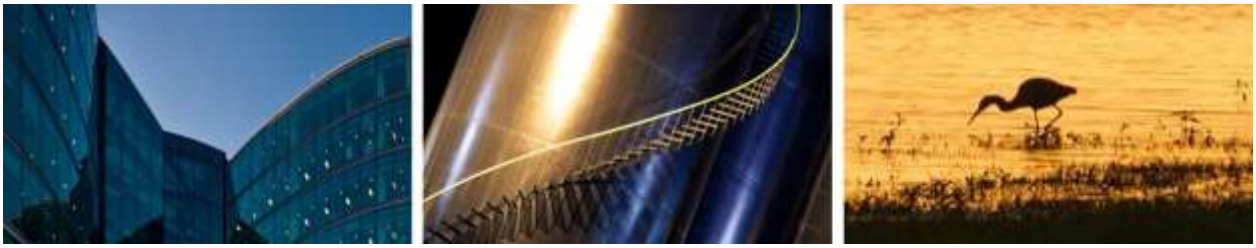

Environmental and Social Due Diligence Supplementary Report Zielona/Dębsk Wind Farm Project Poland

Prepared for:
Polenergia S.A.

Prepared by:
ENVIRON Poland Sp. z o. o.

Date:
September/October 2014

Project number:
PL1104

Report status:
Final

ENVIRON

Project No:	PL1104
Report status and issue:	Final
Project Director/Manager: (signature)	Maciej Rozkrut 
Authors:	Maciej Rozkrut, Agnieszka Rogowiec
Date:	September/October 2014

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Contents

1 Introduction

Two subsidiaries of Polenergia S.A. (formerly Polish Energy Partners S.A.), namely Grupa PEP - Farma Wiatrowa 2 Sp. z o.o. and Grupa PEP – Farma Wiatrowa 3 Sp. z o.o. have developed two wind farm projects at the territory of Żuromin and Kuczbork -Osada communes, central Poland. The wind farms will be situated adjacent to each other and therefore can be considered from the environmental perspective as a single project.

The wind farms, further referred to as the Zielona and Dębsk, comprise of:

- up to 29 wind turbine generators (WTGs) at Zielona and up to 34 WTGs at Dębsk wind farm respectively;
- main electrical substation (MES);
- underground infrastructure of power transmission and control cables;
- access roads to individual WTGs and assembly and service yards.

The maximum capacity of individual WTGs will not exceed 3 MW, and the total installed capacity for the wind farms should not exceed 87 MW and 99 MW for the Zielona and Dębsk wind farms respectively. The maximum diameters of WTGs are:

- hub height: 120 m;
- rotor diameter: 112 m.

The Zielona wind farm will be situated in the area delineated by the villages of Zielona (northwestern corner), Kuczbork (northeastern corner), Olszówka (southeastern corner), Kliczewo (southern corner) and Kosewo (southwestern corner). Eighteen WTGs have been planned for development in the Kuczbork- Osada commune and the remaining 11 in the Żuromin commune, however, due to a limited grid connection capabilities, the actual number of WTGs planned by the company for development in the Kuczbork -Osada commune has been reduced to 14.

The Dębsk wind farm will be situated adjacent to the south of the Zielona wind farm, in the area delineated by the villages of Chamsk (western corner), Olszewo (northwestern corner), Kliczewo Duże (northern corner), Wólka Kliczewska (northeastern corner) and Małocin (southeastern corner).

The MES will be situated by the local road Dębsk-Olszewo, in the center of the WF3.

Energy generated by WTGs of both wind farms will be transferred via underground medium voltage cables to the MES. After transformation to high voltage (HV) the energy will be transferred via an underground 110 kV power transmission line (PTL), approximately 60 km long to the MES Kruszczewo.

Both Zielona and Dębsk wind farms were already granted environmental decisions and passed environmental impact assessment (EIA) procedures, which were based on the following EIA reports:

- „Raport o oddziaływaniu na środowisko farmy wiatrowej >Żuromin FW2< w gminach Kuczbork-Osada i Żuromin (pow. żuromiński, woj. mazowieckie)" (Environmental impact assessment report of „Żuromin FW2" wind farm in the communes of Kuczbork-Osada and Żuromin (Żuromin county, Mazowieckie voivodeship)), in Polish, by Proeko, August 2010, further referred to as Zielona EIA report;

- „Raport o oddziaływaniu na środowisko farmy wiatrowej >Żuromin FW3< w gminie Żuromin (pow. żuromiński, woj. mazowieckie)" (Environmental impact assessment report of „Żuromin FW3" wind farm in the commune of Żuromin (Żuromin county, Mazowieckie voivodeship)), in Polish, by Proeko, May, 2010, further referred to as Dębsk EIA report.

This supplementary report has been prepared in order to address the environmental and social issues which, according to ENVIRON's opinion, were not sufficiently precisely presented in the EIA reports or were not discussed at all, as well as to discuss the potential impacts of the HV PTL which was not covered by any of the above listed EIA reports. Therefore this report does not constitute a full EIA for the Zielona and Dębsk wind farms and does not follow requirements of the EU EIA Directive[1] or Polish Law[2], but rather fills the gaps identified by ENVIRON in the EIA reports as compared to good industry practice and international standards.

1 Directive 2011/92/EU of The European Parliament and of the Council of 13 December 2011, On the Assessment of the Effects of Certain Public and Private Projects on the Environment with further amendments;

2 Ustawa z dnia 3 października 2008 r. o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko with further ammendments

2 Cumulative Environmental and Social Impacts

2.1 Transportation Issues

Construction of up to 63 WTGs (actually, the number of WTGs will be reduced to maximum 57 units, according to the latest Polenergia plans) will require delivery of oversize elements of WTGs, building materials for roads and service yards, concrete and steel for foundations works as well as removal of vast amounts of excavated soil. Also cranes and other building machinery will need to be delivered to construction sites.

Following the EIA reports, the foundation works will require removal of approximately 1200 m^3 of excavated soil per WTG. Assuming typical volume of a dump truck at 20 m^3, removal of soil from one excavation pit will require 60 transits per single WTG. Moreover, similar volume of concrete will need to be delivered which will require additional 120 transits. Further, delivery of WTG's elements, cranes and other building machineries will require additional 10-15 transits. For simplicity it can be assumed that for a single WTG construction approximately 400 drives of trucks will be needed (the number of trucks' transits is doubled as each truck must return after delivery of its load). For the entire wind farm of 57 WTGs, 22,800 transits will be needed, of which 6,840 will be related to removal of excavated soil.

Each WTG will be accompanied by a service yard, approximately 1000 m^2 large. Additionally, approximately 14.5 km of access roads will be developed. Assuming roads width to be 4 m this corresponds to 58,000 m^2 of roads to be hardened, i.e. 115,000 m^2 will need to be hardened in total. Following the EIA reports, the topsoil which will need to be removed will not be transferred off the site. Assuming topsoil layer to be 0.3 m thick, the volume of hardening material will be approximately 34,500 m^3 for the entire wind farm, thus the corresponding number of dump truck drives will amount 3,450.

In total approximately 26,250 drives of heavy trucks will be needed to complete construction works at the Zielna and Dębsk wind farms. At this moment the routes for delivery of equipment and building materials as well as destination for the excavated soil are unknown. However, it is obvious that such large amount of drives will affect the local communities, the most likely citizens of the neighboring villages of Kuczbork, Zielona, Olszewo, Kuczewo, Chamsk and Dębsk which likely will be crossed as being located on the most obvious access roads to the sites. The expected adverse impacts of increased heavy traffic include:

- noise and vibrations generated by heavy trucks to which the citizens will be exposed;
- increased traffic on the local roads;
- increased likelihood of road accidents;
- damages to road's surface and possibly also building structures;
- temporary limitations in the access to the roads due to the needs of oversize cargo transport.

The traffic load will be likely not evenly distributed during the construction phase of the wind farms. It can be expected, that most of the ground works will be conducted in the autumn

and winter seasons, i.e. when such works pose the smaller risk for flora and fauna. Moreover, the works related to construction of roads and service yards and excavation of soil will likely be evenly distributed within this period.

During 6 months of ground works at the wind farms the average number of truck driving in the area for the purpose of roads construction and removal of excavated soil, under assumptions that:

- the works last 26 weeks;
- works are conducted 5 days a week, during daily hours (6am-10pm);

will amount approximately 6 per hour.

Construction of foundations and deliveries of the WTGs' elements will require approximately 15,960 truck drives. Assuming that the construction works will be conducted in the second half of the year and works are conducted 5 days a week during daily hours, the average number of truck drives will amount approximately 9. Moreover, delivery of oversize cargo will disturb local traffic.

In order to mitigate the social impacts related to transportation issues during construction of the wind farms, the company shall implement the following measures:

- the truck routes should be investigated as quickly as possible and should be planned in such away, to avoid as far as possible concentration of drives across nearby villages; the routes should be agreed upon with the road authorities and the police;
- the routes should utilize newly developed internal wind farm roads to avoid crossing the villages;
- prior commencement of the construction works, the citizens of the affected villages should be informed about increased traffic risks and grievance procedure which is implemented in the company.

2.2 Community Safety

2.2.1 Shadow Flicker Effect

The rotating blades of the turbine may cause the shadow flicker effect. Such impact has not been discussed in the EIA reports, however, commissioned by ENVIRON, the subcontractors undertaken a detailed assessment.

Polish law does not regulate in any way the issues related to the reduction of shadow flicker effect. Therefore, any recommendations or restrictions associated with it cannot be applied to the investor. The applied guidelines are based on a document Hinweise zur Ermittlung Und Beurteilung der optischen Immissionen von Windenergieanlagen (WEA-Schattenwurf-Hinweise), which is a basis for shadow flicker analysis in Germany.

According to that document, the ratio of the shading duration should not exceed 30 hours per calendar year and should be a maximum of 30 minutes per day. Although these values

are not regulated by law, they are also used in many other European countries (eg. Great Britain, France, Netherlands).

The calculations were undertaken for both parts of the Zielona/Dębsk Project – Zielona WF and Dębsk WF, as well as for two already existing wind farms – Żuromin I and Żuromin II. The results indicate that there are no exceedances of shading levels, which are treated as safe for the real conditions (taking into account data from long-term observations derived from meteorological stations). In none of the points designated for measurements, the meteorological probable length of shading exceeds 30 hours per year and 30 minutes per day. While lack of clouds and barriers between the receptor and wind turbine was assumed, the results showed only the theoretical and maximal impact.

Moreover, based on the calculations for the cumulative impact of two neighbouring wind farms, it is known that the shading levels will not be exceeded neither. In fact it is expected that the real influence would be significantly lower than the outputs of the calculations.

As concluded by the shadow flicker study authors, the planned investment is likely to be as source of impacts in terms of light phenomena. Implementation of the project will not be a source of nuisance in terms of stroboscopic effect. In order to eliminate the impact, the blades will be coated with a matt paint of translucent texture. Moreover, the Zielona/Dębsk Project should not be a nuisance in terms of shading. The results of calculations for actual meteorological conditions did not show that the proposed wind turbine could cause shading on a higher level than treated as an inconvenient one.

Based on the literature review, the shadow flicker study authors concluded that such effect causes nuisance in a distance smaller than 400-500 m from WTG, thus will not be an issue of concern at the subject wind farm.

2.2.2 Ice/blade Throw Risk

The risk of ice throw must be taken into account during planning of the wind farm investment. This effect may occur when ice generated on the turbine blades under certain meteorological conditions is thrown away of the blade driven by a centrifugal force. The potential risk was not analyzed in none of the EIA report. ENVIRON accomplished calculations according to the guidelines provided by the Wind Energy Production in Cold Climate (Wind Energy Production in Cold Climate Tammelin, Cavaliere, Holttinen, Hannele, Morgan, Seifert, and Säntti, 1997), which suggest the following formula for calculating the safe distance: 1.5 * (hub height + rotor diameter). The rough calculations for the Zielona and Dębsk wind farms indicate that for assumed hub height and rotor diameter, the maximum throw range will be approximately 270 m.

The blade or part of blade throw risk occur in certain circumstances, e.g. if blade structure is affected by ice or production error, or, if an accident caused e.g. by fire or thunder strike occurs while the blades are rotating. Damaged part of the blade or entire blade is then thrown away by a centrifugal force. Theoretically, the throw range can be calculated based on the kinematic of angular throw, which, for given WTGs correspond to a maximum range of throw of some 1500 m. However, in real conditions the thrown blade or its part is still subject to aerodynamics forces and air resistance and actual distances of throw are typically shorter, which was proved both numerically and by observations of real accidents. Following presentation of Mr. Scott Larwood of California Wind Energy Colaborative presentation

(2004 Forum Palm Springs), a throw range for near 100 m tall WTGs is approximately equal to WTG overall height for entire blade, and 2.5 times WTG height for part of the blade. In lack of the sound scientific background we have assumed, that the blade throw range for the subject WTGs will be 500 m.

We have analyzed location of the WTGs versus potential places of concern, such as human residences and public roads. The results of the analysis are presented in the Appendix 1.

Although no human residences were found to be in danger of the ice or blade throw, the local roads are within the risk range as presented in the table below:

Wind farm	WTG	Affected road	Risk
WF2	TW1	Road from Zielona to Kosewo	Blade and ice
	TW19	Road from Zielona to Kosewo	Blade
	TW20	Road from Kuczbork Wieś to Zielona (provincial road No. 563)	Blade and ice
	TW21	Road from Kuczbork Wieś to Zielona (provincial road No. 563)	Blade and ice
	TW22	Road from Kuczbork Wieś to Zielona (provincial road No. 563)	Blade and ice
WF3	EW3	Road from Olszewo to Chamsk	Blade
	EW12	Road from Olszewo to Chamsk	Blade and ice
	EW13	Road from Olszewo to Chamsk	Blade and ice
	EW15	Road from Olszewo to Dębsk	Blade and ice
	EW19	Road from Olszewo to Dębsk	Blade and ice
	EW20	Road from Olszewo to Dębsk	Blade and ice
	EW21	Road from Olszewo to Dębsk	Blade and ice
	EW30	Road from Olszewo to Kliczewo Duże	Blade

In order to mitigate a risk for humans it is recommended to:

- place warning signs in due distance at the access roads to the individual WTGs;
- in agreement with the public roads management authorities, place boards to inform about entering wind farm area, by the roads Zielona-Kosewo, Kuczbork Wieś – Zielona, Olszewo-Chamsk and Olszewo – Kliczewo Duże.

3 Underground Power Transmission Line

3.1 Introduction

The power generated by the Zielona and Dębsk wind farms will be transferred to the national power grid with use of an underground power transmission line (PTL), approximately 60 km long. Following the national regulations, in particular the EIA act[2] and the Executive Order of the Minister of Environment of November 9, 2010 on types of developments which may substantially impact the environment, construction of underground PTLs does not require any environmental impact assessments. Therefore, development of the subject PTL has not been subject to EIA and no environmental decision for it has been granted.

This chapter is aimed at identification of potential adverse risks to the environment related to PTL development. Although the project will be developed by a third party (Distribution System Operator Energa Operator S.A.) it is in the area of influence of the Zielona and Dębsk subprojects.

3.2 PTL Route

For maps of the planned PTL route please refer to Appendix 2.

The PTL route starts at the planned main electrical substation which will serve both WF2 and WF3 wind farms, nearby the road Dębsk-Olszewo. In its initial part, the route goes towards southwest through arable fields and pastures, up to a dirt road Dębsk-Chamsk where it turns southeast. After a distance of approximately 150 m the route turns again towards southwest, crossing again pastures and arable fields.

At a distance of approximately 4 km from the beginning, the PTL route turns towards southeast, 500 m further again towards southwest for some 100 m and then again towars southeast to cross the easternmost dwellings of the Sadłowo village on its southern side. Then the route turns a few times towards south-southeast and southwest to avoid crossing the inhabited areas but keeping the general southwestern direction up to approximately 14th km of the route, when the general direction changes towards southern one, after crossing the Wkra river and entering Natura 2000 area PLB140008 “Doliny Wkry i Mławki” nearby the Myślin village. The route exits the protected area some 3 km further, nearby the Stanisławawowo village.

The direction towards south is maintained for approximately 4 km then it changes again, in the vicinity of the village of Jaworowo-Semborze, towards southwest. Further, nearby the Jaworowo-Kolonia the route turns towards west for a while to cross the road No. 145 and then returns towards southwest again on the western side of the road. Further, the route crosses the railway line nearby the village of Kolonia Młotkowo and then the national road No. 10 nearby the village of Piaski-Zarzecze. Further, the route passes still towards southern and southwestern direction, nearby the village of Sulenczyce up to the village of Grabowice, where two alternative variants are considered at a distance of approximately 2 km.

The alternative routes end at approximately 41 km of the route, north of the village of Lelice. Further, the route crosses the road No. 560 and continues on the eastern side of the road Bronisław-Łysakowo, to cross it nearby the Kędzierzyn village and continue on its western side. Further the route continues towards south, leaving on the eastern part the villages of Lubki, Zągoty and Sękowo. Further, the route turns towards west, crosses a railway line,

and after a distance of approximately 1km turns south again to its final destination at the main transforming substation in Kruszczewo.

At its entire length, the PTL route passes across arable fields, pastures or unused land, leaving human residences and forest complexes unaffected. The PTL will need to cross a few roads of different importance (from local dirt roads to national road No. 10) as well as railway lines. Given well developed drainage system in the area, the PTL will also need to cross drainage ditches.

One river is crossed on the route (Wkra) and one Natura 2000 area.

3.3 Inventory of Nature on the PTL Route

A wild nature inventory was completed at the site by Proeko[3,4] and summarized in the reports, additionally inventory of fauna at the territory of the crossed Natura 2000 area, however, the final report for this inventory has not been prepared yet. However, based on the provided information, the cable route

The inventory was conducted in June and August 2014, in a 20 m wide path of land over the planned PTL route.

3.3.1 PTL Route Within the Natura 2000 area

Based on the inventory report[4], the following Natura 2000 habitats as well as protected species of plants and lichens were found within a 20 m wide lane of land along the route of the planned electricity cable within the Natura 2000 area:

1. Natura 2000 habitat located adjacent to the planned cable route

    - *Fraxino-Alnetum* (Ash-alder riparian) - the priority natural habitat Natura 2000 – riverside riparian (code - *91E0), located on 13-14 km of the route. Weak and dry lobe, adhering from the east to the cable route.

2. Locations/stands of protected species of flowering plants, mostly observed in the vicinity of the cable route (from several up to few hundred meters)

    - *Helichrysum arenarium (*Dwarf Everlast);
    - *Frangula alnus (*Alder buckthorn);
    - *Ribes nigrum* (Blackcurrant).

3 Inwentaryzacja siedliskowo-florystyczna i lichenologiczna trasy planowanego kabla elektroenergetycznego Żuromin – Płock, in Polish, Proeko, August 2014

4 Inwentaryzacja siedliskowo-florystyczna i lichenologiczna trasy planowanego kabla elektroenergetycznego Żuromin – płock w zasięgu obszaru NATURA 2000 „Doliny Wkry i Mławki" PLB140008, Proeko, August 2014

3. Locations/stands of protected species of lichens observed distant from the cable route

   - *Evernia prunastri* (Oakmoss).

Table 1. Summary of the protected stands of protected flowering plants species and epiphytic lichens habitats located close to the PTL route.

No.	Protected habitat	Route km	Comments
1.	*Evernia prunastri* (Oakmoss)	13 -14	2 lindens nearby the Cross, 50 m to the east from the route
2.	*Frangula alnus (*Alder buckthorn)	13 -14	Brushwood on a grasslands, on the course of the cable route
3.	*Ribes nigrum* (Blackcurrant)	14 - 15	A bush by the ditch, on the cable route
4.	*Frangula alnus (*Alder buckthorn)	14 - 15	Brushwood by the ditch nearby the cable route and adjacent forest cover
5.	*Frangula alnus (*Alder buckthorn)	15 - 16	Adjacent to the cable route, to the west from Siedlisko
6.	*Frangula alnus (*Alder buckthorn)	15 - 16	Adjacent to the cable route, to the west from Siedlisko
7.	*Frangula alnus (*Alder buckthorn)	15 - 16	On the intersection between the ditch and the cable route, to the north from Stanisławów
8.	*Ribes nigrum* (Blackcurrant)	15 - 16	On the intersection between the ditch and the cable route, to the north from Stanisławów
9.	*Helichrysum arenarium (*Dwarf Everlast)	15 - 16	On the grass, nearby the house
10.	*Frangula alnus (*Alder buckthorn)	15 - 16	Long lane located in bushwood by the ditch, nearby the cable route

Analysis of the inventory

As indicated in the cable route inventory report, the designated area is located in the vicinity of type of natural habitat Natura 2000 – priority (code - *91E0): willows, poplars, alders and

ashes riparian, which are represented by weakened ash-alder riparian. None of the plants species listed by the Annex II of the Habitats Directive were found within the inventoried area; moreover, none of them belongs to the Polish Red Book of Plants.

Three species under species protection (partial protection) were found. Among them, *Frangula alnus (*Alder buckthorn) was the most common, observed within several sections of the inventoried area. This species is very popular in Poland, protected due to hedging of the pharmaceutical raw materials. The same rule applies to the *Ribes nigrum* (Blackcurrant), which is present in most lowlands of Poland. The next species - *Helichrysum arenarium* (Dwarf Everlast) is a medicinal plant, obtained from the natural stands.

None of the abovementioned species, which are under partial protection, will be impacted by the planned investment of cable route construction.

The route of the planned electricity cable will intersect the Natura 2000 Birds Special Protection 'Dolina Wkry I Mławki' PLB140008 in the approx. 3 km length section Myslin – Wątróbki. The areas intersected by the planned cable route mainly consist of agricultural lands and grasslands, avoiding forest complexes and valuable terrains. The flora of the inventoried area is rather poorly differentiated and mainly consist of meadows clusters.

If the planned cable route runs adjacent to the valuable terrains etc., the following measure to eliminate or minimize the potential impacts should be implemented to the electricity cable project:

- Implementation of a special protection of natural habitat Natura 2000 – priority (code - *91E0): willows, poplars, alders and ashes riparian against negative impact caused by construction works related to the planned cable route;

- Determination of the protection plant species stands, ensuring that they are located mainly in the neighboring areas and, for the time of construction process, implementation of special protection for those stands;

Moreover, as the inventoried area is rather poor, the planned investment will not impact protected species of mushrooms or epiphytic lichens.

3.3.2 PTL Route Out of the Natura 2000 area

Based on the inventory report[3] the following Natura 2000 habitats as well as protected species of plants and lichens were found within a 20 m wide path of land along the route of the planned PTL:

1. Natura 2000 habitat located adjacent to the planned cable route

    - *Fraxino-Alnetum* (Ash-alder riparian) - the priority natural habitat Natura 2000 – riverside riparians (code - *91E0) – one habitat at 16-17 km of the route; lobe of swampy riparian with a rich and typical summer flora;

2. Protected species of flowering plants, mostly observed in the vicinity of the planned cable route (from several up to few hundred meters)

    - *Epipactis helleborine* (Broad-level Helleborine);

- *Dactylorhiza incarnata* (the Early March Orchid);
- *Dactylorhiza majalis* (the western March Orchid);
- *Aquilegia vulgaris* (European columbine);
- *Batrachium aquatile* (Common water-crowfoot);
- *Menyanthes trifoliata*;
- *Nuphar lutea* (Yellow Water-lily);
- *Helichrysum arenarium (*Dwarf Everlast);
- *Convallaria majalis* (Lily of the valley);
- *Frangula alnus (*Alder buckthorn);
- *Viburnum opulus* (Guelder rose);
- *Ribes nigrum* (Blackcurrant);
- *Ononis arvensis.*

3. Protected species of lichens observed distant from the cable route
    - *Evernia prunastri* (Oakmoss).
4. Species of flowering plants belonging to the red list of Polish flora mostly observed in the vicinity of the planned cable route (from several up to few hundred meters)
    - *Lathyrus palustris* (Marsh pea)*;*
    - *Ranunculus illyricus;*
    - *Ranunculus lingua* (Great spearwort);
    - *Teucrium scordium* (Water germander);
    - *Bromus secalinus* (Rye brome).

Based on the inventory reports, one natural habitat Natura 2000 – priority (code - *91E0): willows, poplars, alders and ashes riparian, which are represented by weakened ash-alder riparian is present on the cable route out of the Natura 2000 area. The abovementioned was observed in two distorted habitats. None of the plants species listed by the Annex II of the Habitats Directive were found within the inventoried area; moreover, none of them belongs to the Polish Red Book of Plants.

Thirteen species under species protection were found: five of them are under strict protection and eight of them are under partial protection. Among protected species, the special attention should be directed to the orchids – two March Orchids and one Broad-level Helleborine, which are concentrated in two stands.

Locations of the observed habitats and species are shown on the maps presented in the Appendix 2.

3.3.3 Impact on Fauna

The full fauna inventory report was not available at the time of this supplementary report writing. However, based on the available conclusions of the inventory, the following can be concluded:

1. The PTL development can affect both birds and their habitats. In order to mitigate such impacts the following should be implemented:

    a. the construction works should be conducted under a natural scientist supervision in order to mitigate a risk if protected birds during construction works occupy areas different than these already inventoried;

    b. the construction works should be undertaken out of the breeding season, preferably in the period between September and February;

    c. construction work on the swampy areas or across the river should be conducted with application of a controlling jacking technology, to avoid disturbance of the groundwater conditions;

    d. on the swampy area the works should be conducted as quickly as possible.

2. In order to mitigate adverse impact on amphibians and reptiles, the following mitigation measures should be implemented:

    a. a dedicated barriers protecting amphibians from entering construction area should be used;

    b. construction works should be conducted under supervision of a nature scientist;

    c. other protective measures, such as e.g. capture of amphibians and taking them out of the excavation pits should be implemented.

According to the EU law and Court of Justice of the European Union's judicature and taking into account the precautionary principle, a risk for habitats and wild fauna and flora is dependent on the conditions of the likelihood or the risk that the planned development will have a significant effect on the site. Such a risk exists when on the basis of objective circumstances cannot be excluded that the development will have an impact on the area in a significant way.

According to the report conclusions, implementation of the abovementioned protection measures shall secure appropriate protection on habitats, flora and fauna and eliminate the risk of significant impact. Therefore the development of PTL line shall be in line with EU and national regulations and a likelihood of the authorities to request the EIA procedure is low.

Appendix 1
Areas of the ice/blade throw risk

Legend:

- Blade throw range
- Ice throw range

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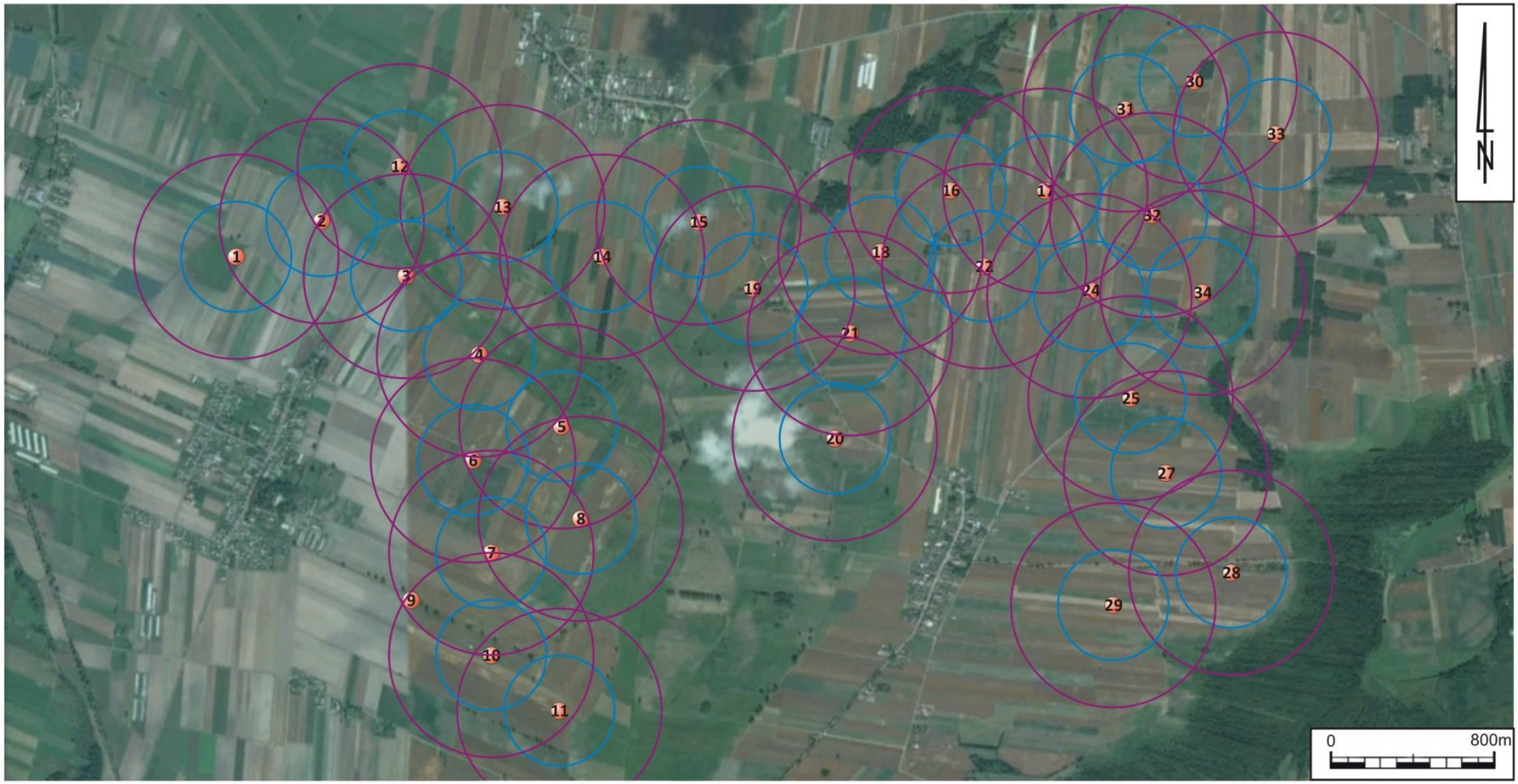
Zielona Wind Farm
Kuczbork-Osada and Żuromin communes
Poland

Ice and blade throw effect

Client: POLENERGIA	Date: September/October 2014
Project no. PL 1104	Drawn: ŁJ



Legend:

- Blade throw range
- Ice throw range

ENVIRON

Dębsk Wind Farm
Żuromin Commune
Poland

Ice and blade throw effect

Client: POLENERGIA	Date: September/October 2014
Project no. 1104	Drawn: ŁJ

Appendix 2

Maps of the underground power transmission line route

source: Inwentaryzacja siedliskowo-florystyczna i lichenologiczna trasy planowanego kabla elektroenergetycznego Żuromin – Płock, in Polish, Proeko, August 2014

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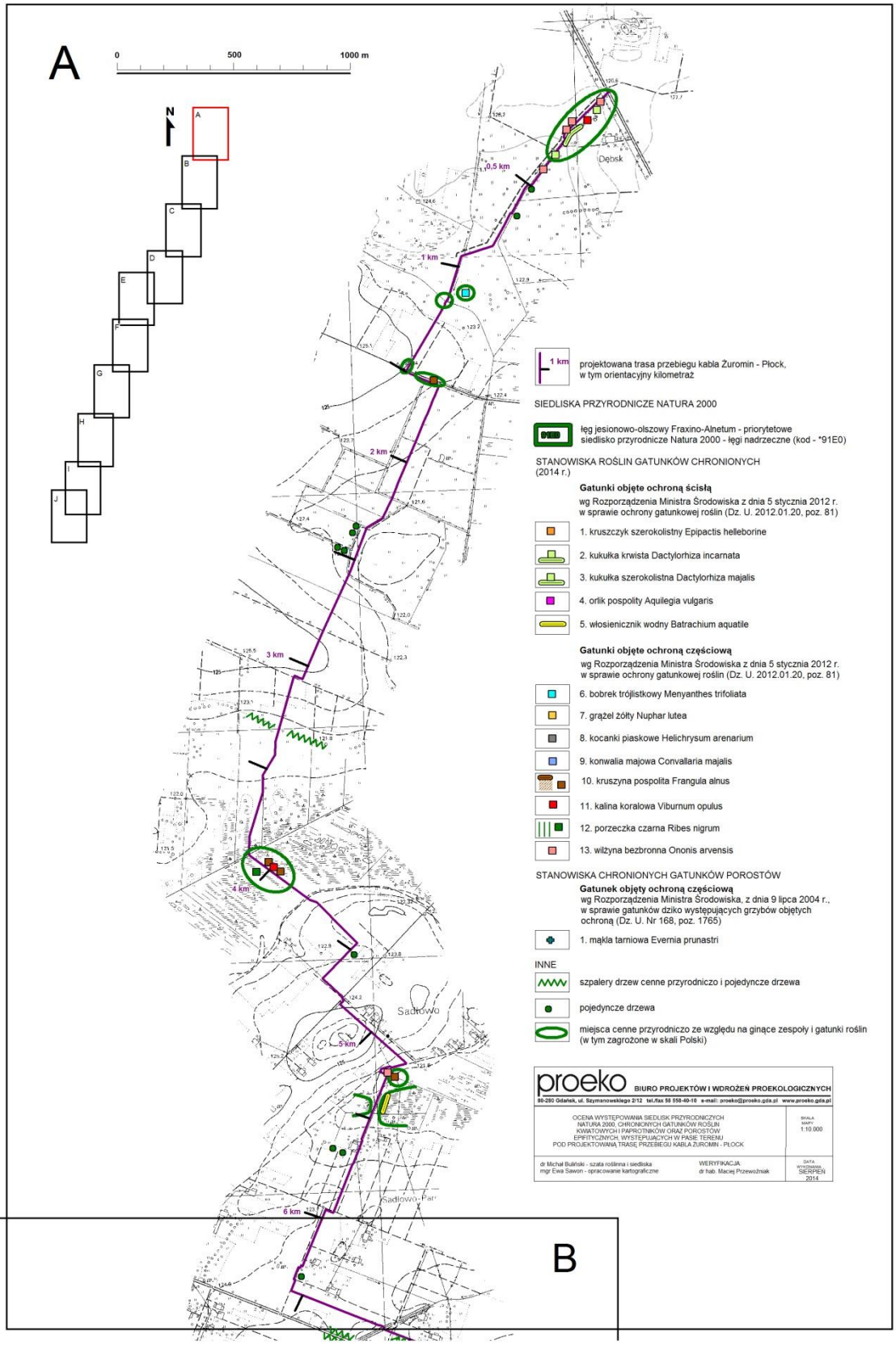

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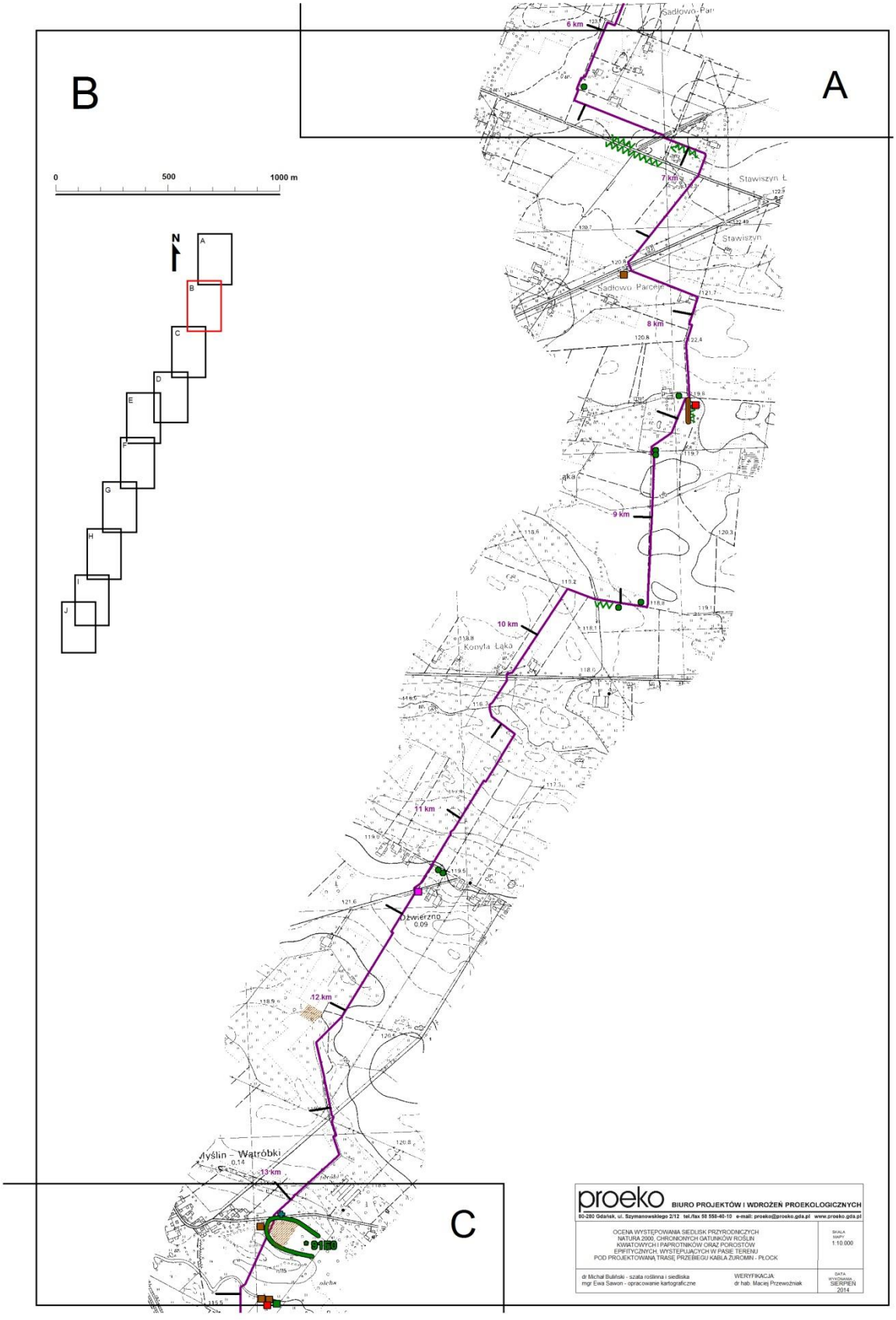

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SKALA MAPY 1:10.000

dr Michał Buliński - szata roślinna i siedliska
mgr Ewa Sawon - opracowanie kartograficzne

WERYFIKACJA dr hab. Maciej Przewoźniak

DATA WYKONANIA SIERPIEŃ 2014

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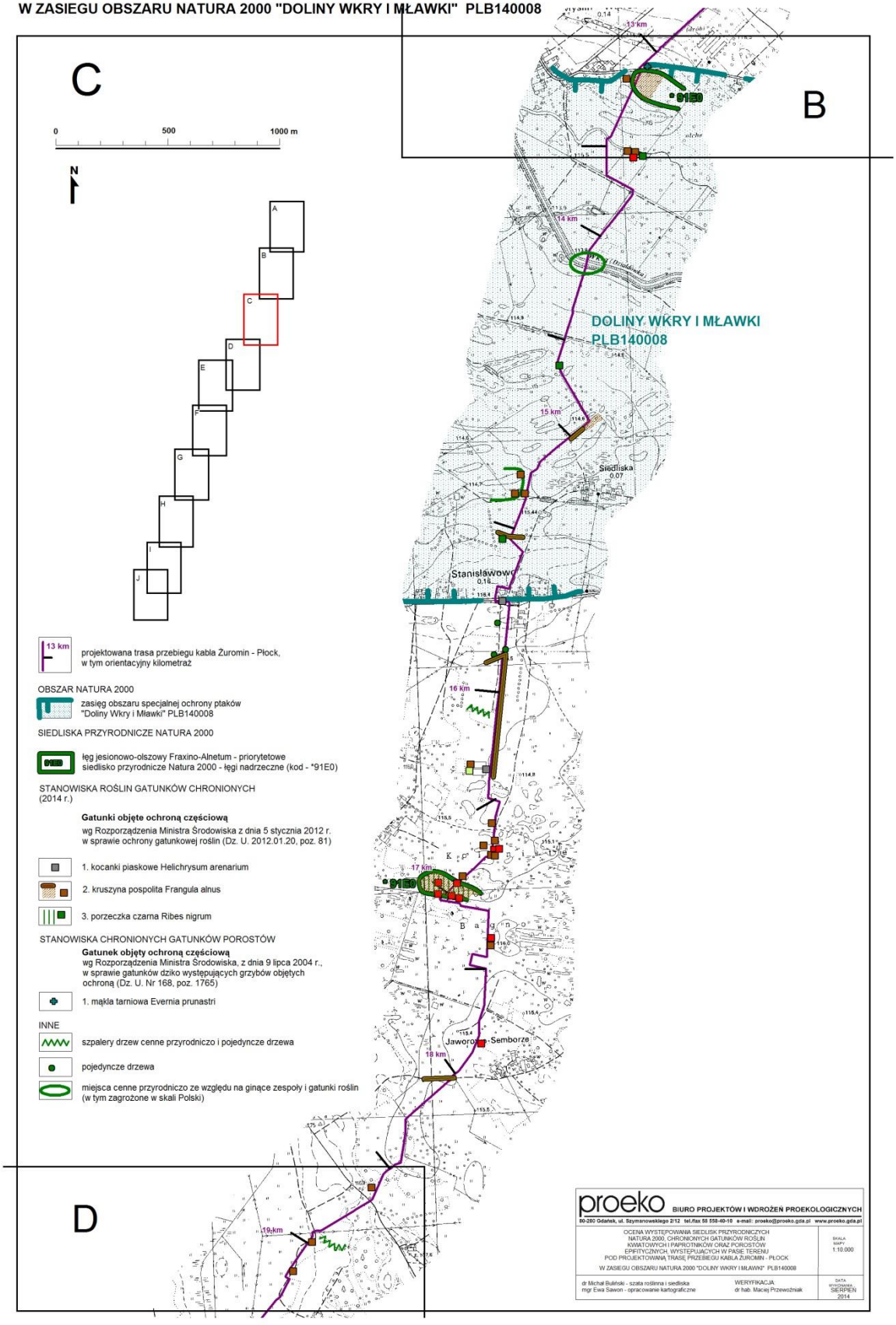

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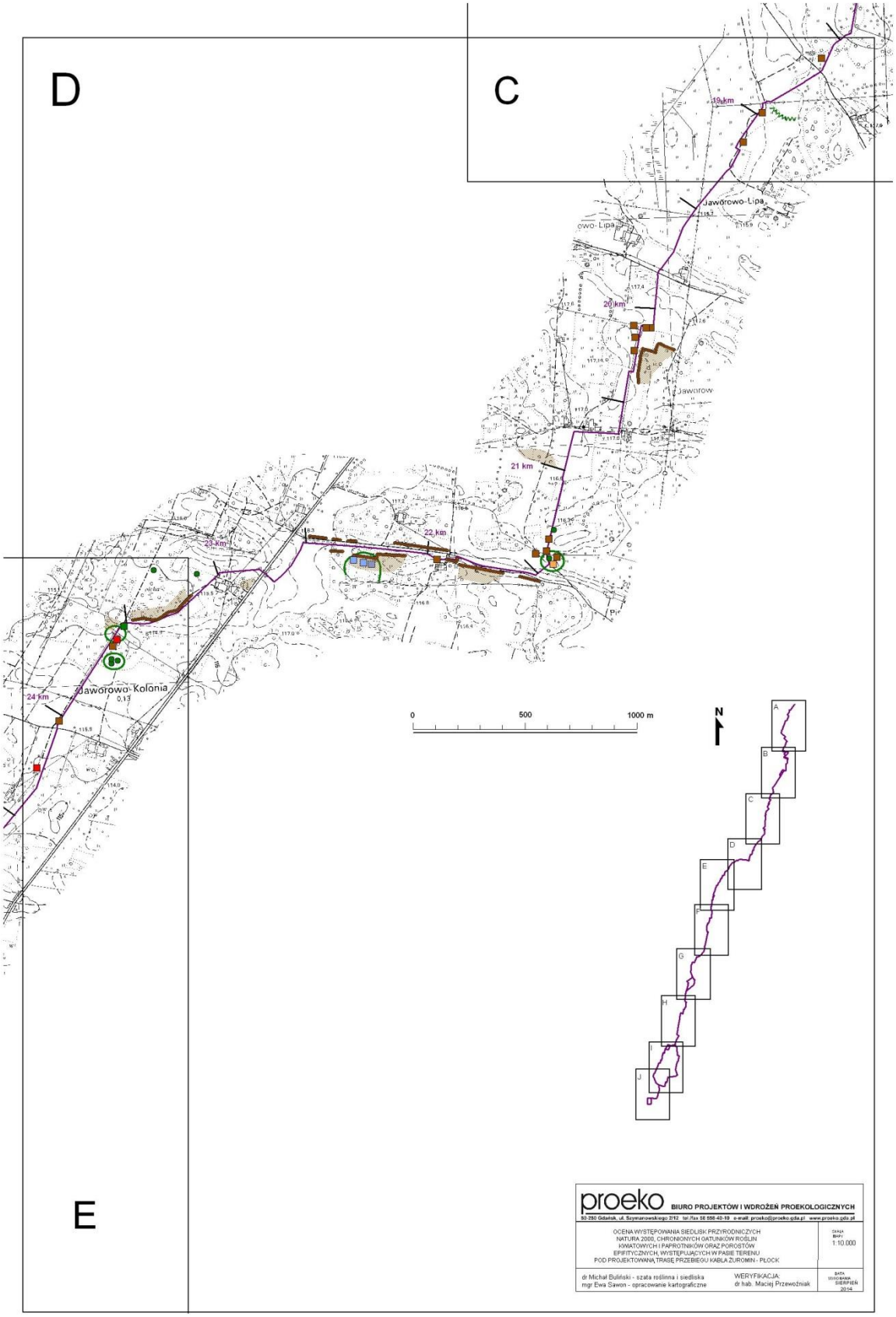

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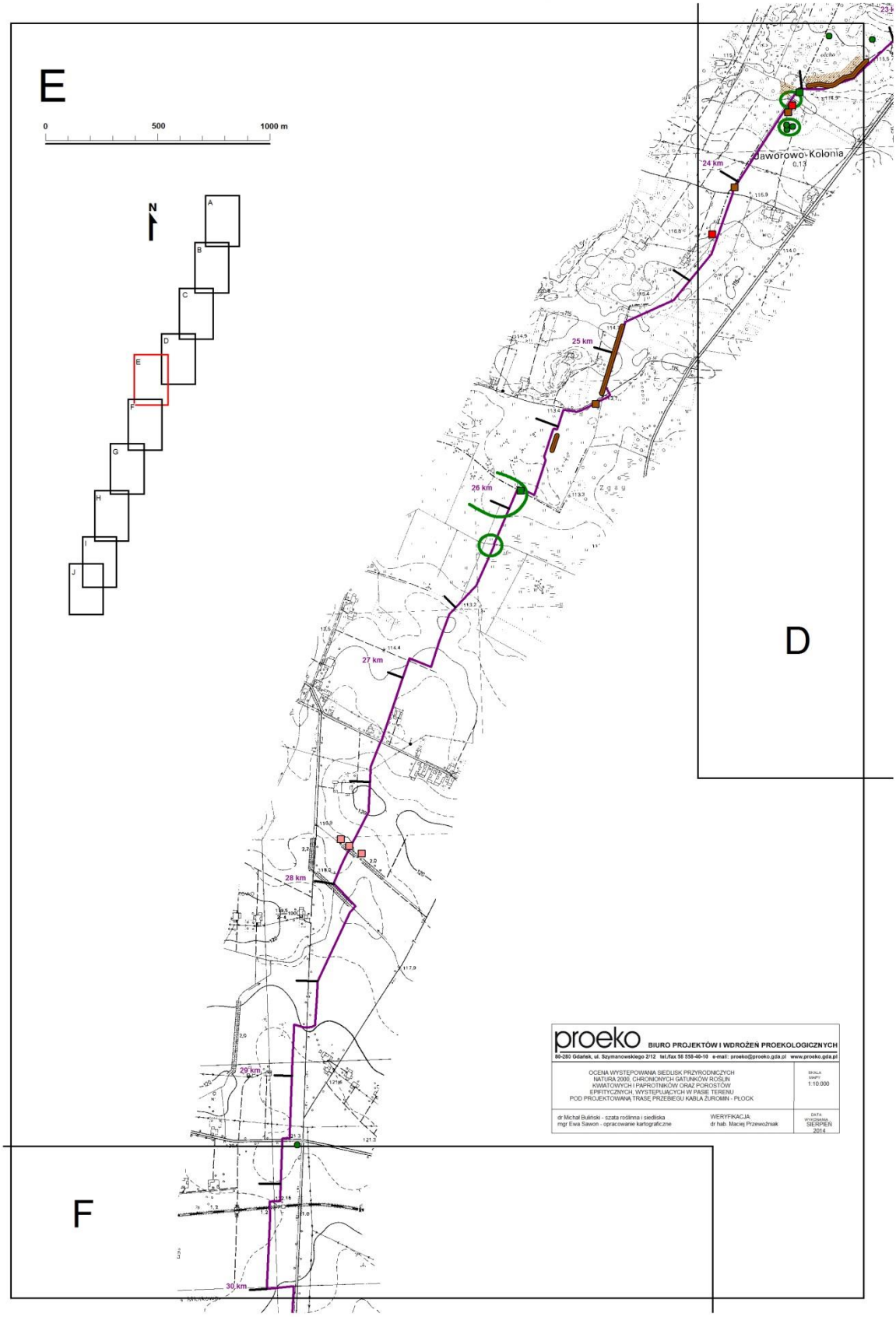

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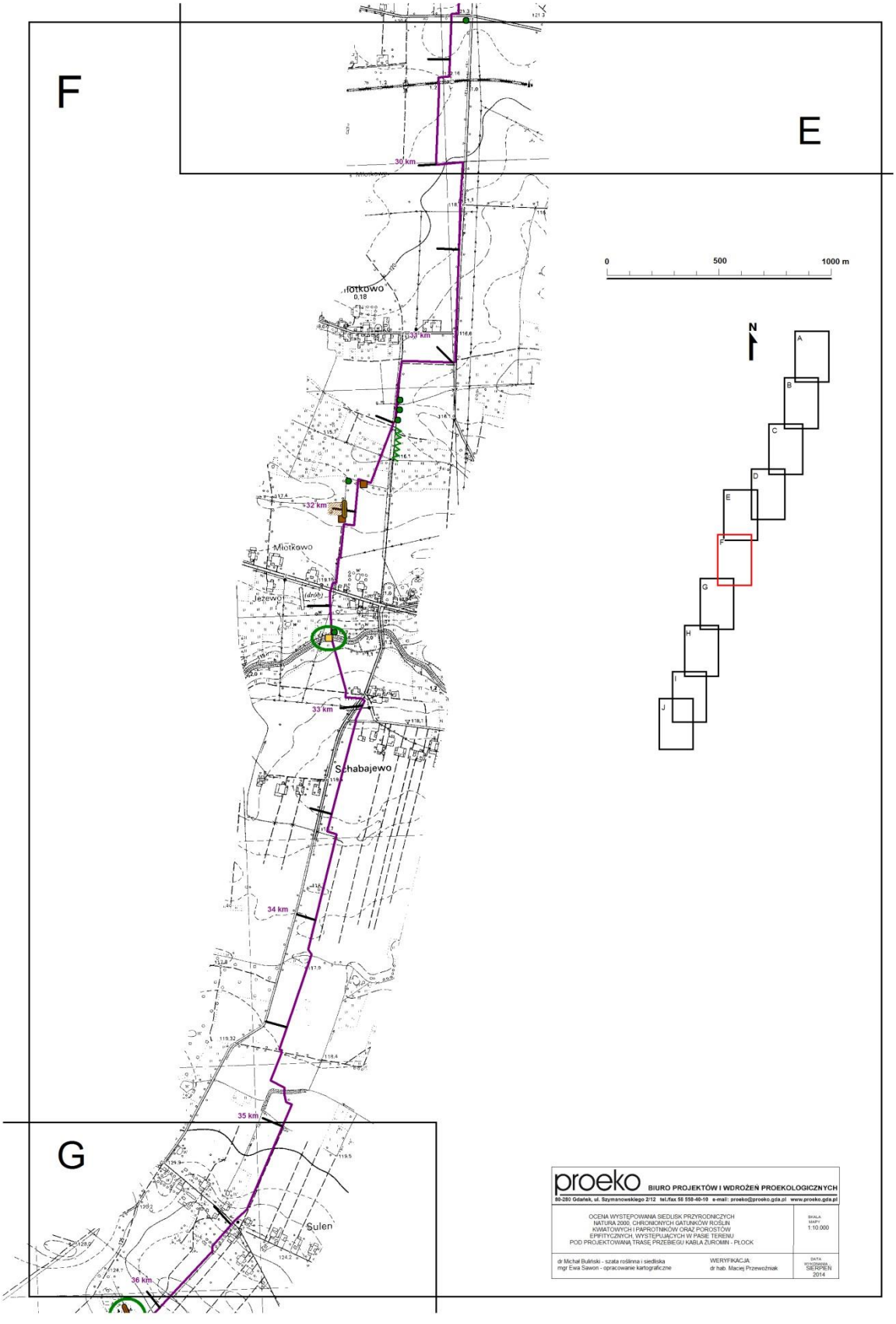

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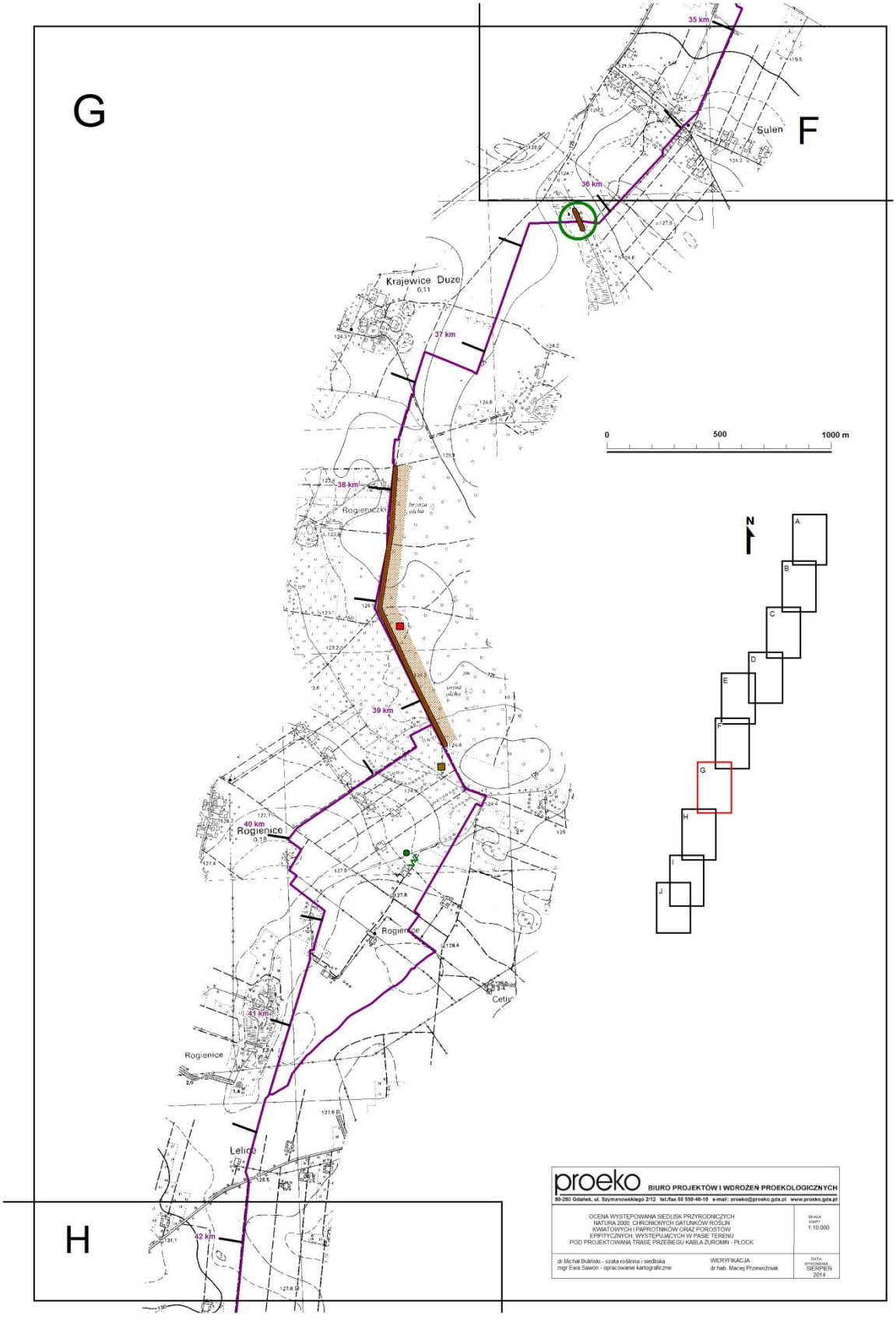

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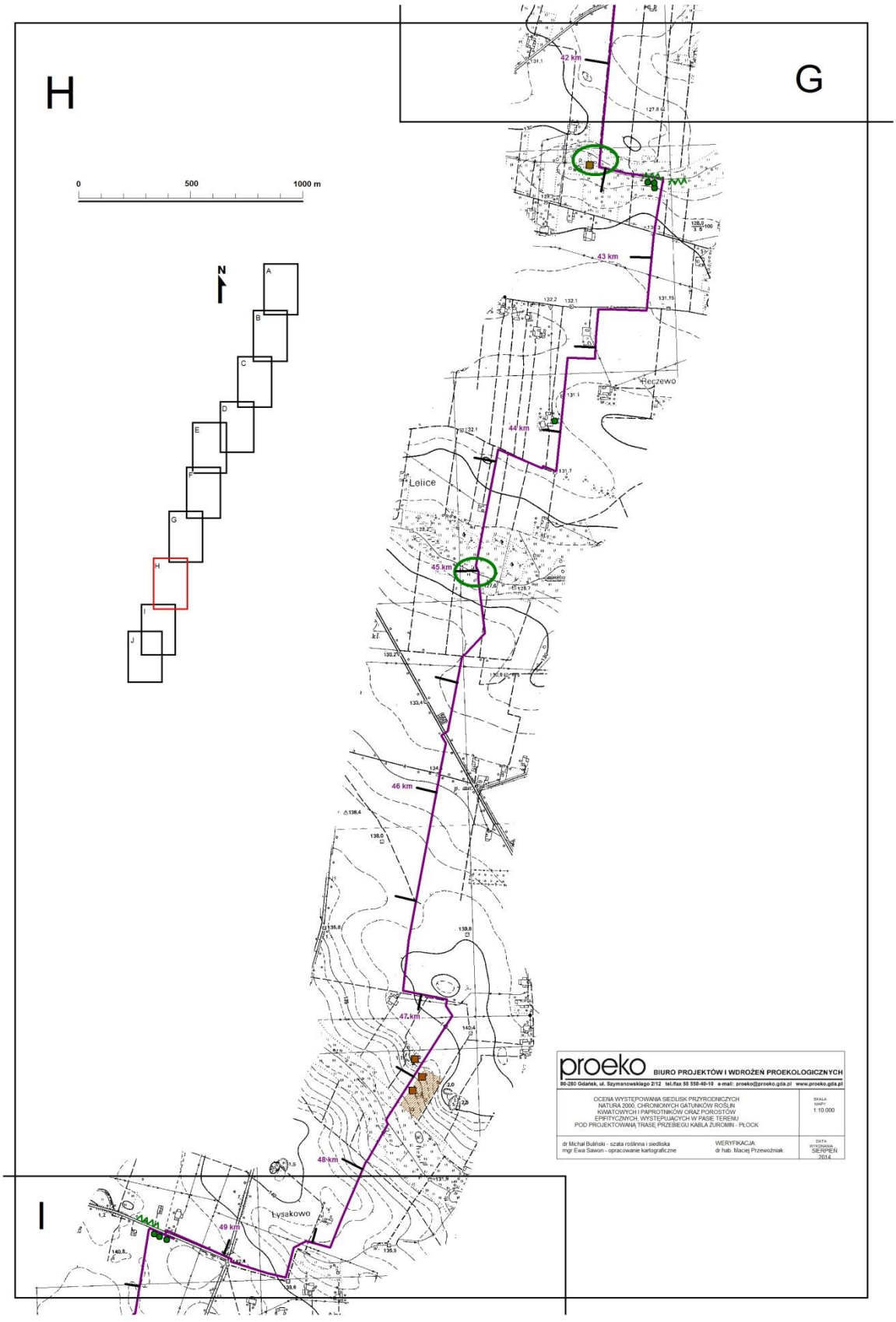

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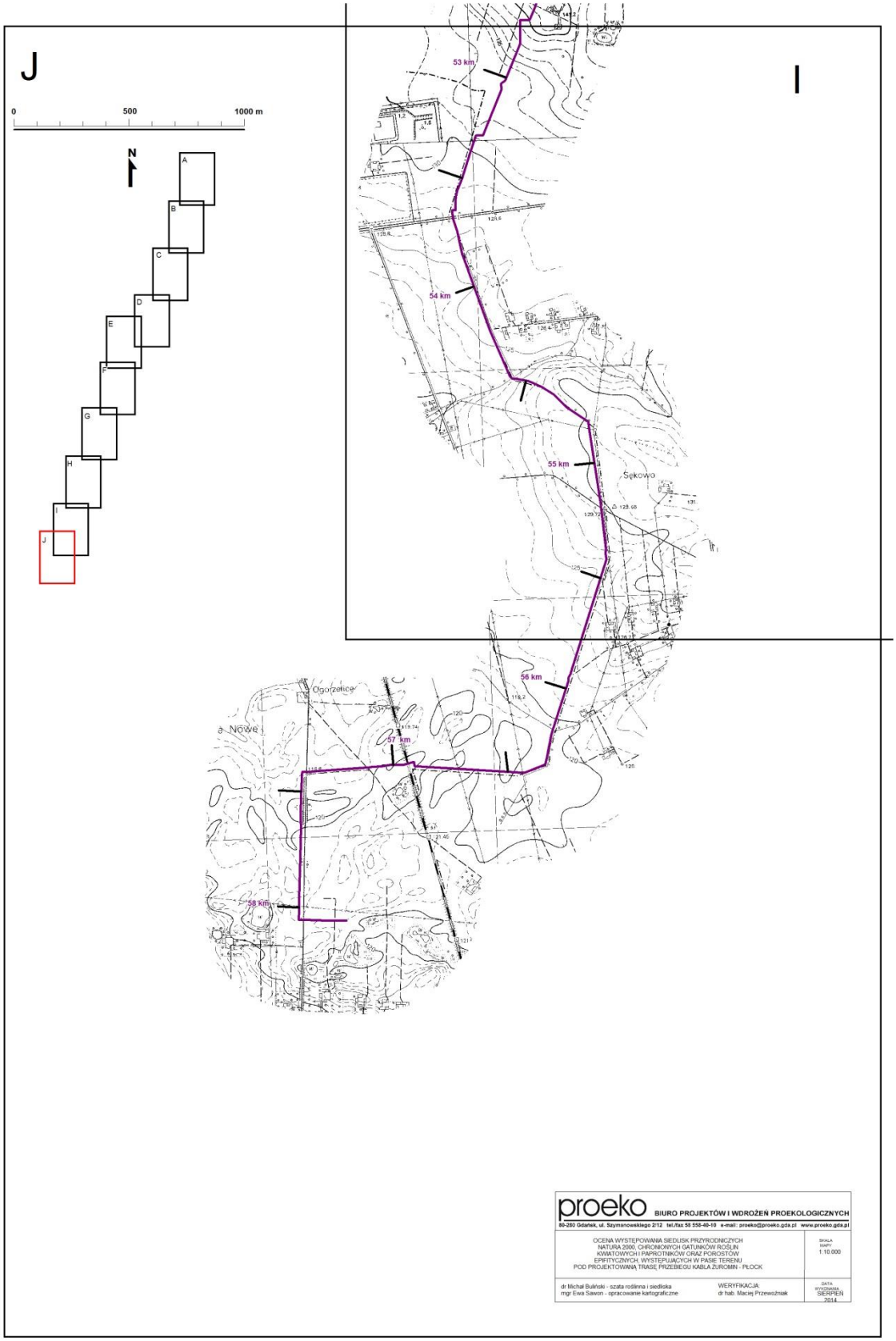

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