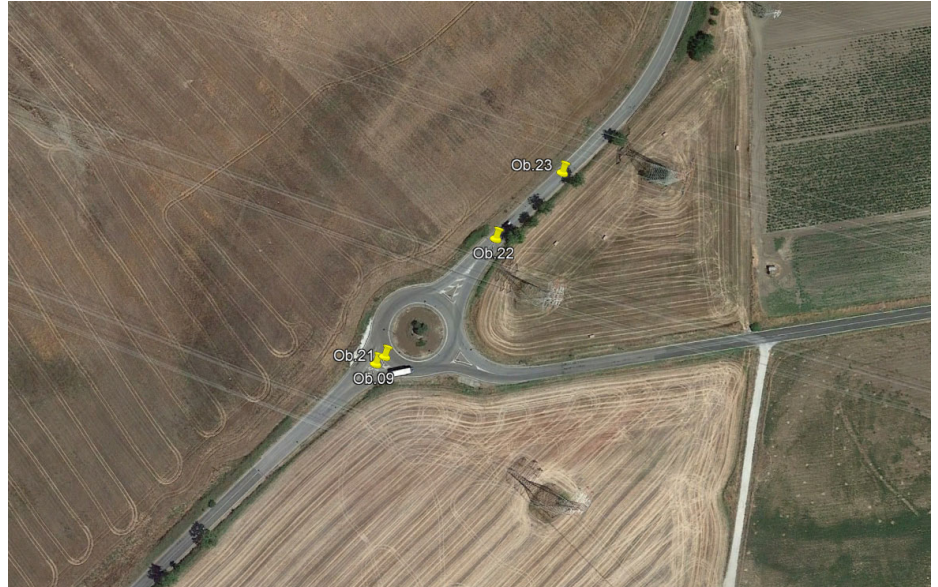
Coord.: 42°22'54.5"N - 11°42'19.06"E



Observation 21

Carry out the indicated maneuver in the wrong direction.
Make a 5m driveway widening and remove the 2 street lamps

Coord.: 42°21'35.81"N - 11°38'37.4"E



Observation 22

On the entire stretch cut the vegetation protruding on the roadway

Coord.: 42°21'37.75"N - 11°38'39.87"E



Observation 23

Cut the vegetation as per picture on the right side

Make enlargement 3mt on the left side

Coord.: 42°21'38.83"N - 11°38'41.35"E



Observation 24

Cut the vegetation as per picture

Coord.: 42°21'49.24"N - 11°38'43.58"E



Observation 25

Make enlargement 30x40m

Coord.: 42°23'54.65"N - 11°40'58.9"E



Observation 26

Make enlargement 30x40m

Coord.: 42°23'54.14"N - 11°40'57.03"E



Observation 27

Create site access T1/T3 as per Vestas guidelines as described as the "0054-6051- Wind farm Roads Requirements".

Coord.: 42°23'54.58"N - 11°40'58.71"E



Conclusions and Highlighted

- Every branches jutting out on routing roads will have to be cut (5,0 m width and 6,0 m high)
- Keep flat every height difference (along 45 m vertical bending radius has to be 250 m) on the complete road surveyed.
- Every air electric and phone cables have to be at least 6,0 m high.
- From the port you need a carriageway with a width of 5.0 meters in the straight part of the road and 5,5 meters in the curves All NOT INDICATED (cables, limbs, etc..) must be over 6,0 m in height. In addition, close to the bends before 100 m and beyond 100 m, in the middle of the carriageway, it will be necessary to leave an aerial clearance without any obstacles (limbs and cables) to allow the lifting of the blade. In curves it is also necessary to ensure an overflight air space for lifting the blade with a maximum inclination between 20 °
- The survey road report has been written up considering authorities go head for exceptional transport along every route analyzed
- The feasibility studies and activities suppose owners availability for transiting and making civil works on their farmsteads.
- Site inland practicability, Wind Turbine Generators stocking area and its accesses roads have not taken into account.
- The survey road report has referred to the date 08/03/2022 therefore variations and/or changes of practicability state will be evaluated subsequently
- For transport activities related to site and new roads, refer to Vestas guidelines as per Vestas guidelines as described as the “0054-6051- Wind farm Roads Requirements”
- This report could be changed according to the final survey performed by Transport Company
- This report do not take into account activities which could be eventually requested by the private or public authorities on the Access Roads as a condition for the obtainment by the Supplier of any Permit under this Agreement (including but not limited to verification of bridges and performance of all activities necessary in order to get the “certificato di transitabilità”), therefore such activities, if any, shall be performed by the Buyer.