



Department of Development Services

Building Division

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Ronald L. Lynn, Director/Building Official

January 10, 2008

TO: INDUSTRY

**RE: ELECTRONIC SUBMITTAL OF GEOTECHNICAL INFORMATION (ESGI)
(Originally Published on September 18, 2007)**

This letter shall serve as an update to a previous letter to industry published on September 18, 2007. The previous letter served as a notification of a new requirement to submit geotechnical information in an electronic format.

The intent of the enclosed update is to discuss the various aspects of the ESGI Program protocol, including submittal requirements at Permit Application Center, ESGI Data Review Process, and publication of geotechnical surface maps.

If you have any questions regarding this program, you may contact Jonathan A. Bahr, P.E., @ 455-8094, or Scott J. Telford, P.E., @ 455-8087.

Enclosure: **ESGI Program Protocol**



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ESGI Program Protocol

I. Introduction

The Building Official has determined that Electronic Submittal of Geotechnical Information (**ESGI**) is mandatory for any project that requires a geotechnical report (soils report). All applications filed on or after **January 7, 2008**, for a building or a structure that requires the submittal of a geotechnical report shall be accompanied by certain surface and subsurface geotechnical information (**ESGI data**) in an **electronic format**. Two types of building permit applications are the focus of this program: “**Grading**” and “**Building with Grading.**” During this **initial phase of implementation**, only **ESGI data** associated with a grading application is required. During the **second phase of implementation**, which is expected to commence between August 2008 and January 2009, **ESGI data** will be required from all other applications that require a geotechnical report.

The purpose of this paper is to discuss the various aspects of the ESGI Program protocol, including:

- ✓ Submittal of ESGI Data and a Copy of the Geotechnical Report
- ✓ Permit Application Center
- ✓ ESGI Data Review
- ✓ Publication of Geotechnical Surface Maps

II. Submittal of ESGI Data and a Copy of the Geotechnical Report

The permit holder is responsible for the submittal of **ESGI data** and an additional copy of the **geotechnical report**. ESGI data shall be submitted on a **Compact Disc (CD) labeled “ESGI.”** The accompanying **geotechnical report** shall also be **labeled “ESGI.”** The permit holder must contact the geotechnical firm to obtain the additional copy of the geotechnical report and ESGI CD. Failure of the permit applicant/owner to submit the required geotechnical data in an electronic format shall result in the rejection of the application in question.

Currently, there are two available options for electronic submittal format:

1. **OPTION ONE** (Geotechnical firms that hold a copy of a gINT application): Obtain a free copy of the **ESGI database***. **Contact** gINT Corporation to obtain a “Transfer Patch File” that would allow for the automatic extraction of required ESGI data from the gINT application into the **ESGI database**. Make a copy of the **ESGI database** with the required ESGI data on a CD and submit with the application. Please note that fees may be charged by the gINT Corporation for the “Transfer Patch File.”
2. **OPTION TWO** (all other geotechnical firms): Obtain a free copy of the **ESGI database***, enter the required ESGI data into this database, and then submit a copy of this database on a CD with the application package.

ESGI Program Protocol

* For a free copy of the **ESGI database**, please contact Jonathan A. Bahr, P.E., at (702) 455-8094 or bahrj@co.clark.nv.us.

III. Permit Application Center

Permit Application Center (PAC) staff shall verify that a **Compact Disc (CD)** and a **copy of the geotechnical report**, which are both **labeled “ESGI”**, are included with the permit application package. Currently, this requirement is only applicable to grading applications. Appropriate PAC checklists have been revised to reflect the above requirements. An application shall **NOT** be accepted and assigned a PAC number without the CD and the additional geotechnical report allocated to the ESGI program.

IV. ESGI Data Review

If CCDDS-BD determines that there are missing or obvious errors in **ESGI data** provided with the permit application, a correction letter will be generated and sent to the permit holder. The permit will not be issued until all issues identified in the correction letter have been resolved. A summary of **ESGI data** is provided in Table 1.

Table 1

Report Information	Exploration Information	Layer Information	Layer Attributes**	Index, Geotechnical and Chemical Properties
Report Date	Exploration Name	Start Layer	Fill	Sample Depth
Report No.	Exploration Type	Stop Layer	Non-plastic	Sample Thickness
Agency Name	Exploration Location (State Grid format)	Shear Wave Velocity**	Cemented	Moisture Content**
Project Type*	Exploration Location accuracy*	Soil classification	Non-cemented	Dry Density**
Site Class	Exploration Elevation	Visual Description*	Organics	Standard Penetration Test**
	Exploration Depth		Porous	Percentage Passing #200 Sieve**
	Exploration Method*		Bedrock	Plastic Limit**
	Depth of Groundwater Table**			Liquid Limit**
				Plasticity Index**
				Swell**
				Sulfates** (SO ₄ ⁻²)
Solubility**				

NOTES: * Non-Mandatory ** Where Applicable, or performed

V. Publication of Geotechnical Surface Maps

At a minimum frequency of once per year, CCDDS-BD will generate **geotechnical surface maps** from ESGI data. Once approved by the Building Official, **geotechnical surface maps** will be published on Clark County’s website. At a minimum frequency of once per year, the mapping team will publish updated **geotechnical surface maps**.