DATA ITEM DESCRIPTION	FORM APPROVAL OMB NO 0704-0188

1. TITLE	2. IDENTIFICATION NUMBER
Geographic Information Systems (GIS) Plan	OE-005-14

3. DESCRIPTION / PURPOSE: To describe the incorporation of geographic information systems (GIS) into Ordnance and Explosives (OE) projects and to provide requirements for the GIS Plan at a specific project site.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
000320	CEHNC-ED-CS-D		

7. APPLICATION / INTERRELATIONSHIP : This Data Item Description contains instructions for preparing Work Plan chapters addressing geographic information systems for OE projects.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER

10. PREPARATION INSTRUCTIONS

10.1 General. The site-specific Geographic Information Systems (GIS) Plan for each project will document the site-specific GIS requirements tailored to the needs of that project. All required services will be accurately specified in the individual project Scope of Work (SOW) tasks.

10.1.1 All data shall conform to the CADD/GIS Technology Center Spatial Data Standards (SDS) and as outlined in the specific task order.

10.1.2 Sources and Standard: The SDS have been developed and produced by the CADD/GIS Technology Center. They are designed to provide a standard for GIS implementations at Department of Defense installations and Army Corps of Engineers Civil Works activities, to provide a GIS implementation schema for approved Federal Geographic Data Committee (FGDC) Data Standards, to provide a "nonproprietary" standard designed for use with commercially available "off-the shelf" CADD, GIS, and relational database software, and to provide a de facto standard for GIS implementations in other Federal, State, and local government organizations, public utilities, and finally, private industry.

10.2 GEOGRAPHIC INFORMATION SYSTEMS (GIS) INCORPORATION. The contractor shall take the GIS data, manual, file, and database structure from the USAESCH GIS standard and apply it to the projects to the extent required to create the products outlined in the specific task order SOW. The standard shall be used as a starting point to load data and to create a GIS tailored for the specific ordnance investigative needs of the site. All digital data shall be created using MicroStation 5.5, 95, or SE and Intergraph's MGE GIS tools to allow it to be loaded directly into the USAESCH OE GIS. Other copies of the GIS may be requested in AutoCad Version 12 or 14, ArcView Version 3.1, and/or Intergraph's Geomedia, version 3.0, to support specific project location requirements. The main purpose of the GIS is to assemble all the data required to associate the non-intrusive subsurface geophysics investigative data to its correct geographical location, the relational database, mapping and remote sensing data. The GIS tools are used to manage the project, assemble data for the administrative record, help determine areas requiring further investigation and to discriminate OE from background anomalies. A program that uses a subset of the GIS data does the discrimination between background anomalies and OE items.

10.3 COMPUTER FILES. All final text files generated by this contract and other individual task orders shall be furnished to USAESCH in MS Office 97 or higher software, IBM PC compatible format and in Adobe Portable Document Format (PDF), suitable for viewing, without modification, on the Internet. Freeware versions of Adobe Acrobat Reader, Netscape, and Internet Explorer shall accompany the text files on CD-ROM, so that the user can use the CD to either install the programs and text files on a machine, or use the CD in a stand alone mode to view the text files. The basic software supported to the field shall be capable of operating on a typical single Intel Pentium processor PC utilizing the Windows NT version 4.0 operating system with a minimum of 64 megabytes of memory and adequate disk storage for project data. All in progress and fielded GIS data, design drawings, survey data, relational databases and related data generated may be required to be available on line to the government

11. DISTRIBUTION STATEMENT

through the use of an Internet connection. Formal submittals for all GIS, survey and mapping data, and design drawings, generated by the contractor under this contract shall be submitted in the proper format and media that will permit their loading, storage, and use without modification or additional software on the USAESCH GIS workstations. The base GIS workstations consist of Intel dual Pentium GIS machines with 256 megabytes of memory. The workstations run under the Windows NT 4.0 operating system. Current GIS project related software includes: MicroStation 5.5, Oracle 8.04, IRAS B, IRASC 5.04, MGE Basic Nucleus, MGE Analyst, MGE Map Finisher, MGE Projection Manager, MGE Grid Analyst, MGE Modeler, Inroads, and Insitu. Other specific packages to be considered must be proposed to USAESCH for approval and for system and mission compatibility. All GIS data for formal submittals shall be on either four millimeter NT 12 Gigabyte tape (DDS-3), PC 3.5" floppies, or PC CD-ROM. The PC CD-ROM is the preferred format, supplemented with 12-Gigabyte tape for the extremely large data sets, with USAESCH approval.