RESEARCH DESIGNS

The research design serves as a guide for the field work, laboratory work, disposition of materials, and report writing, that are essential components of archaeological investigations. It is work plans that not only helps focus the efforts of the Project Director and his/her staff, but also provides the means by which the owner of the site can evaluate the quality and appropriateness of the archaeological investigation proposed. The research design should ensure that the investigation addresses important research questions, produces useful results, and is conducted efficiently.

The research design should also serve as a clear statement of the wishes of the landowner with respect to the work to be done. In this way, misunderstandings between the landowner and the archaeologist can be avoided. In some cases, the landowner and the archaeologist may wish to enter into a formal contract which incorporates the research design.

A research design should be prepared for each excavation or collection project and should include the following ELEMENTS:

A. SPECIFIC GOALS OF THE PROJECT

B. RELEVANT RESEARCH GOALS THAT WILL BE ADDRESSED
The research questions should relate to previous studies in the area and existing knowledge. The research design that proposes work only because "little is known about the prehistory of the area," without identifying more explicit research questions, should be treated with caution. Such vague plans provide little basis for conducting research, may result only in useless, trivial, or redundant information, and sometimes only mask the ignorance of the persons preparing the plan.

C. PRIORITIES FOR STUDY
Devoting the same level of effort to all research questions is not necessary. All research questions should be considered, but priorities for their investigation should be established and justified.

D. DEFINITION OF DATA NEEDS
The information needed to address each research question should be identified.

E. METHODS TO BE USED IN FIELD WORK AND ANALYSIS
Methods should be justified in terms of their effectiveness in collecting the information that is sought. The plan should also recognize that important information may emerge unexpectedly during fieldwork or analysis and need to be addressed.
E. METHODS TO BE USED - (continued)

1. The methods used should ensure full, clear, and accurate descriptions of all field work and observations. Stratigraphic and associational relationships, environmental relationships, excavation techniques, recording methods, and analytical procedures should be described in such a way as to allow future researchers to reconstruct what was done, what was observed, and why.

2. The methods should take into account the possibility that future researchers will need to use the information collected from the site to address questions not recognized at the time the site was excavated.

3. The research design should consider whether portions of a site can be preserved in place. Destructive methods should not be applied to such portions of sites if nondestructive methods are practical.

F. REPORTING OF RESULTS

The research design should describe how results of the investigation will be reported. For collected information to be useful, it must be made available in usable forms. The following products are normally expected from an excavation program.

1. A report that describes the investigation and its results, with reference to the research questions addressed.
2. Information in the form of tables, charts, and graphs.
3. Raw data in the form of field notes, journals, photographs, and data recording forms.
4. Scholarly and other articles or monographs using the results of the work for analytic purposes or to interpret the site to the public.

G. PROPOSED TREATMENT AND DISPOSITION OF EXCAVATED MATERIAL

The research design for any archaeological excavation should provide for the proper treatment and disposition of collected materials. Care should be taken during conservation, curation, and handling of specimens and records to ensure that materials are not lost, inappropriately altered, or damaged.

It is very important that field notes, artifacts, and photographs from an archaeological project be preserved and made available to future researchers. Such materials can be used to address research questions not anticipated during the original investigation. They can be reanalyzed with new techniques that were not available at the time they were collected. Future researchers may also be able to reinterpret such material from different perspectives or in light of new findings from other sites.
Acceptable options for the disposal of materials collected from archaeological sites include:

1. Permanently curating the materials at a public or private repository, including colleges, university, local museum, which will fully protect them from the elements and from vermin, that will ensure their preservation, and that will guarantee their security and accessibility for future study.

2. Returning the materials to the private land owner after the materials have been described, studied, and analyzed in accordance with the research design, or

3. Loaning the materials to public or private parties, after description and study, provided that access for study and proper care of the materials can be expected.

If collected materials are to be curated, arrangements for this should be made with a repository before the field work begins. The research design should specify the repository that will be used and the terms under which the materials will be curated.

Human remains and funerary objects buried with them must be treated in accordance with the Native American Graves Protection and Repatriation Act or State laws A.R.S. 41-844 and 41-865, depending on where they were found. If such material are encountered on private land, the landowner or the landowner’s agent must notify Arizona State Museum. The Museum then has up to ten days, or more if permitted by the landowner, to consult with Indian tribes or other groups that might be culturally related to the remains, and to carry out the decision about the remains.

It is best to consult the appropriate Indian tribes before excavating if human remains or funerary objects are likely to be encountered. Reaching an understanding with the appropriate tribes on how such remains and objects should be treated can reduce or eliminate delays that might otherwise be necessary. The research design should recognize the need to consult with Native Americans if excavation of human remains is likely.

Any human remains and funerary objects donated to repositories which receive Federal funds may be returned, or repatriated, to a culturally related Indian tribe or lineal descendant if claimed by that tribe or descendant. This is true for human remains and funerary objects collected in the past, as well as any such remains and objects that may be excavated in the future, regardless of land ownership.