

## PRELIMINARY ARCHAEOLOGICAL DOCUMENTATION

## Part Two: Difficulties and failures, successes and hopes

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*In Part One, we have outlined the evaluative system and preparation of preliminary archaeological documentation (henceforth: PAD), as well as the methodological possibilities of site-detection and analysis. In this part, we are going to address the difficulties due to professional, legal and other limitations, as well as failures resulting from these limitations or from other (subjective) factors. Nonetheless, we are on the opinion that the provision of preventive archaeology met the expectations set by legal regulations: heritage services prior to large-scale investments became plannable. Additionally, the results of excavations subsequent to the preparation of archaeological assessments significantly increased our knowledge on the potential archaeological sites, instigating several debates and considerations concerning methodological and theoretical aspects of archaeological prospection and site detection.*

## DIFFICULTIES AND FAILURES

The greatest difficulty in preparing PADs is when investigations substantiated by professional arguments cannot be carried out, or only partially. In Part One (REMÉNYI, 2019), we outlined the practice of field-walking, and the limitations of aerial reconnaissance and geophysical surveys: field walking and aerial reconnaissance are ineffective in built-up areas, or when the vegetation period is not suitable for observations to be made. The effectiveness of geophysical surveys is influenced by different limiting factors arising from soil conditions and the evenness of the surface: in case of uneven surfaces (e.g. ploughing), or when the area is much littered with metallic waste, the data from the magnetometer survey become too noisy and unreadable.

Trial trenching faces similar difficulties. In those areas which had been built-up, paved, or dissected by public utility lines, it is generally not possible to carry out trial trenching, or it is unlikely to obtain representative data. In regard to these problems, § 39 Section 2 of the government decree no. 68/2018 underlines that trial trenching should take place only when unfavourable circumstances had been eliminated. However, in case of built-up areas this would imply the demolition of standing buildings. In the course of such projects—particularly when the respective buildings were cellared—it is already possible to find (and damage) cultural layers, including archaeological features, thus one would be able to clarify whether the demolition works pose a threat to the preservation of archaeological heritage, and there would be no need to subsequently schedule trial trenching. In these instances, the sole option—as proposed in PADs—is the excavation of the archaeological features which had been recovered during the demolition works.

A similar situation occurs when the technology of the construction does not allow trial trenching, e.g. in case of railway renovations. Since the length of these interventions is minimized in order to avoid train stoppage, there is generally not enough time for trial trenching. However, archaeological features are likely to turn up during the replacement of old railways and banks, thus—with the exception of a few sites where there are already sufficient data available from earlier research—a watching brief is the method of assessment usually proposed. In most cases, this does not pose any practical problem for the archaeologists; however, as excavations within the frames of watching briefs cannot be planned in advance, the assessments would not significantly improve the planning process, but merely underline the risks involved concerning the preservation of archaeological heritage.

The feasibility of PADs is only minimally or not influenced by weather conditions. When trial trenching is carried out in inappropriate seasons of the year, or in bad weather conditions, it is still possible to assess the risks involved. On the other hand, such conditions would not allow carrying out excavations according to desirable standards (*Fig. 1*).

There is a cost limit specified in the respective legislation, which often makes it difficult to produce PADs appropriately. According to §8 Article 23/F of the Act LXIV of 2001 on the Protection of Cultural Heritage (Henceforth: APCH), “The costs of the preliminary archaeological documentation may not exceed 0.35% of the total cost of the investment project, except if the investor undertakes to pay a higher amount”, which, however, depends on financial means. The total cost of the investment is usually proportionate to the size of the area involved, but not always. In case of light structures, e.g. shopping malls, the cost is relatively low compared to the size of the area. As is also frequently the case, only the earth moving work of the construction is carried out parallel to approval procedures (i.e. when archaeological assessments are also prepared), and it is only at later stages of the projects when most of the costs incur. However, archaeological heritage might be at risk already during the earth moving and the cost limits, set by the legislation, would not necessarily allow for covering the full assessment, let alone later fieldwork and the excavation of potential archaeological features. In such cases, one is forced to make serious compromises (e.g. the volume of trial trenching will not comply with what would be acceptable by professional guidelines), which undermines not only the professional credibility of the archaeological assessment report, but also its practical use, simply making it impossible to implement representative research methods and/or to cover the entire area.



*Fig. 1. Excavations realized in the frames of PADs are not always carried out in ideal conditions*

This problem becomes more acute when the respective development area has not yet been registered as an archaeological site in the public records and the developer leaves this possibility out of account. Whether or not the development area has been registered as an archaeological site, §1 of Article 23/C of the APCH is explicit on this issue: “In the event of large-scale investment projects preliminary archaeological documentation shall be prepared...” When the archaeological assessment proves that heritage elements are potentially at risk by the proposed development, preventive excavations should be carried out, and, in line with §5 of Article 23/E of the APCH, earth moving works should be monitored. The latter provision duly considers one of the basic principles of archaeological heritage protection, namely, “The elements of archaeological heritage may only be removed from their original position during archaeological excavations” (§2 of Article 19 of the APCH). Through the preparation of PADs, the investors’ interest (development planning) is taken into consideration with respect to the provision of risk assessment related to heritage management. Nonetheless, when there are no registered archaeological sites in the respective development area, the different building and zoning authorities usually take different approaches in authorizing development plans. It seems a general practice, for example, that they do not involve the heritage protection authorities in the decision process—not even in case of large-scale projects—and they tend to misinform the developers, often stating that there are no archaeology-related costs involved. In Part One, we have underlined that approximately 30–60% of the estimated total of archaeological sites have been inventoried so far and there are also huge regional differences regarding this percentage. It follows that there is generally a significant chance to find unknown archaeological sites, and if such discoveries are being made during the construc-

tion phase of a project, the site will likely be destroyed without being properly excavated. If developers report the sites—abiding to the law—the local museums are obliged to conduct excavations at their own expense. Thus, discovering archaeology during construction projects poses a much larger problem, involving unplanned expenses and changes to schedule, than the preparation of archaeological assessment reports and taking appropriate preventive measures.

In summary, the success and efficiency of archaeological assessment is hindered by many external factors, including the type of the development project, the schedule of the construction, legal regulations as well as anomalies in the operation of heritage authorities. On the other hand, one should not overlook the failures due to subjective aspects, namely, the incompetence or ignorance of field archaeologists in charge of preventive excavations. Fortunately, such failures tend to occur rarely; there were only three or four reported cases in the last five years.

### SUCSESSES AND RESULTS

Despite the many obstacles and difficulties introduced above, from among the total number of 2224 assessment reports (produced between 2013 and 2019) only a few appear problematic in regard to their content and authenticity. Mostly the aforementioned objective factors are to be blamed, and very few problems were due to professional mistakes. This suggests that PADs essentially fulfilled their role, including data collection, field walking, archaeological prospection, and trial trenching, and the documentations complied with preliminary expectations. When the appropriate methodologies were applied, the developers reported no complaints concerning unexpected events during the phase of the construction and of preventive archaeological works. One has to note, however, that this observation applies only to those large-scale development projects where all the necessary investigations could be completed, their volume could be designed according to professional standards, and the heritage authorities and museum—as service providers—were cooperating in the direction of what was proposed in the archaeological assessment.

Before the introduction of PADs, so-called “heritage impact assessment reports” were prepared to survey heritage-related risks. These documents have been rightly criticized for not being precise enough in defining the chronological parameters and the cost of possible excavation projects. Although some of the reports undoubtedly failed to comply with professional standards (cf. SZALONTAI 2017), the core problem was their methodology, and the system of trial and preventive excavations. A predominant part of the reports relied exclusively on the already available archaeological data and on the results of usually one-off field surveys, which sometimes were not carried out in the most favourable season of the year. Repeated field surveys were rare exceptions and aerial photography and geophysical prospection were applied even much more rarely. Trial excavations (to determine the extent of the site, the superposition of layers, and the intensity of features) illogically took place during the preventive archaeological digs and when the results were positive, the contracts had to be amended in every single case. This became an almost unresolvable problem particularly for projects founded by the EU.

Clearly, the introduction of a suitable and complex system (based on systematic data gathering, field surveys, archaeological prospection, trial excavation) was the key factor in the success of PADs. Due to complex investigations, both the large-scale development projects (e.g. Kecskemét, Mercedes plant, Phase 2; M44, M30, M8 highways; Debrecen, BMW plant) and the small ones could go seamlessly in the past years and archaeological services became plannable.

In addition to achieving the primary goal (plannable development costs), excavations subsequent to the preparation of PADs significantly contributed to increasing the currently available archaeological topographical data. Between 2013 and 2019 (until the submission of the present manuscript) 2224 PADs have been submitted, including 1338 simplified PADs (without trial excavations), 23 risk assessments, 370 Type 1 PADs, 493 complete PADs (with trial excavations) (*Fig. 2*). Site-diagnostic research has been carried out on 1541 occasions, at different sites and along different routes, including field walking on 791 occasions (*Fig. 3*), geophysical prospection on 271 occasions (*Fig. 4*), aerial reconnaissance (along three longer



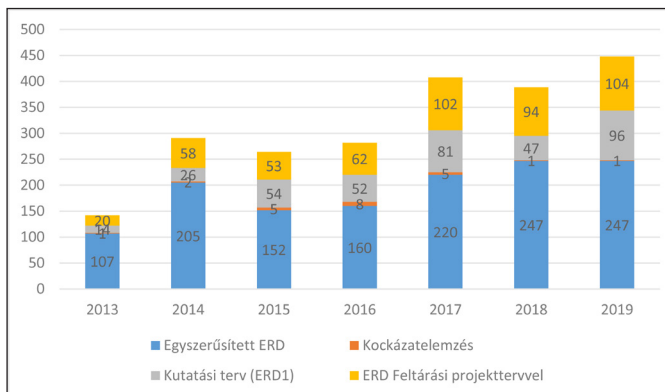


Fig. 2. Number of PADs according to different types, carried out between 2013 and 2019

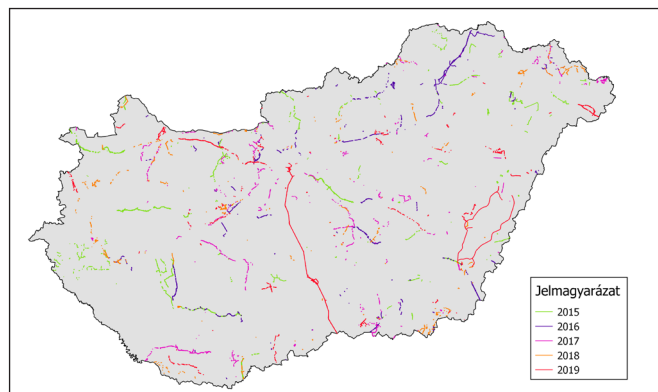


Fig. 3. Map of field surveys carried out in the frames of PADs during 2015-2019 (data provided by András Kalli, Zsolt Molnár and Gergely Sarkadi)

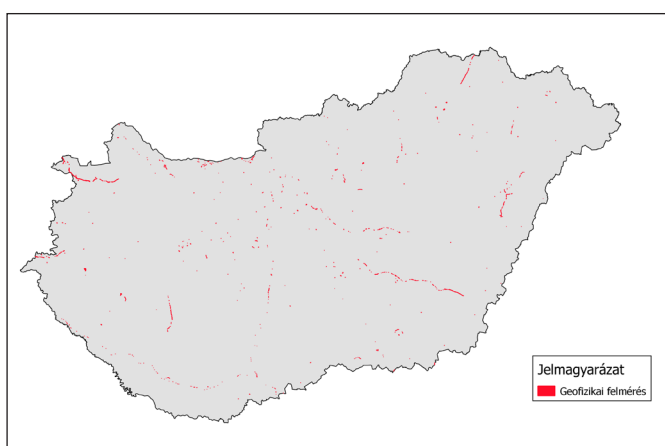


Fig. 4. Map of geophysical surveys carried out in the frames of PADs, dating between 2013 and spring 2018 (data provided by Gábor Mesterházy)

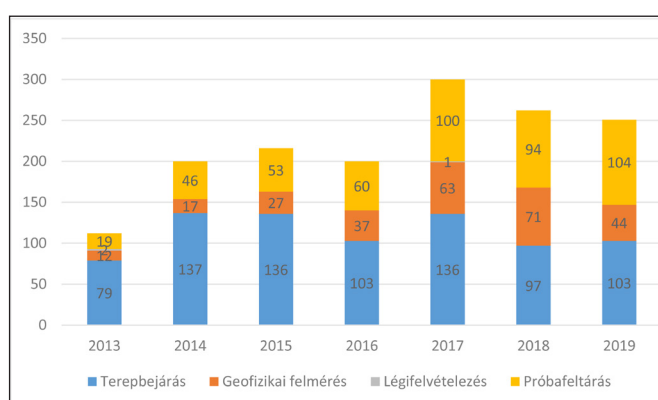


Fig. 5. Number of preventive excavations carried out subsequent to the preparation of PADs, between 2013 and 2019, according to different types of archaeological excavation

routes), trial excavations on 476 occasions (Fig. 5). In result of these investigations, 1729 new, previously unknown sites have been detected, of which 1678 were identified during field walking, 37 during trial excavations, and an additional 14 could be identified during desk-based analysis of archival data. Additionally, the extent of several known archaeological sites could be defined more precisely during the field surveys, geophysical surveys.

Apart from increasing the knowledge base on the already investigated archaeological sites, another important result and success arising from the introduction and implementation of the PADs was the establishment of a research team focusing on archaeological topography and site diagnostics, whose members regularly communicate the results of their research (concerning methodological and theoretical issues of heritage assessment) to both domestic and international audiences, through publications and conferences (REMÉNYI – STIBRÁNYI 2011; STIBRÁNYI – MESTERHÁZY – PADÁNYI-GULYÁS 2012; MESTERHÁZY 2013; STIBRÁNYI 2016; HOLL 2017; KOLLER 2018; MESTERHÁZY – PADÁNYI – STIBRÁNYI 2017; REMÉNYI 2017; STIBRÁNYI 2017; MESTERHÁZY 2019).

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