

# **Terrestrial Ecosystem Information Digital Data Submission Standard - Draft for Field Testing**

## **Database and GIS Data Standards**

Prepared by  
Ministry of Environment  
Knowledge Management Branch  
for the Terrestrial Ecosystems  
Resources Information Standards Committee

January 5, 2015

Version 2.2

© The Province of British Columbia  
Published by the  
Resources Information Standards Committee

## **Library and Archives of Canada Cataloguing in Publication Data**

Additional Copies of this publication can be purchased from:

### **Government Publication Services**

PO Box 9452 Stn Prov Govt  
563 Superior Street 2<sup>nd</sup> Flr  
Victoria, BC V8W 9V7  
Phone: (250) 387-6409 or  
Toll free: 1-800-663-6105  
Fax: (250) 387-1120  
<http://www.publications.gov.bc.ca>

### **Digital Copies are available on the Internet at:**

<http://www.ilmb.gov.bc.ca/risc>

## Preface

The Ecosystem Information Section, Knowledge Management Branch, BC Ministry of Environment has undertaken the loading and storing of Terrestrial Ecosystem Information (TEI), including a variety of terrain, ecosystem, soils, and wildlife information in the BC Geographic Warehouse (formerly the Land and Resource Data Warehouse (LRDW)), for access by the public; the terrain, soils, wildlife and ecosystem mapping communities; and other potential users of the data. In order to load and store TEI data, the project files submitted to MoE must be in the specified file formats, with the specified field names, field characteristics, and allowable codes, as outlined in this document.

This document replaces the data submission sections of the following previous Digital Standards and any associated addenda or errata:

- 1.) Terrain: <http://www.env.gov.bc.ca/fia/terrainstabmap.htm>
- 2.) TEM/VRI: <http://www.env.gov.bc.ca/fia/temvri.htm>
- 3.) TEM: <http://www.env.gov.bc.ca/fia/terrecomap.htm>
- 4.) PEM: <http://www.env.gov.bc.ca/fia/pem.htm>

In the future, this document will be revised to replace portions of the wildlife habitat inventory/modeling data submission standards.

The Resources Information Standards Committee (RISC) members are resource specialists from a number of professional disciplines and represent Provincial, Federal, First Nation and private sector agencies and other resource interests. RISC's objectives are to develop a common set of standards and procedures for provincial resource inventories, as recommended by the Forest Resources Commission in its report "The Future of our Forests."

Funding for the preparation of this document was provided by the Forest Investment Account (FIA). Previous work of the Resources Inventory Committee was funded by the Canada-British Columbia Partnership Agreement of Forest Resource Development FRDA II, the Corporate Resource Inventory Initiative (CRII) and by Forest Renewal BC (FRBC).

For further information about the Resources Information Standards Committee and its various Task Forces, please visit the RISC website at <http://www.for.gov.bc.ca/hts/risc/about.htm>.

Any comments or concerns regarding these standards may be addressed to [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca).

# Abstract

The *Terrestrial Ecosystem Information Digital Data Submission Standard – Draft for Field Testing*, (RISC, 2010) works in conjunction with the Resources Inventory Committee's (RIC) *Standard for Terrestrial Ecosystem Mapping in British Columbia*, (RIC, 1998), along with the *Field Manual for Describing Terrestrial Ecosystems*, (Min. of For et. al, 1998), the *Terrain Classification Manual, Version 2.0*, (Howes and Kenk, 1997) and the existing Ministry standards as listed below.

This document sets out procedures and rules for submitting Terrestrial Ecosystem Information (TEI) data to the ministry's Terrestrial Ecosystem Information System (TEIS) and other database systems. Its goal is to help the province acquire and administer this data in an organized fashion throughout the province and commensurate with the objectives of RISC. This document builds on the previous standards as listed at:

- 1.) RISC Homepage: <http://www.for.gov.bc.ca/hts/risc/index.html>
- 2.) Terrain: <http://www.env.gov.bc.ca/fia/terrainstabmap.htm>
- 3.) TEM/VRI: <http://www.env.gov.bc.ca/fia/temvri.htm>
- 4.) TEM: <http://www.env.gov.bc.ca/fia/terrecomap.htm>
- 5.) PEM: <http://www.env.gov.bc.ca/fia/pem.htm>

This document consolidates all of the submission standards for the above project types into a single framework for digital data submission. It is a draft document created without committee input, but will incorporate feedback and review suggestions from practitioners in the ecosystem, terrain and GIS mapping communities prior to finalization. Send feedback to [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca).

## Acknowledgments

The Government of British Columbia provides funding of the Resources Information Standards Committee work, including the preparation of this document. The Resources Information Standards Committee supports the effective, timely and integrated use of land and resource information for planning and decision making by developing and delivering focused, cost-effective, common provincial standards and procedures for information collection, management and analysis. Representatives to the Committee and its Task Forces are drawn from the ministries and agencies of the Canadian and the British Columbia governments, including academic, industry and First Nations involvement.

The Resources Information Standards Committee evolved from the Resources Inventory Committee which received funding from the Canada-British Columbia Partnership Agreement of Forest Resource Development (FRDA II), the Corporate Resource Inventory Initiative (CRII) and by Forest Renewal BC (FRBC), and addressed concerns of the 1991 Forest Resources Commission.

For further information about the Resources Information Standards Committee, please access the RISC website at: <http://www.for.gov.bc.ca/hts/risc/>.

Sincere appreciation is extended to the following contributors: Tony Button, Tanya Charles, Corey Erwin, Maija Finvers, Deepa Filatow, Jeff Kruys, Mike Neal and Jo-Anne Stacey.

The authors would also like to acknowledge that much of this material has been built on previous standards (listed in the Abstract above).

Partial funding was provided for this project by the Forest Investment Account of British Columbia.

# Table of Contents

## Contents

1 Introduction .....	9
1.1 Background .....	9
1.2 Purpose of the Standard.....	9
1.3 Scope of the Standards .....	9
1.4 Intended Users of the Standards .....	10
2 Non-Spatial Data Specifications.....	11
2.1 Project Report(s).....	11
2.2 Field Data Non Spatial Databases .....	13
2.3 Non-Spatial Databases.....	14
2.4 Sign-off Letter/Project Completion Certificate .....	14
2.5 Quality Assurance (QA) and Quality Control (QC).....	14
2.6 Accuracy Assessment (AA) .....	15
3 Spatial Data Specifications.....	16
3.1 Data Format.....	16
3.2 Coordinate System .....	16
3.3 Topology Implementation .....	17
3.4 Registration and Positional Accuracy .....	18
3.5 Linkages to Attributes .....	18
3.6 Domains and Ranges .....	18
3.8 Feature Class Description.....	19
3.9 User Defined Data .....	20
4 Digital Data Capture.....	21
4.1 Quality of Digital Data Capture .....	21
Interpretation Accuracy/Error .....	21
Resolution and Tolerance.....	21
4.2 Minimum Feature Size .....	21
4.3 Digitizing Polygons .....	22
4.4 Digitizing Arcs, Lines or Polylines .....	23
4.5 Elevation (Z-Axis) Data .....	23

4.6 Tiles .....	23
5 Contractor Package <Date>.....	24
5.1 Minimum Hardware/Software Requirements.....	24
5.2 Source.....	24
5.3 Licensing .....	24
6 Metadata .....	25
7 Cartographic/Representation/Output.....	26
7.1 Templates .....	26
7.2 Symbology.....	26
7.3 Annotation/Labelling.....	26
7.4 Cartographic Alteration/Visual Enhancement.....	26
7.5 Surround .....	26
GIS Quality Assurance Procedures .....	28
8.1 Attributes .....	28
8.2 Geometry .....	28
8.3 Topology .....	28
8.4 Adjacent Project Boundaries .....	28
9 Data Submission.....	30
9.1 Requesting a BAPID .....	30
9.2 Requesting a Standards Variance .....	31
9.3 Interim Deliverables .....	31
9.4 Final Deliverables.....	32
Appendices .....	33



# 1 Introduction

## 1.1 Background

This document describes the digital data specifications for Terrestrial Ecosystem Information (TEI) data with a focus on spatial data collected for use in Geographic Information Systems (GIS). It is part of a series of related documents produced by the Resources Information Standards Committee (RISC), which are intended to ensure BC government agencies are providing resource information which meets recognized standards for quality and consistency. It is anticipated the information in this document will be useful to contractors or staff involved in collecting resource inventory data, managers charged with overseeing data-collection projects, and custodians maintaining resource inventory datasets.

This document supersedes the components dealing with digital data submission in the RISC and Land Based Investment Program (LBIP) documents listed in the scope below.

The standards in this document also apply to the project boundary polygons for Soils inventory and other TEI related data sets.

## 1.2 Purpose of the Standard

The purpose of this document is to define the digital form and structure of Terrestrial Ecosystem Information digital data to be submitted to the Province of BC. It defines:

- standards for describing thematic content;
- standards for physical data specification;
- georeferencing standards;
- quality assurance guidelines; and,
- recommendations for cartographic representation of the data.

This document addresses key provincial government objectives for digital data, by:

- making it easier to integrate digital spatial data into the provincial geographic data warehouse;
- making it easier to integrate digital spatial data by adhering to Provincial standards for georeferencing resource inventory data sets; and,
- providing quantitative and qualitative measures of data quality to ensure data-collection efforts are effective, and to ensure the Province receives good value in contracted projects.

## 1.3 Scope of the Standards

The digital data standards provided in this document are to be applied to Terrestrial Ecosystem Information submitted to the Province of B.C. These standards describe basic

georeferencing and digital data definitions for Terrestrial Ecosystem Information, including coordinate systems, registration and logical and physical descriptions for attribute and spatial aspects of TEI data. They also describe, recommend or prescribe methods for digital data storage and submission, quality assurance and graphic data representation, as well as capture of project metadata.

This document focuses on providing standards and guidelines required by individuals who are responsible for digital data submission of Terrestrial Ecosystem Information. The specifications outlined in the document describe the form (or structure) of the data to be delivered. The standards presented in this document do not attempt to describe the processes undertaken for digitally capturing the data, as there are a number of acceptable methods for data collection and capture. The applicable data capture standards are addressed in the project specific standards available from the links below.

The TEI digital data standard is meant to be used in conjunction with the RISC standards listed on the following sites:

- 1.) RISC Homepage: <http://www.for.gov.bc.ca/hts/risc/>
- 2.) Terrain: <http://www.env.gov.bc.ca/fia/terrainstabmap.htm>
- 3.) TEM/VRI: <http://www.env.gov.bc.ca/fia/temvri.htm>
- 4.) TEM: <http://www.env.gov.bc.ca/fia/terrecomap.htm>
- 5.) PEM: <http://www.env.gov.bc.ca/fia/pem.htm>

This document is intended to complement RISC standards and the TEI Project Workflow documents. Additional information can be found at the following website:

- (This document)  
[http://www.env.gov.bc.ca/fia/documents/TEI\\_Digital\\_Submission\\_Standards.pdf](http://www.env.gov.bc.ca/fia/documents/TEI_Digital_Submission_Standards.pdf)
- <http://www.env.gov.bc.ca/esd/distdata/ecosystems/TEI/ContractorPackage/>
- [http://www.env.gov.bc.ca/fia/documents/TEI\\_prj\\_plan\\_guidelines\\_apr2010.pdf](http://www.env.gov.bc.ca/fia/documents/TEI_prj_plan_guidelines_apr2010.pdf)

## 1.4 Intended Users of the Standards

This document is technical in nature, and is intended for persons compiling, managing and/or using Terrestrial Ecosystem Information digital data.

Contractors and government staff involved directly with collecting Terrestrial Ecosystem Information data will refer to this document for specific technical guidance on the form and structure of the data sets they prepare. Managers of such data-collection projects will use this document to help evaluate whether resource inventory projects have been properly prepared and reviewed prior to submission. End-users will also use this document for clarification of the meaning and structure of TEI data to be used in analysis and graphic display. This document does not address the quality of the mapping with regards to professional judgment.

## 2 Non-Spatial Data Specifications

All project deliverables are to be included in the zipped project folder at the root directory level.

Non-spatial files are to be named using the following general convention:

<broad project type>\_<BAPID>\_<thematic content>.<extension>

e.g., ter\_2345\_rpt.pdf for a terrain project report.

Broad Project Types are listed in Appendix B: Domains. Business Area Project Identification (BAPID) information is outlined in section 10, Data Submission. Thematic content details are provided below.

**Table 1 – Thematic content codes for the naming of non-spatial files**

Code	Description
rpt	report
el	expanded legend
ml	map legend
bgc	non-spatial biogeoclimatic documentation
map	maps
idq	input data quality
inp	input metadata
non	non-standard input
kb	knowledge base
sts	structural stage
eci	field data
cert	project completion certificate
qa	quality assurance
aa	accuracy assessment

### 2.1 Project Report(s)

The project report, must be delivered in PDF format and should be named <Broad Project Type>\_<BAPID>\_rpt.pdf e.g., tem\_1234\_rpt.pdf.

The project report must contain sections that address the following:

- Project objectives/purpose
- Review of previous work
- Description of the study area with information relevant to the inventory type (e.g., physiography, surficial geology, soils, disturbance history, BGC, etc...)

- Methodology including any approved variances to the standards and quality control procedures
- Limitations of the inventory
- Description of all map entities
- Results and discussion
- References

All appendices, figures, scanned documents, photos, legends, maps and/or other tables must be included in the project report file. If the resulting project file becomes too large the expanded legend, map legend, maps, large format maps and other image or text information can be submitted separately from the project report. Files that are submitted separately are to be named as follows:

**Sampling Plan** – A sampling plan is used to determine potential field transects and/or sample plot locations, ensuring that the field plots are well distributed and focused on project objectives.

The file name should be: <Broad Project Type>\_<BAPID>\_sp.pdf e.g., tem\_1234\_sp.pdf

**Working Legend** – The working legend is a mapping tool used to link all expected ecosystem units with the recognizable terrain, landscape and biological characteristics that influence ecosystem distribution across a study area.

The file name should be: <Broad Project Type>\_<BAPID>\_wl.pdf e.g., tem\_1234\_wl.pdf

**Expanded Legend** – This file typically contains a detailed description of all map entities, including the typical environmental conditions, commonly mapped site modifiers and/or structural stages. Observed variability within the study area should be noted, focussing on the dominant environmental conditions, species composition and/or structural stages present for each map entity.

The file name should be: <Broad Project Type>\_<BAPID>\_el.pdf e.g., tem\_1234\_el.pdf

**Map Legend** – The map legend describes all of the symbols and codes used on the map. It is only required if pdf maps are being produced as a project deliverable.

The file name should be: <Broad Project Type>\_<BAPID>\_ml.pdf e.g., tem\_1234\_ml.pdf

**Maps** – Submission of maps is recommended as these are beneficial to reflect the mapper's intended final map. These maybe PDF's, TIFFS, Layer files, .MXD documents and other final datatype specified in the deliverable.

The file name should be: <Broad Project Type>\_<BAPID>\_map.<file extension> e.g., tem\_1234\_map01.pdf,

**Localized Biogeoclimatic Documentation** - A non-spatial PDF file containing all rule sets used in compiling the layer for the attributes outlined in Section 2.4.5 of the PEM Technical Standard along with the rules in Table 2-3 in the Standard for Digital

Terrestrial Ecosystem Mapping (TEM) Data Capture in British Columbia, (RIC, 2000). (see Section 2.2).

The file name should be: <Broad Project Type>\_<BAPID>\_bgc.pdf, e.g., pem\_4145\_bgc.pdf

**Input Data Quality Assessment** – A non-spatial PDF file that documents the methods and procedures for collecting, evaluating and compiling all input data, including input data quality evaluations (as outlined in section 4.4 of the Standards for Predictive Ecosystem Mapping, Version 1.0).

The file name should be: pem\_<BAPID>\_idq.pdf, e.g., pem\_4145\_idq.pdf

**Input metadata (mandatory for PEM)** - A non-spatial PDF file of thematic input data containing the information outlined in Table 2-2 of the PEM Technical Standards.

The file name should be: pem\_<BAPID>\_inp.pdf, e.g., pem\_4145\_inp.pdf

**Non-Standard Inventory metadata** - A non-spatial PDF file containing input for new inventories in support of a PEM project outlined in Table 2-6 of the PEM Technical Standards. The file name should be: pem\_<BAPID>\_non.pdf, e.g., pem\_4145\_non.pdf

**PEM Knowledge base - (mandatory for PEM)** - A non-spatial PDF file of the PEM knowledge base containing the relationship between the input attributes and the output mapping entities outlined in Table 2-4 of the PEM Technical Standards.

The element that applies the knowledge base to the assembled input inventories must also be referenced within this document. Definitions of all map entities and knowledge base validation procedures and validation results must be included within this file. Any associated tables and databases should be submitted in the original file type to maintain field formatting. The file name should be: pem\_<BAPID>\_kb file number>.pdf, e.g., pem\_4145\_kb01.pdf

If more than one knowledge base files are delivered they should be named sequentially,

i.e.: pem\_4145\_kb02.pdf and pem\_4145\_kb03.pdf

**PEM Structural Stage PEM file (mandatory PEM)** - A non-spatial pdf file containing the PEM structural stage knowledge base information outlined in Section 2.4.4 of the PEM Technical Standard along with the rules in Table 2-3 in the Standard for Digital Terrestrial Ecosystem Mapping (TEM) Data Capture in British Columbia, (RIC, 2000). This file may be included within the knowledge base.pdf. The file name should be: pem\_<BAPID>\_sts.pdf, e.g., - pem\_4145\_sts.pdf

**NOTE:** A separate structural stage database is not required if the structural stage is assigned directly to each ecosystem component in the polygon data base. If a structural stage database is submitted, then the database should be submitted in the original file type to maintain field formatting.

## 2.2 Field Data Non Spatial Databases

<http://www.env.gov.bc.ca/ecology/dteif/venus.html>

All attributes submitted through the Venus application MUST have a one to one link in the ECP\_TAG field between the Venus plot data and Sample\_Site feature class.

Terrain field data MUST have a one to one link in the TES\_TAG field between the field data and the Sample\_Site feature class(point or line).

The file name should be: <Broad Project Type>\_<BAPID>\_eci.mdb, e.g., pem\_4145\_eci.pdf, or <Broad Project Type>\_<BAPID>\_eci.xlsx, e.g., pem\_4145\_eci.xlsx, ter\_1234\_eci.csv

## 2.3 Non-Spatial Databases

**Input Polygon Database (mandatory for PEM)** - A non-spatial CSV file of thematic input data containing the information. The template for submission can be located in the **Documents** folder of the **Contractor\_Package\_<Date>**. The file name should be: pem\_<BAPID><thematic content> e.g., pem\_4145\_inp.csv.

**Non-Standard Inventory Database** - A non-spatial CSV file containing input for new inventories in support of a PEM project outlined in Table 2-7 of the PEM Technical Standards. The file name should be: pem\_<BAPID><thematic content> e.g., pem\_4145\_non.csv

## 2.4 Sign-off Letter/Project Completion Certificate

The Sign-off Letter or Project Completion Certificate must certify that the project data delivered is complete and meets the appropriate mapping standards (TEM/PEM/SEI/etc.) and those specified in this document. Note: In no way does submission of a sign-off letter or Project Completion Certificate by a representative of the GIS vendor absolve the Mapping Professional of the duty of due diligence in ensuring the project deliverables meet all the required specifications. The file name should be:

<Broad Project Type>\_<BAPID>\_cert.pdf e.g., ter\_1234\_cert.pdf

An example template for the Project Completion Certificate is available from the following web site:

[http://www.env.gov.bc.ca/esd/distdata/ecosystems/Terrain\\_Standards/ProjectCompletionCertificate.doc](http://www.env.gov.bc.ca/esd/distdata/ecosystems/Terrain_Standards/ProjectCompletionCertificate.doc)

## 2.5 Quality Assurance (QA) and Quality Control (QC)

Quality Assurance, and Quality Control documents must be submitted as PDF. The QA/QC documentation must indicate which steps in the mapping process were reviewed and that the final deliverables are in accordance with the applicable standards. QA/QC reporting may be performed by a qualified third party or may be completed internally by mapping contractor. In both cases, the applicable QA reports and project completion certificate assuring the quality of the deliverables must be signed-off. Consult the most current version of the inventory specific QA guidelines for further explanation of the QA review procedures.

The file(s) name should be:

pem\_<BAPID>\_qa.<file extension> - i.e. pem\_4145\_qa01.pdf for any QA documentation;  
and

If more than one QA/QC report is delivered each should be named sequentially, i.e.:  
pem\_4145\_qa02.pdf and pem\_4145\_qa03.pdf.

The practitioner must retain a copy of their work after the project has been signed off for the period of time indicated by their professional association legislation or for any period of time indicated in relevant legal documentation.

## **2.6 Accuracy Assessment (AA)**

Final Accuracy Assessment reports and associated data must be submitted to [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca) . Consult the “Protocol for Accuracy Assessment of Ecosystem Maps” for further explanation of the AA review procedures found at this site:

<http://www.for.gov.bc.ca/hfd/pubs/Docs/Tr/Tr011.htm>

The file(s) name should be: pem\_<BAPID>\_aa.<file extension> - i.e. pem\_4145\_aa01.pdf for any AA documentation.

If more than one AA report is delivered each should be named sequentially, i.e.:  
pem\_4145\_aa02.pdf and pem\_4145\_aa03.pdf.

The practitioner must retain a copy of their work after the project has been signed off for the period of time indicated by their professional association legislation or for any period of time indicated in relevant legal documentation.

## 3 Spatial Data Specifications

During the data capture, development and quality control stages, project data can be in a number of formats for internal use. For final delivery to the Province, the data must adhere to the following specifications. Data must be loaded into the template feature classes provided in the **Tools\_and\_Templates\_FGDB** included in the **Contractor\_Package\_<Date>**, available for download from the following website:

[http://www.env.gov.bc.ca/FIA/documents/TEI\\_Contractor\\_Package.zip](http://www.env.gov.bc.ca/FIA/documents/TEI_Contractor_Package.zip) Loading into this template will ensure the data adheres to the following specifications:

- Format: ESRI File Geodatabase (FGDB) version 10.0 or higher
- Coordinate system: BC Environment Albers Projection (see Coordinate System section below for details)
- Single part polygons
- Database structure as outlined in Appendix A

The QA tools in the **Contractor\_Package\_<Date>** as outlined in Section 6 must be run and these tools will flag:

- Missing mandatory attributes
- Null and zero values
- Values outside of allowable domains and ranges as outlined in Appendix B
- Cross field validation errors
- Geometry errors

### 3.1 Data Format

Spatial data must be submitted in ESRI File Geodatabase (FGDB) format version 10.0 or higher.

### 3.2 Coordinate System

The data must be submitted in the BC Environment Albers projection. This projection has already been assigned to the feature class templates included in the **Contractor\_Package\_<Date>**, and any features loaded into these templates will automatically be reprojected by the ArcGIS Desktop application into Albers from the source data projection.

In the BC Environment Albers projection, locations are specified in terms of rectangular (projection) coordinates that specify northing, easting and elevation. Northing and easting are stored in metres. Elevation data, expressed along the z-axis, is typically not gathered and is not included in data submissions.

The parameters of the BC Environment Albers projection are as follows:

- **Projection:** Albers
- **Units:** Meter (stored without offsets, e.g. in direct Albers projection coordinates)

- **Datum:** NAD83 (GRS80) - North American Datum 1983, with earth-centered ellipsoid derived from Geodetic Reference System 1980
- **Central Meridian:** 126° 00' 00" West Longitude (-126.0)
- **First Standard Parallel:** 50° 00' 00" North Latitude (50.0)
- **Second Standard Parallel:** 58° 30' 00" North Latitude (58.5)
- **Latitude of Projection Origin:** 45° 00' 00" North Latitude (45.0)
- **False northing:** 0.0m
- **False easting:** 1000000.0m

When defining the coordinate system of raw spatial data, or reprojecting data from a different coordinate system, use the **NAD\_1983\_BC\_Environment\_Albers.prj** file included in the Scripts folder of the **Contractor\_Package\_<Date>**. This file contains the Open Geospatial Consortium (OGC) coordinate system specification string, which is:

- PROJCS["NAD\_1983\_Albers",GEOGCS["GCS\_North\_American\_1983",DATUM["D\_North\_American\_1983",SPHEROID["GRS\_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Albers"],PARAMETER["False\_Easting",1000000.0],PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridian",-126.0],PARAMETER["Standard\_Parallel\_1",50.0],PARAMETER["Standard\_Parallel\_2",58.5],PARAMETER["Latitude\_Of\_Origin",45.0],UNIT["Meter",1.0]]

### 3.3 Topology Implementation

In the quality assurance stage, prior to data submission, topology rules can and should be implemented and enforced using the standard tools available in ArcGIS Desktop. Gaps should not exist between polygons in the dataset except for gap areas that have not been mapped (for example, private land). Unmapped areas should be represented by gaps, not by “placeholder” polygons with empty attributes.

The boundary polygons for adjacent projects must be obtained from the provincial repository, and the polygons of the current project aligned with adjacent project boundaries such that no gaps or overlaps exist (a variance can be obtained if this interferes significantly with project purpose and boundaries). Detailed polygon linework should consider the attributes and linework of adjacent project's detailed polygons, and should match where appropriate.

Each feature in a feature class must be a single part polygon, line or point.

For projects where mapping consists of multiple disjoint polygons in a study area, a single encompassing boundary polygon that defines the outer boundary of the evaluated area is required. These must still conform to the topology rules defined above, no gaps, no overlaps. See the appropriate inventory standards for determining the mandatory attributes for the outer boundary polygon. Sensitive Ecosystems Inventory and Reconnaissance Terrain Stability Mapping are both examples where a bounding polygon is required.

### 3.4 Registration and Positional Accuracy

TEI spatial data must be registered to the Provincial Baseline Digital Atlas 1:20 000 (TRIM) / 1:10 000 (TRIM2). The required baseline positional accuracy for Provincial Baseline Digital Atlas 1:20 000 (TRIM) / 1:10 000 (TRIM2) is as follows:

- 90% of all well-defined planimetric features are coordinated to within 10 metres of their true position.
- 90% of all discrete spot elevations and DEM points are accurate to within 5 metres of their true elevation.
- 90% of all points interpolated from the TRIM (including contour data) are accurate to within 10 metres of their true elevation.

Field sites and traverses are collected using true position/elevation, which is defined as the coordinates that are obtained from positioning with high order ground methods.

### 3.5 Linkages to Attributes

BAPID (Business Area Project Identifier) is the name of the numerical attribute that maintains the link between project polygons (in **TEI\_Long\_Tbl** feature class) and project metadata (in the **TEI\_Project\_Details** table). Email request for BAPID to [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca).

PROJPOLYID (Project Polygon Identifier) is the name of the item that maintains the link between standard detailed attribute polygons and user-defined data tables. It is a unique identifier (unique within the BAPID) up to 50 characters.

TEIS\_ID (Terrestrial Ecosystem Information Identifier) is the name of the long integer attribute that maintains the link between inventory polygons in the **TEI\_Long\_Tbl** feature class and related features, such as the **DomainErrors** table. Within the contractor project data **TEIS\_ID** is not enduring, it is regenerated every time the Set **TEIS\_ID** script is run.

While there are no explicitly defined relationships in the TEI database at this time, the **TEIS\_ID**, **PROJPOLYID**, and **BAPID** are the key fields used to link all data sets in the provincial operational data holdings. In addition, loosely defined relationships exist between many items and their domains, as defined by the Metadata tables. For current information and diagrams, please review the information in the downloadable **Contractor\_Package\_<Date>**.

### 3.6 Domains and Ranges

Specific domains and ranges for fields in deliverable feature classes are detailed in Appendix B. Additional documentation, and the most current versions of domains and ranges, can be found in the **Contractor\_Package\_<Date>**. The **Metadata\_Items** table in the **Tools and Templates FGDB** specifies ranges and references the **Domain\_<name>** for each **FGDB\_Name**. This information is used by the Validation tool in the **Contractor\_Package\_<Date>**. This tool will flag domain and range errors in output error report tables that can be joined to the **TEI\_Long\_Tbl** by **TEIS\_ID**.

### 3.8 Feature Class Description

The purpose of this section is to describe all of the spatial data being submitted. The intent is to provide a single integrated definition of the data (logical and physical) that is unbiased toward any single application of the data being collected and is independent of how the data are physically stored or accessed. The intent is to provide a common understanding of the data as well as provide a basis for systems database design and definition of the Physical Data Description.

There are two primary datasets in the submitted **Operational\_Data** file geodatabase: the **TEI\_Long\_Tbl** feature class which contains the detailed polygon information for all project types, and the **TEI\_Project\_Details** table which contains project level metadata. These two datasets are mandatory deliverables for all projects. See Appendix A for the full data dictionary for each of these Feature Classes.

#### Mandatory Deliverable Feature Class List

- Terrestrial Ecosystem Information Long Table Polygons (**TEI\_Long\_Tbl**) \*
- Terrestrial Ecosystem Information Project Details Table (**TEI\_Project\_Details**)\*

#### Mandatory (If Collected) Deliverable Feature Classes

If data corresponding to any of the following Feature Classes is collected, then submission of these Feature Classes is mandatory. See Appendix A for the full data dictionary for each of these Feature Classes.

- Terrestrial Ecosystem Information Linear Sample Site Locations (**TEI\_Sample\_Site\_Lines**) \*
- Terrestrial Ecosystem Information Point Sample Site Locations (**TEI\_Sample\_Site\_Points**)\*
- Terrestrial Ecosystem Information On-Site Linear Symbols (**TEI\_Symbols\_Lines**)\*
- Terrestrial Ecosystem Information On-Site Point Symbols (**TEI\_Symbols\_Points**)\*
- Terrestrial Ecosystem Information On-Site Area-based Symbols Polygons (**TEI\_Symbols\_Polys**)\*
- Terrestrial Ecosystem Information User Defined Data (**TEI\_Usr\_Dfn\_Data**) \*
- Terrestrial Ecosystem Information User Defined Fields (**TEI\_Usr\_Dfn\_Fields**)\*

#### Optional Deliverable Feature Classes

If data corresponding to any of the following Feature Classes is collected, then submission of these is optional. See Appendix A for the full data dictionary for each of these Feature Classes.

- Terrestrial Ecosystem Information Long Table Polygon Lines (**TEI\_Long\_Tbl\_Arcs**)\*
- Terrestrial Ecosystem Information Project Boundaries Polygons(s) (**TEI\_Project\_Boundaries**)\*
- Terrestrial Ecosystem Information Short Table Polygon Attributes (**TEI\_Short\_Tbl**)\*
- Terrestrial Ecosystem Information Area-based Symbols Polygon Lines (**TEI\_Symbols\_Polys\_Arcs**)\*

\* For Feature class descriptions see Appendix A or the Metadata\_Tables table located in the Tools\_and\_Templates.gdb in the Contractor\_Package\_<Date>.

### 3.9 User Defined Data

User-defined data can take two forms:

1. User-defined values for existing fields (for example, new site series modifiers for a project in the SITEAM\_S1A, SITEAM\_S2A and SITEAM\_S2A fields of the TEIS Long Table).
  - a. New mapcode values for projects must be submitted for approval by the Ministry of Environment. See **MapCode\_Submission** table in **Tools\_and\_Templates.gdb** for required information.
2. New user-defined fields that don't currently exist in any TEIS Environment feature classes or tables.

User-defined values for existing fields must be submitted to and approved by the MoE **prior to the submission of final deliverables**. In particular, new mapcodes must be pre-approved by the regional ecologist for the study area.

However, if any new **user-defined fields** are to be submitted, they need not be pre-approved, and can be added to the **TEI\_Usr\_Dfn\_Fields** table, which initially includes only the required fields TEIS\_ID, Project Polygon Identifier (PROJPOLYID), and Business Area Project ID (BAPID). The PROJPOLYID field must contain unique values, and the records in this table must match 1:1 with those in **TEI\_Long\_Tbl** or other associated feature classes in the **Operational Data FGDB**.

Also, descriptions of the new user-defined fields must be added as records in the **TEI\_Usr\_Dfn\_Items** table. The purpose of this table is to define the properties of the new field, such as data type, valid attribute domains, and ranges. This table follows the format of the previous TEM standard for submission of user-defined field metadata as a CSV file.

Templates for these two tables are also included in the Tools and Templates geodatabase, part of the **Contractor\_Package\_<Date>**. See Appendix A for a full description of the tables.

Information submitted in the **TEI\_Usr\_Dfn\_Items** table should also be included in the report submitted with the spatial data. Please e-mail draft user-defined tables and associated definitions to [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca) early in the project for approval.

If users wish to validate the contents of **TEI\_Usr\_Dfn\_Fields** against the domains and ranges defined in **TEI\_Usr\_Dfn\_Items**, they can use the **Validate User-Defined Data** script tool included in the **Contractor\_Package\_<Date>**.

## 4 Digital Data Capture

This section contains information related to the capture and quality assurance of data submitted. While this information is meant to assist in the creation of digital data, the definitive source is the appropriate data capture standard for the project type being worked on.

### 4.1 Quality of Digital Data Capture

Quality of digital data capture is composed of accuracy, resolution, and tolerance. These requirements will change depending upon the inventory scale and user requirements. This information should be specified for each project in the Final Report included with data submission.

Required quality of digital data capture should be stated for each feature type, or group of feature types. In the case of positional accuracy quality of digital data capture is usually specified in terms of maximum error. Error may be specified as percent probability:

*90% of all points must be positioned on NAD83 within 10 metres. All points must be within 25 metre accuracy on NAD83. [The NAD83 datum on the ground is defined by geodetic control monuments and Active Control Points as maintained by GeoBC.]*

or as statistical error:

*Any sample of at least 3% of points must have less than a 10 metre Root Mean Square Error when compared to their surveyed locations.*

### Interpretation Accuracy/Error

Accuracy and error are also dependent upon the scale and inventory type being performed. Refer to the appropriate RISC standard, and include the Survey Intensity Levels as project level metadata in the **TEI\_Project\_Details** table.

### Resolution and Tolerance

It is not recommended to change the default XY resolution and tolerance values (0.0001m and 0.001m respectively) for feature class templates in the **Contractor\_Package\_<Date>**. Older data in other spatial formats stored with lower precision can be imported to these feature class templates without introducing significant geometric error. See the documentation included with your ArcGIS Desktop software for detailed information.

### 4.2 Minimum Feature Size

Table 2 lists recommended guidelines for minimum feature sizes and minimum feature widths for different mapping scales. There may be slight variations from these recommendations due to the approach used and the intended resolution of the map being produced. Wide variations from these recommendations may result in geometry errors when processing the spatial data. Refer to the specific field inventory standards as appropriate for the inventory type.

**Table 2: Minimum feature size recommendations**

Mapping Scale	Recommended Minimum Feature Area (on ground)	Recommended Minimum Feature Widths(on ground)
1:5,000	0.5 hectare	5 metres
1:10,000	1.0 hectare	10 metres
1:20,000	2.0 hectare	20 metres
1:50,000	5.0 hectare	50 metres

### 4.3 Digitizing Polygons

Table 3 lists recommended guidelines for maximum zoom for digitizing polygons.

**Table 3: Recommended maximum digitizing zoom**

Project Scale	Recommended Zoom Scale	Detailed Polygon Zoom Scale (Riparian, Wetland)
1:5 000	1:2 500	1:2 000
1:10 000	1:5 000	1:4 000
1:20 000	1:10 000	1:8 000
1:50 000	1:25 000	1:20 000

Prior to loading into the **Contractor\_Package\_<Date>** feature class templates, features with polygon geometry **MUST** be tested and verified with an ArcGIS Topology that includes the “Must Not Overlap” and “Must Not Have Gaps” topological rules. When delivered there **MUST** be 0 errors within the above topology rules. Polygons should also be given as input to the ArcGIS **RepairGeometry** tool to identify and eliminate polygons with self-intersecting boundaries or null geometry.

## 4.4 Digitizing Arcs, Lines or Polylines

Linear features having a defined discernible gradient or direction of flow (e.g. rivers, pipelines, slides) must be digitized in the downward or downstream direction.

Prior to loading into the **Contractor\_Package\_<Date>** feature class templates, features with line geometry should be tested with an ArcGIS Topology that includes the “Must Not Self-Overlap” and “Must Not Self-Intersect” topological rules. Line features should also be given as input to the ArcGIS **RepairGeometry** tool to identify and eliminate features with self-intersections or null geometry.

## 4.5 Elevation (Z-Axis) Data

The feature class templates included in the **Contractor\_Package\_<Date>** are not meant to store three-dimensional data. Any Z-values included with input features will not be incorporated into the templates.

## 4.6 Tiles

Data must be provided in a single seamless dataset, not in separate tiles defined by any standard or non-standard mapsheet grid.

## 5 Contractor Package <Date>

The use of the **Contractor\_Package\_<Date>** tools and templates is highly recommended for submission of Terrestrial Ecosystem Information. Contractors will be required to address any formatting issues and/or erroneous content prior to the Ministry's final acceptance of the data. The Ministry will validate all project deliverables for final acceptance.

### 5.1 Minimum Hardware/Software Requirements

The **Contractor\_Package\_<Date>** is designed to work with the ArcGIS Desktop suite of products by ESRI, version 10.0 or newer. All requirements for hardware and software can be found at <http://www.esri.com>. See the source links below for up-to-date information.

### 5.2 Source

The current version of the **Contractor\_Package\_<Date>**, and related documentation (*User's Manual*), can be obtained from the following web sites:

- <http://www.env.gov.bc.ca/esd/distdata/ecosystems/TEI/ContractorPackage/>

### 5.3 Licensing

The **Contractor\_Package\_<Date>** is authorized for capture of RISC standard TEI data to be submitted to the TEI data custodian and published through the BCGW and the DataBC Open Data Catalogue. Any other uses require written permission obtained from the Ministry of Environment a [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca).

The **Contractor\_Package\_<Date>** is not authorized for redistribution or modification.

## 6 Metadata

Explicit data and project level metadata is required in each data submission. For each project, this information is submitted in the **TEIS\_Project\_Details** table, see Section 3.

The **Contractor\_Package\_<Date>** metadata is held directly in the **Tools\_and\_Templates** FGDB tables, as are all data lookup (domain) codes, item definitions, and numeric ranges for use in data validation and quality assurance.

There is currently no requirement to fill out the ESRI metadata associated with the geodatabase or feature classes. However, some basic information can be entered and references to the feature classes containing metadata information be referenced. Note that this information will not be entered into the provincial data holdings and that all relevant metadata should be entered into the appropriate tables and feature classes.

## 7 Cartographic/Representation/Output

### 7.1 Templates

Where map visualization, specialized labels, or hard copy templates are standardized they will be provided in the **Contractor\_Package\_<Date>**. Currently there is no such standardization defined.

### 7.2 Symbology

Standard symbols for the various features that make up the Terrestrial Ecosystem Information (by FCODE) can be found at:

[http://www.env.gov.bc.ca/esd/distdata/ecosystems/TEI/ContractorPackage/FCODE\\_Symbols](http://www.env.gov.bc.ca/esd/distdata/ecosystems/TEI/ContractorPackage/FCODE_Symbols)

### 7.3 Annotation/Labelling

Label text can be created automatically using the **Create Short Table** tool, located in the **Toolset 3 - Optional Post-Processing** toolbox. For example, TER\_LBL, is a concatenated terrain label string in the **TEI\_Short\_Tbl**, created from attributes in **TEI\_Long\_Tbl**. Individual fields can also be used to assemble multiline polygon labels.

Annotation layers, as defined in older versions of ESRI software, are not part of the standards. If created they should be delivered in the **Operational\_data\_<BAPID>.gdb**. If project mapping results in annotation layers containing label text that does not belong in any attribute field of the feature classes being submitted, this information should be submitted through the User-Defined Fields process.

### 7.4 Cartographic Alteration/Visual Enhancement

Representational cartography is not included in the Terrestrial Ecosystem Information data. All data contains positional geometry only.

### 7.5 Surround

Map surrounds are based on the specific project type and information being mapped. Often project (legend) specific information must be included, so no default templates have been specified. General RISC standards recommend the following map elements:

- title
- provincial logo
- mapsheet(s)
- version number
- tick marks
- last update date
- legend

- scale
- scale bars
- north arrow (at map centre)
- projection and datum
- plot date
- originator of plot
- base map
- source of thematic data
- legend with symbology
- neatline, fiducial tickmarks, grid (either lat/long or UTM)

# GIS Quality Assurance Procedures

Quality Control and Quality Assurance of the digital data are based primarily on the utilization of the **Contractor\_Package\_<Date>** through templates and validation tools that perform automated error detection and reporting. The **Documentation** folder in the **Contractor\_Package\_<Date>** contains two documents with detailed workflow and best practices: **TEIS\_Environment\_Workflow.pdf**, and **TEIS\_Environment.pdf**

Quality assurance of the inventory content is achieved through internal quality control procedures and/or third party quality assurance. Guidelines are available at the following link: [http://www.env.gov.bc.ca/esd/distdata/ecosystems/wis/qa\\_guidelines/](http://www.env.gov.bc.ca/esd/distdata/ecosystems/wis/qa_guidelines/)

## 8.1 Attributes

Attribute field names and field types must match those of the templates provided in the Tools and Templates geodatabase in the **Contractor\_Package\_<Date>**. Values in the submitted feature classes and tables must conform to the domains, ranges and cross-field relationships as specified in the **Contractor\_Package\_<Date> Tools\_and\_Templates.gdb Metadata\_Items and Metadata\_Tables**, Appendix A and Appendix B The **Contractor\_Package\_<Date>** includes tools for validating attribute values and producing error reports to aid in the quality assurance process.

## 8.2 Geometry

Feature classes must not contain any invalid or null geometry. The **Contractor\_Package\_<Date>** Toolbox includes a **Validate Geometry** tool which must be executed against each deliverable feature class before submission. ESRI ArcGIS Desktop also includes tools for identifying and repairing geometry errors. See the documentation included with the ArcGIS Desktop software for details.

## 8.3 Topology

The Quality Assurance process should include the creation and validation of a topology on each polygon feature class to be submitted. Each topology should be created with the “Must Not Overlap (Area)” and “Must Not Have Gaps (Area)” rules. Any errors identified by the validation of each topology should be eliminated before submission. See the documentation included with the ArcGIS Desktop software for details on creating and validating topologies.

## 8.4 Adjacent Project Boundaries

All project polygons should, when considered as a single overall project boundary polygon, coincide exactly with boundaries of adjacent projects of a similar project type and mapping scale, leaving no gaps or overlapping areas between the polygons of the feature class being submitted and the adjacent project boundary polygon. ESRI ArcGIS Desktop includes tools for reshaping edges and snapping together adjacent polygon boundaries. See the documentation included with the ArcGIS Desktop software for details.



## 9 Data Submission

The Director of the Knowledge Management Branch, B.C. Ministry of Environment, is the provincial data custodian for all Terrestrial Ecosystems Information (TEI) collected and produced in accordance with the standards set by the Resource Inventory Standards Committee (RISC). Therefore, all RISC standard provincially funded TEI project data must be submitted to the Ministry of Environment. Project data funded by other levels of government, by the private sector, or other proponents, particularly those funded by, or collected in partnership with, the Provincial Government, should also be delivered to MoE. Where appropriate this project data will be loaded to the provincial repositories to facilitate access. The specifications for data submission are outlined below.

### 9.1 Requesting a BAPID

In order to effectively track the progress of multiple TEI projects, and the digital deliverables associated with each of these projects, a Business Area Project Identifier (BAPID) is assigned at the project level. A BAPID is a unique identifier used in the naming of all project files, folders and feature classes, as well as any project correspondence. Since many projects often span multiple years and involve the submission of interim project deliverables, a project identification number <BAPID> must be requested from the province at the onset of any project.

When requesting a BAPID the following basic information must be provided:

- Project Name
- Project Type
- Geographic Location
- Project Contact
- Project Scale
- Project Methods (Standards and/or Variances)
- Project Deliverables
- Project Timeframe

In addition to the information listed above, please identify and provide clarification in your BAPID request if any of the following conditions apply to your project:

- Does your project include multiple TEI project types (e.g. TEM with SEI or WHR interpretations?)? If so, will the secondary project type(s) utilize the same spatial extent (I.e. will the same polygons be attributed?)?
- Does your project cover a large geographic area (I.e. multiple management units)? If so, will the data be submitted as a single contiguous product at one time or as sub-areas submitted over multiple years?
- Does your project involve multiple map scales?
- Will the project be completed by a single mapper / company (I.e. will a single professional authority be signing off on the project deliverables)?
- Is your project an update of an existing project? If so, will the updated data replace the entire original project data set?

## 9.2 Requesting a Standards Variance

As noted in Section 1.0, the TEI digital standards are to be used in conjunction with the applicable TEI inventory standards. These standards represent the currently accepted best management practices for TEI inventory and data collection. It is recognized that variances to these standards may be justified. Requests for variances to the TEI inventory and/or digital standards must be submitted to the MoE for approval prior to project initiation. Requests should be sent to:

## 9.3 Interim Deliverables

Some TEI project types, specifically Ecosystem Mapping projects, require the submission of interim deliverables for review and approval prior to project completion. Any proposed changes to the provincial Biogeoclimatic (BGC) linework and/or proposed new ecosystem map units must be approved by the Ministry of Forests, Lands and Natural Resource Operations regional ecologist prior to the production and submission of the final mapping. Note, reconnaissance or field level reliability large scale BGC mapping is available for some areas of the province. In these areas, the existing linework should be used. More information on the extent of localized BGC mapping is available at:

[http://www.for.gov.bc.ca/hre/becweb/resources/maps/index.html#bgc\\_mapping](http://www.for.gov.bc.ca/hre/becweb/resources/maps/index.html#bgc_mapping)

All submissions for BGC linework changes must include supporting plot data (i.e. Full plots or equivalent) and plot locations spatial data (in Shapefile format). Requests for new ecosystem units must include proposed map unit coding, unit name and description, as well as supporting plot data.

Submissions should be sent to: [TEI\\_mail@gov.bc.ca](mailto:TEI_mail@gov.bc.ca).

Once approved by the Ministry of Forests, Lands and Natural Resource Operations regional ecologist, the data custodian will be notified and the mapping can be finalized. The provincial list of site series and map codes will be updated to include all new units allowing users to validate the final ecosystem mapping prior to submission.

## 9. 4 Final Deliverables

All project deliverables must be submitted to the Ministry of Environment, via the government FTP site as per instructions available at:

[http://www.env.gov.bc.ca/ecology/ecological\\_info\\_submissions.html](http://www.env.gov.bc.ca/ecology/ecological_info_submissions.html).

Deliverables must be placed in a single ZIP file, using the standard folder structure, file formats and naming conventions specified below. All non-spatial files are to be delivered in the ZIP folder with the format and naming conventions outlined in Section 3. The spatial files are to be delivered in the same ZIP folder using a subfolder named

<project type>\_<BAPID>\_Spatial

Example Deliverable folder and file structure:

tem\_1234.zip

tem\_1234\_spatial

Operational\_Data\_1234.gdb

tem\_1234\_rpt.pdf

tem\_1234\_eci.mdb

tem\_1234\_map01.pdf

tem\_1234\_map02.pdf

tem\_1234\_qa.pdf

Any non-standard spatial data files (shape files, CAD based files, etc.), plot files (HPGL/2: HP2, Raster Transfer Language: .RTL, .PostScript: PS, etc.), and non-spatial files that are in non-standard formats, including source or input data files, may be submitted to government in addition to the required files in the standard formats. If submitted they should adhere to the same file naming conventions (<project type>\_<BAPID>\_<file type>) and be delivered in the same ZIP folder as the standard files. All non-standard files will be stored with the rest of the project data and be accessible to all potential users. The government recognizes that these alternate file formats may be preferred by some mapping project clients or data users, and therefore wishes to support ease of access to data in these alternate formats. The government, however, is not in a position to offer any level of technical support for any data or deliverables that is not in the mandatory/current standard. Non-standard data will be maintained in the original condition as it was delivered. Refer to the Terrain, TEM, PEM, and SEI inventory standards for clarification on the information requirements of these different project types.

# Appendices

## Appendix A: Tables

**Table 1: Details of TEI\_Long\_Tbl template.**

TEI\_Long\_Tbl contains Terrestrial Ecosystem Information (TEI) polygons with full RISC (Resource Inventory Standards Committee) standard attributes. These describe the physical and biological characteristics of ecosystems at a landscape level. TEI\_Short\_Tbl and TEI\_Project\_Boundaries are derived from the TEI\_Long\_Tbl.

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	TEIS Primary Key (TEIS_ID)	The unique identifier (PK) for the TEIS detailed geometry. This key may change between snapshots of the database.			Unique numeric ID for detailed polygons. (Non-soils.)	Integer	4
2	Project Polygon Identifier (PROJPOLYID)	This field contains a unique polygon identifier for linking attribute data to spatial data for TER, TEM, PEM and SEI data. A unique identifier within a project, that when combined with the BAPID creates a unique identifier within the province. This field can be used for linking foreign key data (user defined fields, report references, etc.).				String	50
3	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
4	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10

5	Project Type (PROJ_TYPE)	A nine letter code indicating the type of mapping project.	PROJECT_TYPE (aka PROJ_TYPE) contains a 3-9 letter code indicating the specific type of mapping and attributes gathered for the project. For example: TEM, PEM, SEI, TIM, TSM, TBT, TEMSEI, TEMNSS and PRETEM.	Project_Type		String	9
6	Project Map Scale (PROJ_SCALE)	The scale of the project maps produced. For example, use 20000, not 1:20000	Renamed from 'Scale'		5000 to 250000 (Values outside of this scale range may be valid.)	Integer	4
7	Project Identification (PROJ_ID)	A unique identifier (project short name) for each project being delivered. See Section: Digital Data Specification and Table: Metadata for Header on Data Form.				String	5

8	Mapsheet Number (MAPSH_NBR)	Where the project mapping falls entirely within a single mapsheet, the number of the mapsheet. In case where the project includes several mapsheets, this is captured for each polygon. Where a polygon straddles mapsheets, the mapsheet underlying the greatest portion of the polygon is to be used. See Table: Map Number Recording Convention.	A leading zero is required for mapsheets not starting with 1. Do not use a decimal or '/' separator. E.g., 083E073. Caution: ensure this is a character field if data is first captured in MS Excel, as mapsheet numbers containing an E may be converted into scientific notation on data import or export.			String	9
9	Polygon Number (POLY_NBR)	An identifying number for polygon being mapped. Polygons may be numbered consecutively within projects, or within projects and mapsheets, depending on the preference of the lead mapper and on project objectives.	Mandatory field.			Integer	4
10	Ecosection Label (ECO_SEC)	contains the three-letter code for the Ecosection in which the polygon occurs.				String	3
11	BGC Zone (BGC_ZONE)					String	4
12	BGC Subzone (BGC_SUBZON )					String	3

13	BGC Variant (BGC_VRT)				1 to 6 (This field is not a real range, but rather a set of (possibly) valid values based on the BGC_ZONE and BGC_SUBZON cross field relationship. It should be remodelled.)	Integer	4
14	BGC Phase (BGC_PHASE)					String	1
15	Ecosystem Decile of Ecosystem Component 1 (SDEC_1)	contains a number from 4-10 indicating the proportion of the polygon covered by ecosystem component 1. Enter zero (0) when not recorded.	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		4 to 10 (NULL is permitted if there is no associated data.)	SmallInteger	2
16	Realm of Ecosystem Component 1 (REALM_1)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	1
17	Group of Ecosystem Component 1 (GROUP_1)		Coding to be defined.			String	50

18	Class of Ecosystem Component 1 (CLASS_1)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	1
19	Site Series Number of Ecosystem Component 1 (SITE_S1)		Coding follows the standards found at: <a href="http://www.env.gov.bc.ca/ecology/tem/list.html">http://www.env.gov.bc.ca/ecology/tem/list.html</a> and the MoFR Field Guides to Site Units.			String	5
20	Assumed Site Series Modifier 1 of Ecosystem Component 1 (SITEAM_S1A)		These cannot be used as site modifiers to site series.			String	1
21	Assumed Site Series Modifier 2 of Ecosystem Component 1 (SITEAM_S1B)					String	1

22	Assumed Site Series Modifier 3 of Ecosystem Component 1 (SITEAM_S1C)					String	1
23	Assumed Site Series Modifier 4 of Ecosystem Component 1 (SITEAM_S1D)					String	1
24	Site Series Map Code of Ecosystem Component 1 (SITEMC_S1)					String	5
25	Site Modifiers 1 of Ecosystem Component 1 (SITE_M1A)		Coding must follow Table 3.2 in the Standard for Terrestrial Ecosystem Mapping in British Columbia, (RIC, 1998).			String	1
26	Site Modifiers 2 of Ecosystem Component 1 (SITE_M1B)		Coding must follow Table 3.2 in the Standard for Terrestrial Ecosystem Mapping in British Columbia, (RIC, 1998).			String	1

27	Site Series Mapcode ID of Ecosystem Component 1 (MC_ID1)	A unique ID number for the combination of BGC unit, site series, and site series mapcode, corresponding to the MAPCODE_ID field in the Domain_Mapcodes table.		Mapcodes		Integer	4
28	Structural Stage of Ecosystem Component 1 (STRCT_S1)			Structural_Stage		String	2
29	Structural Stage Substage OR Modifier of Ecosystem Component 1 (STRCT_M1)		Codes must follow those listed in the Structural stage modifiers table.	Structural_Stage_Modifier		String	1
30	Stand Composition Modifier of Ecosystem Component 1 (STAND_A1)		Coding must follow the Table: Stand composition modifiers and codes.	Stand_Composition_Modifier		String	1
31	Seral Community Type of Ecosystem Component 1 (SERAL_1)					String	2

32	Tree Crown Closure of Ecosystem Component 1 (TREE_C1)				0 to 100 (Percent value)	SmallInteger	2
33	Shrub Crown Closure of Ecosystem Component 1 (SHRUB_C1)				0 to 100 (Percent value)	SmallInteger	2
34	Site Disturbance Class of Ecosystem Component 1 (DISTCLS_1)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	1
35	Site Disturbance Subclass of Ecosystem Component 1 (DISTSCLS_1)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	1
36	Site Disturbance Sub-Subclass of Ecosystem Component 1 (DISSSCLS_1)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	2

37	Sensitive Ecosystem Class of Ecosystem Component 1 (SECL_1)	contains a string of upper case character codes indicating the sensitive ecosystem class for SEI component 1. SEI classes group ecosystems based on similar disturbance sensitivity or at-risk status.		SEI_Class		String	2
38	Sensitive Ecosystem Subclass of Ecosystem Component 1 (SESUBCL_1)	contains a string of lower case character codes indicating the sensitive ecosystem subclass for SEI component 1. Subclasses further define the ecosystem class based on ecological criteria.		SEI_Subclass		String	2
39	Condition of Ecosystem Component 1 (COND_1)	contains a single numeric code indicating the condition of the sensitive ecosystem in SEI component 1. Condition is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the ecosystem and the degree to which they affect the continued existence of the ecosystem.		Condition		String	1

40	Viability of Ecosystem Component 1 (VIAB_1)	contains a single numeric code indicating the probability the sensitive ecosystem for SEI component 1 will persist based on its size, condition, and landscape context.		Viability		String	1
41	Ecosystem Decile of Ecosystem Component 2 (SDEC_2)	contains a number from 0-5 indicating the proportion of the polygon covered by ecosystem component 2. Enter zero (0) when not recorded.	e.g., a decile of 10=100% of polygon, 8=80% of polygon, 2=20% of polygon		1 to 5 (Zero values are to be replaced by NULL.)	SmallInteger	2
42	Realm of Ecosystem Component 2 (REALM_2)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	1
43	Group of Ecosystem Component 2 (GROUP_2)					String	50
44	Class of Ecosystem Component 2 (CLASS_2)					String	1
45	Site Series Number of Ecosystem Component 2 (SITE_S2)		Coding follows the standards found at: <a href="http://www.env.gov.bc.ca/ecology/tem/list.html">http://www.env.gov.bc.ca/ecology/tem/list.html</a> and the MoFR Field Guides to Site Units.			String	5

46	Assumed Site Series Modifier 1 of Ecosystem Component 2 (SITEAM_S2A)					String	1
47	Assumed Site Series Modifier 2 of Ecosystem Component 2 (SITEAM_S2B)					String	1
48	Assumed Site Series Modifier 3 of Ecosystem Component 2 (SITEAM_S2C)					String	1
49	Assumed Site Series Modifier 4 of Ecosystem Component 2 (SITEAM_S2D)					String	1

50	Site Series Map Code of Ecosystem Component 2 (SITEMC_S2)					String	5
51	Site Modifiers 1 of Ecosystem Component 2 (SITE_M2A)		Coding must follow Table 3.2 in the Standard for Terrestrial Ecosystem Mapping in British Columbia, (RIC, 1998).			String	1
52	Site Modifiers 2 of Ecosystem Component 2 (SITE_M2B)		Coding must follow Table 3.2 in the Standard for Terrestrial Ecosystem Mapping in British Columbia, (RIC, 1998).			String	1
53	Site Series Mapcode ID of Ecosystem Component 2 (MC_ID2)	A unique ID number for the combination of BGC unit, site series, and site series mapcode, corresponding to the MAPCODE_ID field in the Domain_Mapcodes table.		Mapcodes		Integer	4
54	Structural Stage of Ecosystem Component 2 (STRCT_S2)			Structural_Stage		String	2

55	Structural Stage Substage OR Modifier of Ecosystem Component 2 (STRCT_M2)		Codes must follow those listed in the Structural stage modifiers table.	Structural_Stage_M odifier		String	1
56	Stand Composition Modifier of Ecosystem Component 2 (STAND_A2)		Coding must follow the Table: Stand composition modifiers and codes.	Stand_Composition _Modifier		String	1
57	Seral Community Type of Ecosystem Component 2 (SERAL_2)					String	2
58	Tree Crown Closure of Ecosystem Component 2 (TREE_C2)				0 to 100 (Percent value)	SmallInteger	2
59	Shrub Crown Closure of Ecosystem Component 2 (SHRUB_C2)				0 to 100 (Percent value)	SmallInteger	2

60	Site Disturbance Class of Ecosystem Component 2 (DISTCLS_2)					String	1
61	Site Disturbance Subclass of Ecosystem Component 2 (DISTSCLS_2)					String	1
62	Site Disturbance Sub-Subclass of Ecosystem Component 2 (DISSSCLS_2)					String	2
63	Sensitive Ecosystem Class of Ecosystem Component 2 (SECL_2)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 2. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.		SEI_Class		String	2

64	Sensitive Ecosystem Subclass of Ecosystem Component 2 (SESUBCL_2)	contains a string of upper case character codes indicating the sensitive ecosystem class for SEI component 2. SEI classes group ecosystems based on similar disturbance sensitivity or at-risk status.		SEI_Subclass		String	2
65	Condition of Ecosystem Component 2 (COND_2)	contains a single numeric code indicating the condition of the sensitive ecosystem in SEI component 2. Condition is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the ecosystem and the degree to which they affect the continued existence of the ecosystem.		Condition		String	1
66	Viability of Ecosystem Component 2 (VIAB_2)	contains a single numeric code indicating the probability the sensitive ecosystem for SEI component 2 will persist based on its size, condition, and landscape context.		Viability		String	1
67	Ecosystem Decile of Ecosystem Component 3 (SDEC_3)	contains a number from 0-3 indicating the proportion of the polygon covered by ecosystem component 3. Enter zero (0) when not recorded.	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		1 to 3 (Zero values are to be replaced by NULL.)	SmallInteger	2

68	Realm of Ecosystem Component 3 (REALM_3)		Coding must follow the Field Manual for Describing Terrestrial Ecosystems (BC Ministry of Environment, Lands, and Parks and BC Ministry of Forests 1998).			String	1
69	Group of Ecosystem Component 3 (GROUP_3)					String	50
70	Class of Ecosystem Component 3 (CLASS_3)					String	1
71	Site Series Number of Ecosystem Component 3 (SITE_S3)		Coding follows the standards found at: <a href="http://www.env.gov.bc.ca/ecology/tem/list.html">http://www.env.gov.bc.ca/ecology/tem/list.html</a> and the MoFR Field Guides to Site Units.			String	5
72	Assumed Site Series Modifier 1 of Ecosystem Component 3 (SITEAM_S3A)					String	1

73	Assumed Site Series Modifier 2 of Ecosystem Component 3 (SITEAM_S3B)					String	1
74	Assumed Site Series Modifier 3 of Ecosystem Component 3 (SITEAM_S3C)					String	1
75	Assumed Site Series Modifier 4 of Ecosystem Component 3 (SITEAM_S3D)					String	1
76	Site Series Map Code of Ecosystem Component 3 (SITEMC_S3)					String	5

77	Site Modifiers 1 of Ecosystem Component 3 (SITE_M3A)		Coding must follow Table 3.2 in the Standard for Terrestrial Ecosystem Mapping in British Columbia, (RIC, 1998).			String	1
78	Site Modifiers 2 of Ecosystem Component 3 (SITE_M3B)		Coding must follow Table 3.2 in the Standard for Terrestrial Ecosystem Mapping in British Columbia, (RIC, 1998).			String	1
79	Site Series Mapcode ID of Ecosystem Component 3 (MC_ID3)	A unique ID number for the combination of BGC unit, site series, and site series mapcode, corresponding to the MAPCODE_ID field in the Domain_Mapcodes table.		Mapcodes		Integer	4
80	Structural Stage of Ecosystem Component 3 (STRCT_S3)			Structural_Stage		String	2
81	Structural Stage Substage OR Modifier of Ecosystem Component 3 (STRCT_M3)		Codes must follow those listed in the Structural stage modifiers table.	Structural_Stage_M odifier		String	1

82	Stand Composition Modifier of Ecosystem Component 3 (STAND_A3)		Coding must follow the Table: Stand composition modifiers and codes.	Stand_Composition _Modifier		String	1
83	Seral Community Type of Ecosystem Component 3 (SERAL_3)					String	2
84	Tree Crown Closure of Ecosystem Component 3 (TREE_C3)				0 to 100 (Percent value)	SmallInteger	2
85	Shrub Crown Closure of Ecosystem Component 3 (SHRUB_C3)				0 to 100 (Percent value)	SmallInteger	2
86	Site Disturbance Class of Ecosystem Component 3 (DISTCLS_3)					String	1

87	Site Disturbance Subclass of Ecosystem Component 3 (DISTSCLS_3)					String	1
88	Site Disturbance Sub-Subclass of Ecosystem Component 3 (DISSSCLS_3)					String	2
89	Sensitive Ecosystem Class of Ecosystem Component 3 (SECL_3)	contains a string of upper case character codes indicating the sensitive ecosystem class for SEI component 3. SEI classes group ecosystems based on similar disturbance sensitivity or at-risk status.		SEI_Class		String	2
90	Sensitive Ecosystem Subclass of Ecosystem Component 3 (SESUBCL_3)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 3. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.		SEI_Subclass		String	2

91	Condition of Ecosystem Component 3 (COND_3)	contains a single numeric code indicating the condition of the sensitive ecosystem in SEI component 3. Condition is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the ecosystem and the degree to which they affect the continued existence of the ecosystem.		Condition		String	1
92	Viability of Ecosystem Component 3 (VIAB_3)	contains a single numeric code indicating the probability the sensitive ecosystem for SEI component 3 will persist based on its size, condition, and landscape context.		Viability		String	1
93	Decile of Terrain Component 1 (TDEC_1)	Describes the proportion of the polygon covered by Terrain Component 1, in deciles (i.e., a proportion out of 10). See Table: Component Relation Delimiters Codes. Note: This field is typically used for Ecosystem Mapping .	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		4 to 10 (NULL is permitted if there is no associated data.)	SmallInteger	2

94	Partial Cover Flag of Terrain Component 1 (PRTFLG_1)	A flag indicating that the overlying material in the terrain component only partially covers the underlying material. It means a moderately extensive but discontinuous cover of surface material. Eolian veneer is an example.		Partial_Cover_Flag		String	1
95	Surficial Material Texture 3 of Terrain Component 1 (TTEX_1C)	The surficial material texture of the first stratum of terrain component 1 (represented by 1-3 codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1

96	Surficial Material Texture 2 of Terrain Component 1 (TTEX_1B)	The secondary surficial material texture of the first stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
----	--	--	--	-----------------	--	--------	---

97	Surficial Material Texture 1 of Terrain Component 1 (TTEX_1A)	The dominant surficial material texture of the first stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
98	Surficial Material of Terrain Component 1 (SURFM_1)	A code identifying the geomorphic origin of the surficial material in the first stratum of terrain component 1. See Table: Surficial Material Codes.	Mandatory field.	Surficial_Material		String	2

99	Surficial Material Qualifier of Terrain Component 1 (SURFM_Q1)	A code used to specify whether the surficial material of the first stratum of terrain component 1 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1
100	Surficial Material Subtype of Terrain Component 1 (SURFM_ST1)	A project-specific code for the subtype of the surficial material in the first stratum of terrain component 1. A surficial material subtype is used when its characteristics cannot be adequately represented by a standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

101	Surface Expression 1 of Terrain Component 1 (SURF_E1A)	The dominant surface expression for the first stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
102	Surface Expression 2 of Terrain Component 1 (SURF_E1B)	The second surface expression for the first stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
103	Surface Expression 3 of Terrain Component 1 (SURF_E1C)	The third surface expression for the first stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

104	Bedrock Type of Terrain Component 1 (BEDROCK_1)	<p>The type of bedrock in the terrain component. (This is only applicable where surficial material is of origin type 'R'). See Table: Bedrock Classification Codes. The intent of using the bedrock code is to provide auxiliary information, to help qualify texture and/or terrain stability information. It is not intended to provide bedrock stratigraphy.</p>		Bedrock_Type		String	2
105	Subsurficial Material Texture 3 of Terrain Component 1 (STTEX_1C)	<p>The tertiary surficial material texture of the second stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.</p>		Terrain_Texture		String	1

106	Subsurficial Material Texture 2 of Terrain Component 1 (STTEX_1B)	The dominant surficial material texture of the second stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
-----	--	--	--	-----------------	--	--------	---

107	Subsurficial Material Texture 1 of Terrain Component 1 (STTEX_1A)	The secondary surficial material texture of the second stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
108	Subsurficial Material of Terrain Component 1 (SSURFM_1)	A code identifying the geomorphic origin of the surficial material in the second stratum of terrain component 1. See Table: Surficial Material Codes.		Surficial_Material		String	2

109	Subsurficial Material Qualifier of Terrain Component 1 (SSURFM_Q1)	A code used to specify whether the surficial material of the second stratum of terrain component 1 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.		Surficial_Material_Qualifier		String	1
110	Subsurficial Material Subtype of Terrain Component 1 (SSURFM_ST1)	A project-specific code for the subtype of the surficial material in the second stratum of terrain component 1 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.			1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

111	Subsurface Expression 1 of Terrain Component 1 (SSURF_E1A)	The dominant surface expression for the second stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
112	Subsurface Expression 2 of Terrain Component 1 (SSURF_E1B)	The second surface expression for the second stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
113	Subsurface Expression 3 of Terrain Component 1 (SSURF_E1C)	The third surface expression for the second stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

114	Subsurficial Material Texture 3 of Terrain Component 1 (TTTEX_1C)	The tertiary surficial material texture of the third stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.	Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type).	Terrain_Texture		String	1
115	Sub- Subsurficial Material Texture 2 of Terrain Component 1 (TTTEX_1B)	The second surficial material texture of the third stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.	Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type).	Terrain_Texture		String	1

116	Sub-Subsurficial Material Texture 1 of Terrain Component 1 (TTTEX_1A)	The dominant surficial material texture of the third stratum of terrain component 1 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.	Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type).	Terrain_Texture		String	1
117	Sub-Subsurficial Material of Terrain Component 1 (TSURFM_1)	A code identifying the geomorphic origin of the surficial material in the third stratum of terrain component 1. See Table: Surficial Material Codes.		Surficial_Material		String	2
118	Sub-Subsurficial Material Qualifier of Terrain Component 1 (TSURFM_Q1)	A code used to specify whether the surficial material of the third stratum of terrain component 1 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1

119	Sub-Subsuficial Material Subtype of Terrain Component 1 (TSURFM_ST1)	A project-specific code for the subtype of the surficial material in the second stratum of terrain component 1 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2
120	Sub-Subsurface Expression 1 of Terrain Component 1 (TSURF_E1A)	The dominant surface expression for the third stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
121	Sub-Subsurface Expression 2 of Terrain Component 1 (TSURF_E1B)	The second surface expression for the third stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

122	Sub-Surface Expression 3 of Terrain Component 1 (TSURF_E1C)	The third surface expression for the third stratum of surficial material in terrain component 1 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
123	Relation of Terrain Component 1 and 2 (COMREL1_2)	A general indicator of the relative areal proportions of the first and second terrain components within the current polygon. (Note: These proportional indicators are commonly used for terrain stability mapping in place of deciles). See Table: Component Relation Delimiters Codes.		Component_Relationship		String	2
124	Decile of Terrain Component 2 (TDEC_2)	Describes the proportion of the polygon covered by Terrain Component 2, in deciles (i.e., a proportion out of 10). See Table: Component Relation Delimiters Codes. Note: This field is typically used for Ecosystem Mapping .	e.g., a decile of 10=100% of polygon, 8=80% of polygon, 2=20% of polygon		1 to 5 (Zero values are to be replaced by NULL.)	SmallInteger	2

125	Partial Cover Flag of Terrain Component 2 (PRTFLG_2)	A flag indicating that the overlying material in the terrain component only partially covers the underlying material. It means a moderately extensive but discontinuous cover of surface material. Eolian veneer is an example.		Partial_Cover_Flag		String	1
126	Surficial Material Texture 3 of Terrain Component 2 (TTEX_2C)	The tertiary surficial material texture of the first stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1

127	<p>Surficial Material Texture 2 of Terrain Component 2 (TTEX_2B)</p>	<p>The secondary surficial material texture of the first stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.</p>		Terrain_Texture		String	1
-----	--	---	--	-----------------	--	--------	---

128	Surficial Material Texture 1 of Terrain Component 2 (TTEX_2A)	The dominant surficial material texture of the first stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
129	Surficial Material of Terrain Component 2 (SURFM_2)	A code identifying the geomorphic origin of the surficial material in the first stratum of terrain Component 2. See Table: Surficial Material Codes.	Mandatory field.	Surficial_Material		String	2

130	Surficial Material Qualifier of Terrain Component 2 (SURFM_Q2)	A code used to specify whether the surficial material of the first stratum of terrain Component 2 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1
131	Surficial Material Subtype of Terrain Component 2 (SURFM_ST2)	A project-specific code for the subtype of the surficial material in the first stratum of terrain Component 2 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

132	Surface Expression 1 of Terrain Component 2 (SURF_E2A)	The dominant surface expression for the first stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
133	Surface Expression 2 of Terrain Component 2 (SURF_E2B)	The second surface expression for the first stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
134	Surface Expression 3 of Terrain Component 2 (SURF_E2C)	The third surface expression for the first stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

135	Bedrock Type of Terrain Component 2 (BEDROCK_2)	<p>The type of bedrock in the terrain component. (This is only applicable where surficial material is of origin type 'R'). See Table: Bedrock Classification Codes. The intent of using the bedrock code is to provide auxiliary information, to help qualify texture and/or terrain stability information. It is not intended to provide bedrock stratigraphy.</p>		Bedrock_Type		String	2
136	Subsurficial Material Texture 3 of Terrain Component 2 (STTEX_2C)	<p>The tertiary surficial material texture of the second stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.</p>		Terrain_Texture		String	1

137	Subsurficial Material Texture 2 of Terrain Component 2 (STTEX_2B)	The secondary surficial material texture of the second stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
-----	--	---	--	-----------------	--	--------	---

138	Subsurficial Material Texture 1 of Terrain Component 2 (STTEX_2A)	The dominant surficial material texture of the second stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
139	Subsurficial Material of Terrain Component 2 (SSURFM_2)	A code identifying the geomorphic origin of the surficial material in the second stratum of terrain Component 2. See Table: Surficial Material Codes.		Surficial_Material		String	2

140	Subsurficial Material Qualifier of Terrain Component 2 (SSURFM_Q2)	A code used to specify whether the surficial material of the second stratum of terrain Component 2 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1
141	Subsurficial Material Subtype of Terrain Component 2 (SSURFM_ST2)	A project-specific code for the subtype of the surficial material in the second stratum of terrain Component 2 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

142	Subsurface Expression 1 of Terrain Component 2 (SSURF_E2A)	The dominant surface expression for the second stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
143	Subsurface Expression 2 of Terrain Component 2 (SSURF_E2B)	The second surface expression for the second stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
144	Subsurface Expression 3 of Terrain Component 2 (SSURF_E2C)	The third surface expression for the second stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

145	Subsurficial Material Texture 3 of Terrain Component 2 (TTTEX_2C)	The tertiary surficial material texture of the third stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
146	Sub- Subsurficial Material Texture 2 of Terrain Component 2 (TTTEX_2B)	The second surficial material texture of the third stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.		Terrain_Texture		String	1

147	Sub-Subsurficial Material Texture 1 of Terrain Component 2 (TTTEX_2A)	The dominant surficial material texture of the third stratum of terrain Component 2 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
148	Sub-Subsurficial Material of Terrain Component 2 (TSURFM_2)	A code identifying the geomorphic origin of the surficial material in the third stratum of terrain Component 2. See Table: Surficial Material Codes.		Surficial_Material		String	2
149	Sub-Subsurficial Material Qualifier of Terrain Component 2 (TSURFM_Q2)	A code used to specify whether the surficial material of the third stratum of terrain Component 2 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.		Surficial_Material_Qualifier		String	1

150	Sub-Subsurficial Material Subtype of Terrain Component 2 (TSURFM_ST2)	A project-specific code for the subtype of the surficial material in the second stratum of terrain Component 2 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.			1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2
151	Sub-Subsurface Expression 1 of Terrain Component 2 (TSURF_E2A)	The dominant surface expression for the third stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
152	Sub-Subsurface Expression 2 of Terrain Component 2 (TSURF_E2B)	The second surface expression for the third stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

153	Sub-Surface Expression 3 of Terrain Component 2 (TSURF_E2C)	The third surface expression for the third stratum of surficial material in terrain Component 2 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
154	Relation of Terrain Component 2 and 3 (COMREL2_3)	A general indicator of the relative areal proportions of the first and second terrain components within the current polygon. (Note: These proportional indicators are commonly used for terrain stability mapping in place of deciles). See Table: Component Relation Delimiters Codes.		Component_Relationship		String	2
155	Decile of Terrain Component 3 (TDEC_3)	Describes the proportion of the polygon covered by Terrain Component 3, in deciles (i.e., a proportion out of 10). See Table: Component Relation Delimiters Codes. Note: This field is typically used for Ecosystem Mapping .	e.g., a decile of 10=100% of polygon, 8=80% of polygon, 2=20% of polygon		1 to 3 (Zero values are to be replaced by NULL.)	SmallInteger	2

156	Partial Cover Flag of Terrain Component 3 (PRTFLG_3)	A flag indicating that the overlying material in the terrain component only partially covers the underlying material. It means a moderately extensive but discontinuous cover of surface material. Eolian veneer is an example.		Partial_Cover_Flag		String	1
157	Surficial Material Texture 3 of Terrain Component 3 (TTEX_3C)	The tertiary surficial material texture of the first stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1

158	<p>Surficial Material Texture 2 of Terrain Component 3 (TTEX_3B)</p>	<p>The secondary surficial material texture of the first stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.</p>		Terrain_Texture		String	1
-----	--	---	--	-----------------	--	--------	---

159	Surficial Material Texture 1 of Terrain Component 3 (TTEX_3A)	The dominant surficial material texture of the first stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
160	Surficial Material of Terrain Component 3 (SURFM_3)	A code identifying the geomorphic origin of the surficial material in the first stratum of terrain Component 3. See Table: Surficial Material Codes.	Mandatory field.	Surficial_Material		String	2

161	Surficial Material Qualifier of Terrain Component 3 (SURFM_Q3)	A code used to specify whether the surficial material of the first stratum of terrain Component 3 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1
162	Surficial Material Subtype of Terrain Component 3 (SURFM_ST3)	A project-specific code for the subtype of the surficial material in the first stratum of terrain Component 3 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

163	Surface Expression 1 of Terrain Component 3 (SURF_E3A)	The dominant surface expression for the first stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
164	Surface Expression 2 of Terrain Component 3 (SURF_E3B)	The second surface expression for the first stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
165	Surface Expression 3 of Terrain Component 3 (SURF_E3C)	The third surface expression for the first stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

166	Bedrock Type of Terrain Component 3 (BEDROCK_3)	<p>The type of bedrock in the terrain component. (This is only applicable where surficial material is of origin type 'R'). See Table: Bedrock Classification Codes. The intent of using the bedrock code is to provide auxiliary information, to help qualify texture and/or terrain stability information. It is not intended to provide bedrock stratigraphy.</p>		Bedrock_Type		String	2
167	Subsurficial Material Texture 3 of Terrain Component 3 (STTEX_3C)	<p>The tertiary surficial material texture of the second stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.</p>		Terrain_Texture		String	1

168	Subsurficial Material Texture 2 of Terrain Component 3 (STTEX_3B)	The secondary surficial material texture of the second stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
-----	--	---	--	-----------------	--	--------	---

169	Subsurficial Material Texture 1 of Terrain Component 3 (STTEX_3A)	The dominant surficial material texture of the second stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type). See Table: Terrain Texture Codes.		Terrain_Texture		String	1
170	Subsurficial Material of Terrain Component 3 (SSURFM_3)	A code identifying the geomorphic origin of the surficial material in the second stratum of terrain Component 3. See Table: Surficial Material Codes.		Surficial_Material		String	2

171	Subsurficial Material Qualifier of Terrain Component 3 (SSURFM_Q3)	A code used to specify whether the surficial material of the second stratum of terrain Component 3 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1
172	Subsurficial Material Subtype of Terrain Component 3 (SSURFM_ST3)	A project-specific code for the subtype of the surficial material in the second stratum of terrain Component 3 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

173	Subsurface Expression 1 of Terrain Component 3 (SSURF_E3A)	The dominant surface expression for the second stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
174	Subsurface Expression 2 of Terrain Component 3 (SSURF_E3B)	The second surface expression for the second stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
175	Subsurface Expression 3 of Terrain Component 3 (SSURF_E3C)	The third surface expression for the second stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

176	Subsurficial Material Texture 3 of Terrain Component 3 (TTTEX_3C)	The tertiary surficial material texture of the third stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.	Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type).	Terrain_Texture		String	1
177	Sub-Subsurficial Material Texture 2 of Terrain Component 3 (TTTEX_3B)	The second surficial material texture of the third stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.	Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type).	Terrain_Texture		String	1

178	Sub-Subsurficial Material Texture 1 of Terrain Component 3 (TTTEX_3A)	The dominant surficial material texture of the third stratum of terrain Component 3 (one of up to three codes). Texture is the size, shape and sorting of particles in clastic sediments (or the proportion and degree of decomposition of plant fibre in organic sediments). See Table: Terrain Texture Codes.	Texture codes are shown in the order: tertiary, secondary, dominant, in the terrain label on a map (with the dominant texture adjacent to the surficial material type).	Terrain_Texture		String	1
179	Sub-Subsurficial Material of Terrain Component 3 (TSURFM_3)	A code identifying the geomorphic origin of the surficial material in the third stratum of terrain Component 3. See Table: Surficial Material Codes.		Surficial_Material		String	2
180	Sub-Subsurficial Material Qualifier of Terrain Component 3 (TSURFM_Q3)	A code used to specify whether the surficial material of the third stratum of terrain Component 3 is currently undergoing formation or not. The assumed (default) status is not recorded. See Table: Surficial Material and Geomorphological Process Qualifier Codes and Surficial Material Terms and Symbols.	Only entered if the status of activity is contrary to the assumed state defined for each material.	Surficial_Material_Qualifier		String	1

181	Sub-Subsuficial Material Subtype of Terrain Component 3 (TSURFM_ST3)	A project-specific code for the subtype of the surficial material in the second stratum of terrain Component 3 . A surficial material subtype is used when its characteristics cannot be adequately represented by standard terrain classes. For example, basal till. See Table: Surficial Material Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2
182	Sub-Subsurface Expression 1 of Terrain Component 3 (TSURF_E3A)	The dominant surface expression for the third stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
183	Sub-Subsurface Expression 2 of Terrain Component 3 (TSURF_E3B)	The second surface expression for the third stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1

184	Sub-Surface Expression 3 of Terrain Component 3 (TSURF_E3C)	The third surface expression for the third stratum of surficial material in terrain Component 3 (one of up to three codes). Surface expression describes the three-dimensional shape of the surficial material. See Table: Surficial Expression Codes.		Surface_Expression		String	1
185	1st Geomorphological Process Class (GEOP_1)	The sole or most significant geomorphological process affecting the terrain polygon. See Table: Geomorphological Process Codes.		Geomorphological_Process		String	1
186	1st Process Qualifier (GEOP_Q1)	A code used to specify whether the first geomorphologic process of the terrain polygon is currently active or inactive. See Table: Surficial Material and Geomorphological Process Qualifier Codes.	Only entered if the status of activity is contrary to the assumed state defined for each process. See Table: Geomorphological Process Terms and Symbols, Column: Assumed Status of Geological Process.	Geomorphological_Process_Qualifier		String	1

187	1st Process Subtype (GEOP_ST1)	A project-specific numeric code used to further specify the first geomorphological process within the current terrain polygon. Project specific subtypes of the standard geomorphological processes may be established to distinguish characteristics that cannot be adequately represented by the standard process classes alone. These subtypes should be described in the terrain legend. See Table: Geomorphological Process Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2
188	1st Process Initiation Zone Indicator (GEOP_INZ1)	A symbol that indicates that the polygon is an initiation zone for one or more of the subclasses of the first geomorphological process .	2005 - the initiation zone indicator has been split out from the other subtypes to facilitate sorting, querying and theming the data. This also allows for 3 subtypes to be used in addition to the "".	Geomorphological_Process_Initiation_Zone_Polygon		String	1

189	1st Process Initiation Zone Indicator for Subclass 1 (GEOP_INZ1A)	A symbol that indicates that the polygon is an initiation zone for the first subclasses of the first geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1
190	1st Process Subclass 1 (GEOP_SCM1A)	The dominant subclass modifier for the first geomorphological process, used to further describe the process (one of up to three codes). See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes.		Geomorphological_Process_Subclass		String	1
191	1st Process Initiation Zone Indicator for Subclass 2 (GEOP_INZ1B)	A symbol that indicates that the polygon is an initiation zone for the second subclasses of the first geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1

192	1st Process Subclass 2 (GEOP_SCM1B)	The second subclass modifier for the first geomorphological process, used to further describe the process (one of up to three codes). See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes.		Geomorphological_Process_Subclass		String	1
193	1st Process Initiation Zone Indicator for Subclass 3 (GEOP_INZ1C)	A symbol that indicates that the polygon is an initiation zone for the third subclasses of the first geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1

194	1st Process Subclass 3 (GEOP_SCM1C)	The third subclass modifier for the first geomorphological process, used to further describe the process (one of up to three codes). See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes.		Geomorphological_Process_Subclass		String	1
195	2nd Geomorphological Process Class (GEOP_2)	An uppercase letter representing the second most significant geomorphological process to affect terrain within the current polygon. See Table: Geomorphological Process Subtype.		Geomorphological_Process		String	1
196	2nd Process Qualifier (GEOP_Q2)	A code used to specify whether the second geomorphologic process of the terrain polygon is currently active or inactive. See Table: Surficial Material and Geomorphological Process Qualifier Codes.	Only entered if the status of activity is contrary to the assumed state defined for each process. See Table: Geomorphological Process Terms and Symbols, Column: Assumed Status of Geological Process.	Geomorphological_Process_Qualifier		String	1

197	2nd Process Subtype (GEOP_ST2)	A project-specific numeric code used to further specify the second geomorphological process within the current terrain polygon. Project specific subtypes of the standard geomorphological processes may be established to distinguish characteristics that cannot be adequately represented by the standard process classes alone. These subtypes should be described in the terrain legend. See Table: Geomorphological Process Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2
198	2nd Process Initiation Zone Indicator (GEOP_INZ2)	A symbol that indicates that the polygon is an initiation zone for one or more of the subclasses of the second geomorphological process.	2005 - the initiation zone indicator has been split out from the other subtypes to facilitate sorting, querying and theming the data. This also allows for 3 subtypes to be used in addition to the "".	Geomorphological_Process_Initiation_Zone_Polygon		String	1

199	2nd Process Initiation Zone Indicator for Subclass 1 (GEOP_INZ2A)	A symbol that indicates that the polygon is an initiation zone for the first subclasses of the second geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1
200	2nd Process Subclass 1 (GEOP_SCM2A )	The 1st of up to 3 codes describing the second geomorphological process within the current terrain polygon. Subclass modifiers are used to further describe the process. They are usually mapped at a more detailed level. See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes		Geomorphological_Process_Subclass		String	1

201	2nd Process Initiation Zone Indicator for Subclass 2 (GEOP_INZ2B)	A symbol that indicates that the polygon is an initiation zone for the second subclasses of the second geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1
202	2nd Process Subclass 2 (GEOP_SCM2B )	The 2nd of up to 3 codes describing the second geomorphological process within the current terrain polygon. Subclass modifiers are used to further describe the process. They are usually mapped at a more detailed level. See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes		Geomorphological_Process_Subclass		String	1

203	2nd Process Initiation Zone Indicator for Subclass 3 (GEOP_INZ2C)	A symbol that indicates that the polygon is an initiation zone for the third subclasses of the second geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1
204	2nd Process Subclass 3 (GEOP_SCM2C )	The 3rd of up to 3 codes describing the second geomorphological process within the current terrain polygon. Subclass modifiers are used to further describe the process. They are usually mapped at a more detailed level. See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes		Geomorphological_Process_Subclass		String	1
205	3rd Geomorphological Process Class (GEOP_3)	An uppercase letter representing the third most significant geomorphological process to affect terrain within the current polygon. See Table: Geomorphological Process Subtype.		Geomorphological_Process		String	1

206	3rd Process Qualifier (GEOP_Q3)	A code used to specify whether the third geomorphologic process of the terrain polygon is currently active or inactive. See Table: Surficial Material and Geomorphological Process Qualifier Codes.	Only entered if the status of activity is contrary to the assumed state defined for each process. See Table: Geomorphological Process Terms and Symbols, Column: Assumed Status of Geological Process.	Geomorphological_Process_Qualifier		String	1
207	3rd Process Subtype (GEOP_ST3)	A project-specific numeric code used to further specify the third geomorphological process within the current terrain polygon. Project specific subtypes of the standard geomorphological processes may be established to distinguish characteristics that cannot be adequately represented by the standard process classes alone. These subtypes should be described in the terrain legend. See Table: Geomorphological Process Subtype.	Subtypes must be defined in the project comments field PROJ_COM. Detailed descriptions can be included in the project report,		1 to 9 (The definitions for these codes are 'custom' i.e. Project specific to be documented on map legends and in the report.)	SmallInteger	2

208	3rd Process Initiation Zone Indicator (GEOP_INZ3)	A symbol that indicates that the polygon is an initiation zone for one or more of the subclasses of the third geomorphological process .	2005 - the initiation zone indicator has been split out from the other subtypes to facilitate sorting, querying and theming the data. This also allows for 3 subtypes to be used in addition to the "".	Geomorphological_Process_Initiation_Zone_Polygon		String	1
209	3rdProcess Initiation Zone Indicator for Subclass 1 (GEOP_INZ3A)	A symbol that indicates that the polygon is an initiation zone for the first subclasses of the third geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1

210	3rd Process Subclass 1 (GEOP_SCM3A)	The 1st of up to 3 codes describing the third geomorphological process within the current terrain polygon. Subclass modifiers are used to further describe the process. They are usually mapped at a more detailed level. See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes		Geomorphological_Process_Subclass		String	1
211	3rd Process Initiation Zone Indicator for Subclass 2 (GEOP_INZ3B)	A symbol that indicates that the polygon is an initiation zone for the second subclasses of the third geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1

212	3rd Process Subclass 2 (GEOP_SCM3B)	The 2nd of up to 3 codes describing the third geomorphological process within the current terrain polygon. Subclass modifiers are used to further describe the process. They are usually mapped at a more detailed level. See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes		Geomorphological_Process_Subclass		String	1
213	3rd Process Initiation Zone Indicator for Subclass 3 (GEOP_INZ3C)	A symbol that indicates that the polygon is an initiation zone for the third subclasses of the third geomorphological process.	This field allows for the indication of initiation zone by subclass. It will make it easier for mappers to distinguish which mass movement processes represent initiation zone and which are transport or runout zone in the terrain polygon.	Geomorphological_Process_Initiation_Zone_Component		String	1

214	3rd Process Subclass 3 (GEOP_SCM3C)	The 3rd of up to 3 codes describing the third geomorphological process within the current terrain polygon. Subclass modifiers are used to further describe the process. They are usually mapped at a more detailed level. See Tables: Mass Movement Process Subclass Codes, Avalanche Process Subclass Codes, Fluvial Process Subclass Codes and Permafrost Process Subclass Codes		Geomorphological_Process_Subclass		String	1
215	1st Soil Drainage Class of Polygon (DRAIN_1)	The dominant soil drainage class the terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1

216	Soil Drainage Separator of Polygon (DRAIN_SEP)	Symbols used, where a terrain polygon includes more than one drainage class, to indicate the relationship between the two classes (i.e. two discrete classes, a range of classes, or the relative proportion of the polygon occupied by each class). See Table: Drainage Separator Codes.		Drainage_Separator		String	2
217	2nd Soil Drainage Class of Polygon (DRAIN_2)	The secondary soil drainage class the terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1
218	Lower Limit of Dominant Slope Range (SLPLL_1)	The lower limit of the range of slopes (in percent or degrees) within a terrain polygon, or, where a polygon includes distinctly gentler and steeper slopes (e.g., stepped topography), the lower limit of the slope range associated with most of the polygon. See Table: Slope Steepness.	The data entered in percent slope (rise/run*100), e.g., 12% would be entered as 12; Use 999 for vertical. Data entered in degrees use 0 to 90. All values within a project must be entered either in percent or degrees, not both.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2

219	Upper Limit of Dominant Slope Range (SLPUL_1)	The upper limit of the range of slopes within a terrain polygon (in percent or degrees), or where a polygon includes distinctly gentler and steeper slopes (i.e. stepped topography), the upper limit of the slope range associated with most of the polygon. See Table: Slope Steepness.	The data entered in percent slope (rise/run*100), e.g., 12% would be entered as 12; Use 999 for vertical. Data entered in degrees use 0 to 90. All values within a project must be entered either in percent or degrees, not both.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
220	Lower Limit of Subdominant Slope Range (SLPLL_2)	The lower limit of the subdominant slope range (in percent or degrees) for the terrain polygon (e.g., stepped topography). See Table: Slope Steepness.	The data entered in percent slope (rise/run*100), e.g., 12% would be entered as 12; Use 999 for vertical. Data entered in degrees use 0 to 90. All values within a project must be entered either in percent or degrees, not both.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
221	Upper Limit of Subdominant Slope Range (SLPUL_2)	The upper limit of the subdominant slope range (in percent or degrees) for the terrain polygon (e.g., stepped topography). See Table: Slope Steepness.	The data entered in percent slope (rise/run*100), e.g., 12% would be entered as 12; Use 999 for vertical. Data entered in degrees use 0 to 90. All values within a project must be entered either in percent or degrees, not both.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2

222	Slope Stability Class (SLPSTB_CLS)	A code representing a class of slope stability of the terrain polygon. See Tables: Terrain Stability Classes - Slope Stability Classes for Detailed Mapping; Classes for Reconnaissance Terrain Stability Mapping. Stability criteria are defined on a project by project basis. Please see the project report for details.	Only one slope stability classification scheme may be used within a project.			String	3
223	Slope Stability Qualifier For Roads (RDSTB_FLG)	A flag indicating class IV terrain where road construction is likely to cause landslides, but harvesting (without roads) is not likely to cause landslides (see Forest Practices Code, 1995, p.9). See Table: Slope Stability Qualifier for Roads.	Submit table of class definitions with project files and include definitions in map legend.	Road_Stability_Flag		String	2

224	Surface Erosion Potential Class of Terrain Polygon (SFCERO_POT)	The Surface erosion potential class for the terrain polygon. A class which indicates the likelihood of soil erosion on bare or disturbed soil after logging or road construction (e.g. from ditches or cutbanks). Surface erosion refers to the removal of soil, particle by particle, by surface runoff. It results in sheet erosion and the development of rills and gullies. See Table: Surface Erosion Potential Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Potential		String	2
225	Landslide Induced Stream Sedimentation Class (LSSED_CLS)	A rating class indicating the likelihood of landslide-induced stream sedimentation for the polygon. See Table: Landslide Induced Stream Sediment Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Landslide_Induced_Stream_Sedimentation		SmallInteger	2

226	Surface Erosion Sedimentation Class (SESED_CLS)	A rating class indicating the likelihood of stream sedimentation due to surface erosion. This rating is assigned by the terrain mapper on the basis of air photo interpretation with occasional field confirmation. See Table: Class Codes for Potential Sediment Delivery From Surface Erosion Sources.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Sedimentation		String	2
227	1st Soil Drainage Class of Terrain Component 1 (DRAIN_1A)	The dominant soil drainage class for terrain component 1 of the current terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1

228	Soil Drainage Separator of Terrain Component 1 (DRAIN_SEP1)	Symbols used, where the terrain component includes more than one drainage class, to indicate the relationship between the two classes (i.e. two discrete classes, a range of classes, or the relative proportion of the polygon occupied by each class). See Table: Drainage Separator Codes.		Drainage_Separator		String	2
229	2nd Soil Drainage Class of Terrain Component 1 (DRAIN_1B)	The secondary soil drainage class for terrain component 1 of the current terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1

230	1st Soil Drainage Class of Terrain Component 2 (DRAIN_2A)	The dominant soil drainage class for terrain component 2 of the current terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1
231	Soil Drainage Separator of Terrain Component 2 (DRAIN_SEP2)	Symbols used, where the terrain component includes more than one drainage class, to indicate the relationship between the two classes (i.e. two discrete classes, a range of classes, or the relative proportion of the polygon occupied by each class). See Table: Drainage Separator Codes.		Drainage_Separator		String	2

232	2nd Soil Drainage Class of Terrain Component 2 (DRAIN_2B)	The secondary soil drainage class for terrain component 2 of the current terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1
233	1st Soil Drainage Class of Terrain Component 3 (DRAIN_3A)	The dominant soil drainage class for terrain component 3 of the current terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1

234	Soil Drainage Separator of Terrain Component 3 (DRAIN_SEP3)	Symbols used, where the terrain component includes more than one drainage class, to indicate the relationship between the two classes (i.e. two discrete classes, a range of classes, or the relative proportion of the polygon occupied by each class). See Table: Drainage Separator Codes.		Drainage_Separator		String	2
235	2nd Soil Drainage Class of Terrain Component 3 (DRAIN_3B)	The secondary soil drainage class for terrain component 3 of the current terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions; this refers to the annual moisture status of the soil, not just the permeability. See Table: Soil Drainage Codes.		Drainage		String	1
236	Slope Stability Class of Terrain Component 1 (SLPSTB_CL1)	A code representing a class of slope stability of terrain component 1. See Tables: Terrain Stability Classes - Slope Stability Classes for Detailed Mapping.	Only one slope stability classification scheme may be used within a project.	Slope_Stability_Classes		String	3

237	Slope Stability Class of Terrain Component 2 (SLPSTB_CL2)	A code representing a class of slope stability of terrain component 2. See Tables: Terrain Stability Classes - Slope Stability Classes for Detailed Mapping.	Only one slope stability classification scheme may be used within a project.	Slope_Stability_Classes		String	3
238	Slope Stability Class of Terrain Component 3 (SLPSTB_CL3)	A code representing a class of slope stability of terrain component 3. See Tables: Terrain Stability Classes - Slope Stability Classes for Detailed Mapping.	Only one slope stability classification scheme may be used within a project.	Slope_Stability_Classes		String	3
239	Surface Erosion Potential Class of Terrain Component 1 (SFCERO_PT1)	Surface erosion potential class of terrain component 1. A class which indicates the likelihood of soil erosion on bare or disturbed soil after logging or road construction (e.g. from ditches or cutbanks). Surface erosion refers to the removal of soil, particle by particle, by surface runoff. It results in sheet erosion and the development of rills and gullies. See Table: Surface Erosion Potential Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Potential		String	3

240	Surface Erosion Potential Class of Terrain Component 2 (SFCERO_PT2)	Surface erosion potential class of terrain component 2. A class which indicates the likelihood of soil erosion on bare or disturbed soil after logging or road construction (e.g. from ditches or cutbanks). Surface erosion refers to the removal of soil, particle by particle, by surface runoff. It results in sheet erosion and the development of rills and gullies. See Table: Surface Erosion Potential Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Po tential		String	3
241	Surface Erosion Potential Class of Terrain Component 3 (SFCERO_PT3)	Surface erosion potential class of terrain component 3. A class which indicates the likelihood of soil erosion on bare or disturbed soil after logging or road construction (e.g. from ditches or cutbanks). Surface erosion refers to the removal of soil, particle by particle, by surface runoff. It results in sheet erosion and the development of rills and gullies. See Table: Surface Erosion Potential Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Po tential		String	3

242	Generalized Texture Class of Terrain Component 1 (TTEX_GEN1)	The generalized texture class of the first stratum of surficial material for Terrain Component 1.	Codes include: f - fine, m - medium, c - coarse, and v - very coarse (coarse fragments comprise 90% or more of the soil mass (by volume), with too little fine earth (<10% by volume) to fill interstices larger than 1 mm). The first three classes are defined in table: Site Modifiers for Atypical Conditions, Describing Terrestrial Ecosystems in the field, 1998. Used for modelling (e.g., PEM).	Generalized_Texture_Class		String	1
243	Generalized Texture Class of Terrain Component 2 (TTEX_GEN2)	The generalized texture class of the first stratum of surficial material for Terrain Component 2.	Codes include: f - fine, m - medium, c - coarse, and v - very coarse (coarse fragments comprise 90% or more of the soil mass (by volume), with too little fine earth (<10% by volume) to fill interstices larger than 1 mm). The first three classes are defined in table: Site Modifiers for Atypical Conditions, Describing Terrestrial Ecosystems in the field, 1998. Used for modelling (e.g., PEM).	Generalized_Texture_Class		String	1

244	Generalized Texture Class of Terrain Component 3 (TTEX_GEN3)	The generalized texture class of the first stratum of surficial material for Terrain Component 3.	Codes include: f - fine, m - medium, c - coarse, and v - very coarse (coarse fragments comprise 90% or more of the soil mass (by volume), with too little fine earth (<10% by volume) to fill interstices larger than 1 mm). The first three classes are defined in table: Site Modifiers for Atypical Conditions, Describing Terrestrial Ecosystems in the field, 1998. Used for modelling (e.g., PEM).	Generalized_Texture_Class		String	1
245	Surficial Material Thickness Class of Terrain Component 1 (THKCLS_1)	Identifies the interpreted thickness of the surficial material (s) in terrain component 1.	A - very thin (<20cm), B - thin (20-100cm), C - thick (101-300 cm), D - very thick (>300 cm), N - not applicable. Used for modeling (e.g., PEM).	Thickness_Class		String	1
246	Surficial Material Thickness Class of Terrain Component 2 (THKCLS_2)	Identifies the interpreted thickness of the surficial material (s) in terrain component 2.	A - very thin (<20cm), B - thin (20-100cm), C - thick (101-300 cm), D - very thick (>300 cm), N - not applicable. Used for modeling (e.g., PEM).	Thickness_Class		String	1

247	Surficial Material Thickness Class of Terrain Component 3 (THKCLS_3)	Identifies the interpreted thickness of the surficial material (s) in terrain component 3.	A - very thin (<20cm), B - thin (20-100cm), C - thick (101-300 cm), D - very thick (>300 cm), N - not applicable. Used for modeling (e.g., PEM).	Thickness_Class		String	1
248	Landslide Induced Stream Sedimentation Class of Terrain Component 1 (LSSED_CLS1)	A rating class indicating the likelihood of landslide-induced stream sedimentation for terrain component 1. See Table: Landslide Induced Stream Sediment Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Landslide_Induced_Stream_Sedimentation		SmallInteger	2
249	Landslide Induced Stream Sedimentation Class of Terrain Component 2 (LSSED_CLS2)	A rating class indicating the likelihood of landslide-induced stream sedimentation for terrain component 2. See Table: Landslide Induced Stream Sediment Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Landslide_Induced_Stream_Sedimentation		SmallInteger	2
250	Landslide Induced Stream Sedimentation Class of Terrain Component 3 (LSSED_CLS3)	A rating class indicating the likelihood of landslide-induced stream sedimentation for terrain component 3. See Table: Landslide Induced Stream Sediment Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Landslide_Induced_Stream_Sedimentation		SmallInteger	2

251	Surface Erosion Sedimentation Class (SESED_CLS1)	A rating class indicating the likelihood of stream sedimentation due to surface erosion in terrain component 1. This rating is assigned by the terrain mapper on the basis of air photo interpretation with occasional field confirmation. See Table: Class Codes for Potential Sediment Delivery From Surface Erosion Sources.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Sedimentation		String	2
252	Surface Erosion Sedimentation Class (SESED_CLS2)	A rating class indicating the likelihood of stream sedimentation due to surface erosion for terrain component 2. This rating is assigned by the terrain mapper on the basis of air photo interpretation with occasional field confirmation. See Table: Class Codes for Potential Sediment Delivery From Surface Erosion Sources.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Sedimentation		String	2

253	Surface Erosion Sedimentation Class (SESED_CLS3)	A rating class indicating the likelihood of stream sedimentation due to surface erosion for terrain component 3. This rating is assigned by the terrain mapper on the basis of air photo interpretation with occasional field confirmation. See Table: Class Codes for Potential Sediment Delivery From Surface Erosion Sources.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Sedimentation		String	2
254	Lower Limit of Dominant Slope Range of Terrain Component 1 (SLPLL_1A)	The lower limit of the range of slopes (in percent) within terrain component 1 or, where a component includes distinctly gentler and steeper slopes (e.g., stepped topography), the lower limit of the slope range associated with most of the component. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2

255	Upper Limit of Dominant Slope Range of Terrain Component 1 (SLPUL_1A)	The upper limit of the range of slopes (in percent) within terrain component 1, or where a component includes distinctly gentler and steeper slopes (i.e. stepped topography), the upper limit of the slope range associated with most of the component. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
256	Lower Limit of Subdominant Slope Range of Terrain Component 1 (SLPLL_1B)	The lower limit of the subdominant slope range (in percent) associated with terrain component 1. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
257	Upper Limit of Subdominant Slope Range of Terrain Component 1 (SLPUL_1B)	The upper limit of the subdominant slope range (in percent) associated with terrain component 1. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2

258	Lower Limit of Dominant Slope Range of Terrain Component 2 (SLPLL_2A)	The lower limit of the range of slopes (in percent) within terrain component 2 or, where a component includes distinctly gentler and steeper slopes (e.g., stepped topography), the lower limit of the slope range associated with most of the component. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
259	Upper Limit of Dominant Slope Range of Terrain Component 2 (SLPUL_2A)	The upper limit of the range of slopes (in percent) within terrain component 2, or where a component includes distinctly gentler and steeper slopes (i.e. stepped topography), the upper limit of the slope range associated with most of the component. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
260	Lower Limit of Subdominant Slope Range of Terrain Component 2 (SLPLL_2B)	The lower limit of the subdominant slope range (in percent) associated with terrain component 2. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2

261	Upper Limit of Subdominant Slope Range of Terrain Component 2 (SLPUL_2B)	The upper limit of the subdominant slope range (in percent) associated with terrain component 2. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
262	Lower Limit of Dominant Slope Range of Terrain Component 3 (SLPLL_3A)	The lower limit of the range of slopes (in percent) within terrain component 3, or, where a component includes distinctly gentler and steeper slopes (e.g., stepped topography), the lower limit of the slope range associated with most of the component. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
263	Upper Limit of Dominant Slope Range of Terrain Component 3 (SLPUL_3A)	The upper limit of the range of slopes (in percent) within terrain component 3, or where a component includes distinctly gentler and steeper slopes (i.e. stepped topography), the upper limit of the slope range associated with most of the component. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2

264	Lower Limit of Subdominant Slope Range of Terrain Component 3 (SLPLL_3B)	The lower limit of the subdominant slope range (in percent) associated with terrain component 3. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
265	Upper Limit of Subdominant Slope Range of Terrain Component 3 (SLPUL_3B)	The upper limit of the subdominant slope range (in percent) associated with terrain component 3. See Table: Slope Steepness.	The data must be entered in percent slope (rise/run*100), e.g., 12% would be entered as 12. Use 999 for vertical.		0 to 999 (Historical data may be in percent or degrees)	SmallInteger	2
266	Captured Label (CAPLBL)	The map label captured from the original hard copy mapping projects. This may not match current mapping standards and labels.	Used only if digitizing a 'legacy' map, for capturing the polygon label from the map.			String	50
267	Captured Label Corrected (CAPLBL_COR)	Where Quality Control determined that the map label captured in the CAPLBL field was wrong due to transcription or coding, and a corrected label was constructed to assist in automatic parsing of labels.	For internal MoE use only.			String	50

268	Bouldery or Blocky Substrate of Polygon (BBSUB_FLG)	A flag indicating that the ground within the current polygon is covered by sufficiently large clasts to adversely affect soil development and forest growth. This area will present severe problems for restocking after logging due to absence of topsoil. See Table: Bouldery or Blocky substrate.				String	1
269	Mean Aspect of Polygon (MEAN_ASP)	The general direction in which the current polygon is facing, measured to the nearest degree of azimuth. See Table: Mean Aspect.			0 to 359	SmallInteger	2
270	Ea Avalanche Hazard Flag (AVLHAZ_FLG)	A flag indicating that timber removal from the current polygon may result in increased avalanche hazard to sites downslope. This designation is from the BC Forest Service Environmentally Sensitive Mapping Codes in the Historical Forest Cover Mapping System. See Table: 'Ea' (Forest Service) Snow Avalanche Hazard Flag.		Avalanche_Hazard_Flag		String	1

271	Polygons of Relatively Low Reliability (LOWREL_FLG)	A flag indicating that for reasons such as cloud cover on an air photo the current polygon has been mapped with significantly less reliability than adjacent polygons. See Table: Polygons of Relatively Low Reliability Flag.		Low_Reliability_Flag		String	1
272	Field Check of Polygon (SMPL_TYPE)	A class which describes the level of field checking done on the current polygon (detailed/reconnaissance/visual) . See Table: Field Check Class.	Renamed from 'Fldchktpt'	Field_Check_Type		String	1
273	Field Site Number (FLDNUM)	Identifies the field site number (s) in the polygon (unique within the project).	Use a comma to separate more than one field site in one polygon.			String	20
274	Flightline Number (FLIGHT_LIN)					String	16
275	Air Photo Number (AIR_PH)		Do not include full flight line identifier with the photo number.			String	3
276	Air Photo Polygon Number (PHOTO_POLY)					String	2
277	Microsite (MICROSITE)					String	2
278	Fragmentation (FRAG)			Landscape_Fragmentation		String	2

279	Plot Number (PLOT_NO)					String	10
280	Polygon Comments (POLY_COM)	This field may be used to record any pertinent information regarding the polygon. At all times attempt to use referenced classifications which are well defined and understood in the science, or provide thorough definitions for the user. This project specific data will be stored in flat file format, unless keyword or standard designations are required, then contact the data custodian. The data custodian will keep records of new or additional classifications, which are commonly used for project specific applications.	Renamed from 'Comments'.			String	254

**Table 2: Details of TEI\_Long\_Tbl\_Arcs template.**

TEI\_Long\_Tbl\_Arcs contains the polygon arcs corresponding with the TEI\_Long\_Tbl feature class polygons, with fcodes representing line reliability: solid (definite), dashed (approximate) and dotted (assumed) as described in Specifications and Guidelines For Terrain Mapping in BC. If it is stated in the Proj\_Com field and in the report that 'all polygon lines are assumed dashed in the TEI\_Long\_Tbl unless otherwise superseded by the TEI\_Long\_Tbl\_Arcs feature class', then only dashed and dotted line types need be collected.

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
---	------	-------------	-----------------------	--------------	-------------	------------	--------

1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10
4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254

**Table 3: Details of TEI\_Project\_Boundaries template.**

TEI\_Project\_Boundaries contains Terrestrial Ecosystem Information (TEI) project boundaries (study areas) and attributes describing each project (project level metadata), plus links to the locations of other data associated with the project (e.g., reports, polygon datasets, plot files, legends). This feature class is derived from TEI\_Long\_Tbl and TEIS\_Project\_Details. TEI inventories describe the physical and biological attributes of ecosystems.

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4

2	Project Type (PROJ_TYPE)	A nine letter code indicating the type of mapping project.	PROJECT_TYPE (aka PROJ_TYPE) contains a 3-9 letter code indicating the specific type of mapping and attributes gathered for the project. For example: TEM, PEM, SEI, TIM, TSM, TBT, TEMSEI, TEMNSS and PRETEM.	Project_Type		String	9
3	Project Name (PROJ_NAME)	The common name of the project, usually a well known local place of feature.				String	100
4	Project Map Scale (PROJ_SCALE)	The scale of the project maps produced. For example, use 20000, not 1:20000	Renamed from 'Scale'		5000 to 250000 (Values outside of this scale range may be valid.)	Integer	4
5	Modification Date (MOD_DATE)	Contains the year, month and day that the attribute data or the corresponding spatial data (i.e. polygon boundaries) for the given data record was last altered in any way.				Date	8
6	Geographic Location (GEOG_LOC)	The geographic location of the mapping project. This is a gazetted name taken from published map; for example, a town, lake, or watershed.				String	254

7	Project Completion Date (COMPL_DATE)	The date on which the project was completed, Format: yyyy-mm-dd	Renamed from 'Rec_date'			String	20
8	Date Surveyed (SURV_DATE)	Date(s) of field inventory(s)	Include information about the months and years during which field surveys were conducted.			String	254
9	Ecosystem Survey Intensity Level (ESIL)	The sampling intensity characterized according to percentage of polygons that have been field inspected or density of inspections by area. Coding must follow Table 6-3 in the Standard for Terrestrial Ecosystem Mapping in British Columbia.				String	1
10	Terrain Survey Intensity Level (TSIL)	The extent to which the terrain mapping for the current project has been checked on the ground. See Table: Terrain Survey Intensity Level.	If project has more than one TSIL then indicate the lowest TSIL and not in Proj_Com.			String	1
11	Accuracy Assessment Level (AA_LEVEL)	A number from 1-6 based level of accuracy assessment used. See Protocol for quality assurance and accuracy assessment of ecosystem maps. Draft. On (Meidinger, 1999).	New field for Terrain.	Accuracy_Assessment_Level		SmallInteger	2

12	Accuracy Assessment Comments (AA_COM)	Contains information about the accuracy assessment methodology, assessment type or other information relating to the accuracy assessment.				String	254
13	Mapsheet List (MAPSH_LST)	The mapsheet(s) in the project. See Table: Map Number Recording Convention.	A leading zero is required for mapsheets not starting with 1. Left justified with no decimal or / separator. E.g., 083E073. Caution: ensure this is a character field if data is first captured in Excel, as mapsheet.			String	254
14	Consultant or Organization (ORG_NAME)	The public or private-sector organization responsible for the mapping project.				String	80
15	Project Supervisor (PROJ_SUP)	The professional responsible for project signoff.	New field for Terrain.			String	80
16	Ecosystem Mapper or Modeller (ECO_MAP)	The person who originally captured the Terrestrial Ecosystem Mapping data.				String	80

17	Terrain Mapper (TER_MAP)	The licenced professional who has done the terrain mapping (polygon delineation and pretyping/typing). Where there is more than one mapper on a project, this is the name of the project leader.				String	80
18	Soil Mapper Name (SOIL_MAP)	Soil Surveyor or Mapper: contains the name of the person who completed the soil survey, including delineating the soil polygons, conducting field work and describing the soils in a project area. Where there is more than one mapper on the project, this is the name of the project leader.				String	80
19	Wildlife Mapper Name (WILD_MAP)	Wildlife Habitat Mapper or Modeller: contains the name of the wildlife biologist responsible for the development or revision of the species-habitat models, all related field activities, and final wildlife habitat mapping or species distribution mapping products.				String	80

20	Digital Data Capture (DIG_CAP)	The public or private-sector individual or organization responsible for digital capture of spatial data. For SEI data, this field is used if SE data is mapped stereomodelled from TEM or other images; if SE data is traditionally from mapping, refer to t	New field for Terrain.			String	125
21	GIS Supervisor (GIS_SUP)	The public or private-sector individual responsible for sign off on the spatial digital data.				String	80
22	Recorder Name (REC_NAME)	The person(s) who entered the project and polygon attribute data into a database.				String	254
23	Client (CLIENT)	The client (public or private organization) for whom the project was completed.				String	80
24	TRIM Version (TRIM_NBR)	The version of TRIM mapsheets used for the project mapping.		TRIM_Version		String	1
25	Image Type (PHO_TYPE)	Indicates specific details about the image type.				String	1
26	Image Scale (PHO_SC)	Scale of air photos/images used for polygon delineation and pre-typing. For example, 20000 represents 1:20000.			5000 to 250000 (Values outside of this scale range may be valid.)	String	8

27	Image Year (PHO_YR)	Year of air photo(s) or images (yyyy) used for polygon delineation and pre-typing. In the case where several vintages of air photos/images were used, the year applicable to the majority.			1950 to 2011 (Items outside of this range may be valid. The range may change.)	SmallInteger	2
28	Terrain Legend Source (TER_LEG_SC)	The origin of a customized legend, if utilizing a legend developed for another project. See Table: Metadata for Header on Data Form.				String	50
29	Terrain Legend Type (TER_LEG_TP)	The type of legend associated with the map; refer to the Terrain Mapping Methodology (RIC) for legend format and specifications.				String	3
30	Version of Package Used (PACK_NBR)	Versions of standards used for project mapping. As codes have changed over time, indicates the versions of manuals used for the project.				String	2
31	Stability Classification Type (STBCLS_TP)	The classification system used to classify slope stability for the current project. Indicate only one of the following with an (R) Recon, (D) Detailed, or (E) Es.				String	1

32	Slope Units (SLP_UNIT)	The type of units, if slope classes were done for this database, percent or degrees denoting slope steepness. See able: Metadata for Header on Data Form and see Table: Slope Steepness.	The same units must be used for all slope steepness values in a given project. Indicate one of the following with a (P) Percent, (D) Degrees or (N) Null.			String	1
33	Project Comments (PROJ_COM)	This field records any other pertinent information regarding the project. At all times attempt to use referenced classifications which are well defined and understood in the science, or provide thorough definitions for the user. This field may also be u	At all times attempt to use referenced classifications which are well defined and understood in the science, or provide thorough definitions for the user. This field may also be used to identify user defined data files or other documents associated with			String	254
34	Project Identification (PROJ_ID)	A unique identifier (project short name) for each project being delievered. See Section: Digital Data Specification and Table: Metadata for Header on Data Form.				String	5

35	Map Legend Comments (LEGEND_COM )	Contains a description of the generic map legend found at MAP LEGEND DATA DOWNLOAD LINK (MAP_LEG). For example, Information on how to interpret terrain labels is available at the following site.				String	140
36	Map Legend Link (LEGEND_URL)	Contains a link to an internet resource related to the map legend or compilation methods.				String	100
37	EcoCat Comments (ECOCAT_COM )	Contains a description of the Ecological Reports Catalogue (EcoCat) link found at ECOCAT URL DATA DOWNLOAD LINK (ECOCAT_URL). For example, Project related data is available from the EcoCat site.				String	200
38	EcoCat Link (ECOCAT_URL)	Contains the URL for the specific project within EcoCat where the project files (not on LRDW) are available. Spatial data available via the LRDW should be considered more current than data found				String	100

39	Reference 1 Comments (REF_1_COM)	Contains a description of the link found at REFERENCE 1 DATA DOWNLOAD LINK (REF_1_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100
40	Reference 1 Link (REF_1_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100
41	Reference 2 Comments (REF_2_COM)	Contains a description of the link found at REFERENCE 2 DATA DOWNLOAD LINK (REF_2_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100

42	Reference 2 Link (REF_2_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100
43	Reference 3 Comments (REF_3_COM)	Contains a description of the link found at REFERENCE 3 DATA DOWNLOAD LINK (REF_3_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100
44	Reference 3 Link (REF_3_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100

45	Reference 4 Comments (REF_4_COM)	Contains a description of the link found at REFERENCE 4 DATA DOWNLOAD LINK (REF_4_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100
46	Reference 4 Link (REF_4_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100
47	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
48	Boundary Only Flag (BDRY_ONLY)	Project Boundary Only Flag: contains a Y/N to indicate there is only a project boundary and no detailed polygon data in the LRDW.				String	1

49	Review Comments (RE VW_COM)	Data Quality Review Comments: contains a summary description of data issues such as coding errors, problems with geometry, identified during a TEIS_ENVIRONEMENT review of the data.				String	254
----	-----------------------------	--	--	--	--	--------	-----

**Table 4: Details of TEI\_Project\_Details template.**

TEI\_Project\_Details is the authoritative provincial data for TEI project metadata by BAPID. It contains attributes describing each project (project level metadata), plus links to the locations of other data associated with the project (e.g., reports, polygon datasets, plot files, legends).

TEIS\_Project\_Boundaries is derived in part from this table. TEI inventories describe the physical and biological attributes of ecosystems.

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10

3	Project Type (PROJ_TYPE)	A nine letter code indicating the type of mapping project.	PROJECT_TYPE (aka PROJ_TYPE) contains a 3-9 letter code indicating the specific type of mapping and attributes gathered for the project. For example: TEM, PEM, SEI, TIM, TSM, TBT, TEMSEI, TEMNSS and PRETEM.	Project_Type		String	9
4	Project Name (PROJ_NAME)	The common name of the project, usually a well known local place of feature.				String	100
5	Project Map Scale (PROJ_SCALE)	The scale of the project maps produced. For example, use 20000, not 1:20000	Renamed from 'Scale'		5000 to 250000 (Values outside of this scale range may be valid.)	Integer	4
6	Modification Date (MOD_DATE)	Contains the year, month and day that the attribute data or the corresponding spatial data (i.e. polygon boundaries) for the given data record was last altered in any way.				Date	8
7	Geographic Location (GEOG_LOC)	The geographic location of the mapping project. This is a gazetted name taken from published map; for example, a town, lake, or watershed.				String	254

8	Project Completion Date (COMPL_DATE)	The date on which the project was completed, Format: yyyy-mm-dd	Renamed from 'Rec_date'			String	20
9	Date Surveyed (SURV_DATE)	Date(s) of field inventory(s)	Include information about the months and years during which field surveys were conducted.			String	254
10	Ecosystem Survey Intensity Level (ESIL)	The sampling intensity characterized according to percentage of polygons that have been field inspected or density of inspections by area. Coding must follow Table 6-3 in the Standard for Terrestrial Ecosystem Mapping in British Columbia.				String	1
11	Terrain Survey Intensity Level (TSIL)	The extent to which the terrain mapping for the current project has been checked on the ground. See Table: Terrain Survey Intensity Level.	If project has more than one TSIL then indicate the lowest TSIL and not in Proj_Com.			String	1
12	Accuracy Assessment Level (AA_LEVEL)	A number from 1-6 based level of accuracy assessment used. See Protocol for quality assurance and accuracy assessment of ecosystem maps. Draft. On (Meidinger, 1999).	New field for Terrain.	Accuracy_Assessment_Level		SmallInteger	2

13	Accuracy Assessment Comments (AA_COM)	Contains information about the accuracy assessment methodology, assessment type or other information relating to the accuracy assessment.				String	254
14	Mapsheet List (MAPSH_LST)	The mapsheet(s) in the project. See Table: Map Number Recording Convention.	A leading zero is required for mapsheets not starting with 1. Left justified with no decimal or / separator. E.g., 083E073. Caution: ensure this is a character field if data is first captured in Excel, as mapsheet.			String	254
15	Consultant or Organization (ORG_NAME)	The public or private-sector organization responsible for the mapping project.				String	80
16	Project Supervisor (PROJ_SUP)	The professional responsible for project signoff.	New field for Terrain.			String	80
17	Ecosystem Mapper or Modeller (ECO_MAP)	The person who originally captured the Terrestrial Ecosystem Mapping data.				String	80

18	Terrain Mapper (TER_MAP)	The licenced professional who has done the terrain mapping (polygon delineation and pretyping/typing). Where there is more than one mapper on a project, this is the name of the project leader.				String	80
19	Soil Mapper Name (SOIL_MAP)	Soil Surveyor or Mapper: contains the name of the person who completed the soil survey, including delineating the soil polygons, conducting field work and describing the soils in a project area. Where there is more than one mapper on the project, this is the name of the project leader.				String	80
20	Wildlife Mapper Name (WILD_MAP)	Wildlife Habitat Mapper or Modeller: contains the name of the wildlife biologist responsible for the development or revision of the species-habitat models, all related field activities, and final wildlife habitat mapping or species distribution mapping products.				String	80

21	Digital Data Capture (DIG_CAP)	The public or private-sector individual or organization responsible for digital capture of spatial data. For SEI data, this field is used if SE data is mapped stereomodelled from TEM or other images; if SE data is traditionally from mapping, refer to t	New field for Terrain.			String	125
22	GIS Supervisor (GIS_SUP)	The public or private-sector individual responsible for sign off on the spatial digital data.				String	80
23	Recorder Name (REC_NAME)	The person(s) who entered the project and polygon attribute data into a database.				String	254
24	Client (CLIENT)	The client (public or private organization) for whom the project was completed.				String	80
25	TRIM Version (TRIM_NBR)	The version of TRIM mapsheets used for the project mapping.		TRIM_Version		String	1
26	Image Type (PHO_TYPE)	Indicates specific details about the image type.				String	1
27	Image Scale (PHO_SC)	Scale of air photos/images used for polygon delineation and pre-typing. For example, 20000 represents 1:20000.			5000 to 250000 (Values outside of this scale range may be valid.)	String	8

28	Image Year (PHO_YR)	Year of air photo(s) or images (yyyy) used for polygon delineation and pre-typing. In the case where several vintages of air photos/images were used, the year applicable to the majority.			1950 to 2011 (Items outside of this range may be valid. The range may change.)	SmallInteger	2
29	Terrain Legend Source (TER_LEG_SC)	The origin of a customized legend, if utilizing a legend developed for another project. See Table: Metadata for Header on Data Form.				String	50
30	Terrain Legend Type (TER_LEG_TP)	The type of legend associated with the map; refer to the Terrain Mapping Methodology (RIC) for legend format and specifications.				String	3
31	Version of Package Used (PACK_NBR)	Versions of standards used for project mapping. As codes have changed over time, indicates the versions of manuals used for the project.				String	2
32	Stability Classification Type (STBCLS_TP)	The classification system used to classify slope stability for the current project. Indicate only one of the following with an (R) Recon, (D) Detailed, or (E) Es.				String	1

33	Slope Units (SLP_UNIT)	The type of units, if slope classes were done for this database, percent or degrees denoting slope steepness. See able: Metadata for Header on Data Form and see Table: Slope Steepness.	The same units must be used for all slope steepness values in a given project. Indicate one of the following with a (P) Percent, (D) Degrees or (N) Null.			String	1
34	Project Comments (PROJ_COM)	This field records any other pertinent information regarding the project. At all times attempt to use referenced classifications which are well defined and understood in the science, or provide thorough definitions for the user. This field may also be u	At all times attempt to use referenced classifications which are well defined and understood in the science, or provide thorough definitions for the user. This field may also be used to identify user defined data files or other documents associated with			String	254
35	Project Identification (PROJ_ID)	A unique identifier (project short name) for each project being delievered. See Section: Digital Data Specification and Table: Metadata for Header on Data Form.				String	5

36	Map Legend Comments (LEGEND_COM )	Contains a description of the generic map legend found at MAP LEGEND DATA DOWNLOAD LINK (MAP_LEG). For example, Information on how to interpret terrain labels is available at the following site.				String	140
37	Map Legend Link (LEGEND_URL)	Contains a link to an internet resource related to the map legend or compilation methods.				String	100
38	EcoCat Comments (ECOCAT_COM )	Contains a description of the Ecological Reports Catalogue (EcoCat) link found at ECOCAT URL DATA DOWNLOAD LINK (ECOCAT_URL). For example, Project related data is available from the EcoCat site.				String	200
39	EcoCat Link (ECOCAT_URL)	Contains the URL for the specific project within EcoCat where the project files (not on LRDW) are available. Spatial data available via the LRDW should be considered more current than data found				String	100

40	Reference 1 Comments (REF_1_COM)	Contains a description of the link found at REFERENCE 1 DATA DOWNLOAD LINK (REF_1_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100
41	Reference 1 Link (REF_1_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100
42	Reference 2 Comments (REF_2_COM)	Contains a description of the link found at REFERENCE 2 DATA DOWNLOAD LINK (REF_2_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100

43	Reference 2 Link (REF_2_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100
44	Reference 3 Comments (REF_3_COM)	Contains a description of the link found at REFERENCE 3 DATA DOWNLOAD LINK (REF_3_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100
45	Reference 3 Link (REF_3_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100

46	Reference 4 Comments (REF_4_COM)	Contains a description of the link found at REFERENCE 4 DATA DOWNLOAD LINK (REF_4_URL). For example, Project report is available from the Ministry library, or Raster and/or PDF maps are available from the following FTP site.				String	100
47	Reference 4 Link (REF_4_URL)	Contains a URL to additional project information and/or files (not in the LRDW or EcoCat). For example, <a href="http://www.for.gov.bc.ca/hfd/library/index.htm">http://www.for.gov.bc.ca/hfd/library/index.htm</a> , and <a href="ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/">ftp://fshftp.env.gov.bc.ca/pub/outgoing/Terrain_Data/Terrain_Soils_Maps_Raster/</a>				String	100
48	Boundary Only Flag (BDRY_ONLY)	Project Boundary Only Flag: contains a Y/N to indicate there is only a project boundary and no detailed polygon data in the LRDW.				String	1
49	Review Comments (RE VW_COM)	Data Quality Review Comments: contains a summary description of data issues such as coding errors, problems with geometry, identified during a TEIS_ENVIRONEMENT review of the data.				String	254
50	Project Status (PROJ_STAT)			Project_Status		String	25

**Table 5: Details of TEI\_Sample\_Site\_Lines template.**

TEI\_Sample\_Site\_Lines contains linear field traverses (transects) where inventory data was collected, and the TES\_TAG that links to the original field data (such as cross sections).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10
4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254
5	Terrestrial Site Identification Tag (TES_TAG)	This field contains the terrain site identification number.	These must be a unique identifier for each site within a project.			String	18

6	Terrestrial Site Identification ID (TES_ID)	This field contains the unique identifier (PK) for the TES Attributes detailed geometry. This key may change between snapshots of the database.	This field is automatically generated.		System assigned integer.	Integer	4
7	ECI_TAG (ECI_TAG)					String	18

**Table 6: Details of TEI\_Sample\_Site\_Points template.**

TEI\_Sample\_Site\_Points contains the point locations of field sites where inventory data was collected, and the TES\_TAG that links to the original field data (such as ECI\_TAG linking to Venus data).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10
4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254

5	Terrestrial Site Identification Tag (TES_TAG)	This field contains the terrain site identification number.	These must be a unique identifier for each site within a project.			String	18
6	Terrestrial Site Identification ID (TES_ID)	This field contains the unique identifier (PK) for the TES Attributes detailed geometry. This key may change between snapshots of the database.	This field is automatically generated.		System assigned integer.	Integer	4
7	ECI_TAG (ECI_TAG)					String	18

**Table 7: Details of TEI\_Short\_Tbl template.**

TEI\_Short\_Tbl contains Terrestrial Ecosystem Information (TEI) polygons with key and amalgamated (concatenated) attributes derived from the TEIS\_Long\_Tbl. These describe the physical and biological characteristics of ecosystems at a landscape level.

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	TEIS Primary Key (TEIS_ID)	The unique identifier (PK) for the TEIS detailed geometry. This key may change between snapshots of the database.			Unique numeric ID for detailed polygons. (Non-soils.)	Integer	4

2	Project Polygon Identifier (PROJPOLYID)	This field contains a unique polygon identifier for linking attribute data to spatial data for TER, TEM, PEM and SEI data. A unique identifier within a project, that when combined with the BAPID creates a unique identifier within the province. This field can be used for linking foreign key data (user defined fields, report references, etc.).				String	50
3	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
4	Modification Date (MOD_DATE)	Contains the year, month and day that the attribute data or the corresponding spatial data (i.e. polygon boundaries) for the given data record was last altered in any way.				Date	8
5	Project Type (PROJ_TYPE)	A nine letter code indicating the type of mapping project.	PROJECT_TYPE (aka PROJ_TYPE) contains a 3-9 letter code indicating the specific type of mapping and attributes gathered for the project. For example: TEM, PEM, SEI, TIM, TSM, TBT, TEMSEI, TEMNSS and PRETEM.	Project_Type		String	9

6	Project Name (PROJ_NAME)	The common name of the project, usually a well known local place of feature.				String	100
7	Project Map Scale (PROJ_SCALE)	The scale of the project maps produced. For example, use 20000, not 1:20000	Renamed from 'Scale'		5000 to 250000 (Values outside of this scale range may be valid.)	Integer	4
8	Ecosection Label (ECO_SEC)	contains the three-letter code for the Ecosection in which the polygon occurs.				String	3
9	Biogeoclimatic Label (BGC_LBL)	contains a string of numeric and character codes indicating the Biogeoclimatic unit in which the polygon occurs. This field is a concatenation of polygon attributes from the RISC Long Table including Biogeoclimatic zone, subzone, variant and phase.				String	10
10	Ecosystem Label of Ecosystem Component 1 (ECOLBL_1)	contains a string of numeric and character codes representing the ecosystem label for ecosystem component 1. This field is a concatenation of polygon attributes from the RISC Long Table including decile, ecosystem unit, site modifier, structural stage, stand composition and seral community codes.				String	26

11	Ecosystem Decile of Ecosystem Component 1 (SDEC_1)	contains a number from 4-10 indicating the proportion of the polygon covered by ecosystem component 1. Enter zero (0) when not recorded.	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		4 to 10 (NULL is permitted if there is no associated data.)	SmallInteger	2
12	Site Series Label of Ecosystem Component 1 (SITES_LBL1)	contains a string of numeric and character codes indicating the type of plant community present in ecosystem component 1. This field is a concatenation of polygon attributes from the RISC Long Table including site series numbers and seral community type codes. Codes are unique within individual Biogeoclimatic subzones and variants.				String	11
13	Site Series Map Code Label of Ecosystem Component 1 (SITEMCLBL1)	contains a string of character codes indicating the type of plant community present in ecosystem component 1. This field is a concatenation of polygon attributes from the RISC Long Table including site series mapcodes and seral community types. Codes are unique within individual Biogeoclimatic subzones and variants.				String	11

14	Sensitive Ecosystem Label of Ecosystem Component 1 (SEILBL_1)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 1. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.				String	7
15	Sensitive Ecosystem Class of Ecosystem Component 1 (SECL_1)	contains a string of upper case character codes indicating the sensitive ecosystem class for SEI component 1. SEI classes group ecosystems based on similar disturbance sensitivity or at-risk status.		SEI_Class		String	2
16	Sensitive Ecosystem Subclass of Ecosystem Component 1 (SESUBCL_1)	contains a string of lower case character codes indicating the sensitive ecosystem subclass for SEI component 1. Subclasses further define the ecosystem class based on ecological criteria.		SEI_Subclass		String	2

17	Condition of Ecosystem Component 1 (COND_1)	contains a single numeric code indicating the condition of the sensitive ecosystem in SEI component 1. Condition is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the ecosystem and the degree to which they affect the continued existence of the ecosystem.		Condition		String	1
18	Viability of Ecosystem Component 1 (VIAB_1)	contains a single numeric code indicating the probability the sensitive ecosystem for SEI component 1 will persist based on its size, condition, and landscape context.		Viability		String	1
19	Structural Stage Label of Ecosystem Component 1 (STRCTLBL_1)	contains a string of numeric and character codes indicating the structure and composition of the vegetation cover for ecosystem component 1. This field is a concatenation of polygon attributes from the RISC Long Table including structural stage and stand composition codes.				String	3

20	Ecosystem Label of Ecosystem Component 2 (ECOLBL_2)	contains a string of numeric and character codes representing the ecosystem label for ecosystem component 2. This field is a concatenation of polygon attributes from the RISC Long Table including decile, ecosystem unit, site modifier, structural stage, stand composition and seral community codes.				String	26
21	Ecosystem Decile of Ecosystem Component 2 (SDEC_2)	contains a number from 0-5 indicating the proportion of the polygon covered by ecosystem component 2. Enter zero (0) when not recorded.	e.g., a decile of 10=100% of polygon, 8=80% of polygon, 2=20% of polygon		1 to 5 (Zero values are to be replaced by NULL.)	SmallInteger	2
22	Site Series Label of Ecosystem Component 2 (SITES_LBL2)	contains a string of numeric and character codes indicating the type of plant community present in ecosystem component 2. This field is a concatenation of polygon attributes from the RISC Long Table including site series numbers and seral community type codes. Codes are unique within individual Biogeoclimatic subzones and variants.				String	11

23	Site Series Map Code Label of Ecosystem Component 2 (SITEMCLBL2)	contains a string of character codes indicating the type of plant community present in ecosystem component 2. This field is a concatenation of polygon attributes from the RISC Long Table including site series mapcodes and seral community types. Codes are unique within individual Biogeoclimatic subzones and variants.				String	11
24	Sensitive Ecosystem Label of Ecosystem Component 2 (SEILBL_2)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 2. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.				String	7
25	Sensitive Ecosystem Class of Ecosystem Component 2 (SECL_2)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 2. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.		SEI_Class		String	2

26	Sensitive Ecosystem Subclass of Ecosystem Component 2 (SESUBCL_2)	contains a string of upper case character codes indicating the sensitive ecosystem class for SEI component 2. SEI classes group ecosystems based on similar disturbance sensitivity or at-risk status.		SEI_Subclass		String	2
27	Condition of Ecosystem Component 2 (COND_2)	contains a single numeric code indicating the condition of the sensitive ecosystem in SEI component 2. Condition is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the ecosystem and the degree to which they affect the continued existence of the ecosystem.		Condition		String	1
28	Viability of Ecosystem Component 2 (VIAB_2)	contains a single numeric code indicating the probability the sensitive ecosystem for SEI component 2 will persist based on its size, condition, and landscape context.		Viability		String	1

29	Structural Stage Label of Ecosystem Component 2 (STRCTLBL_2)	contains a string of numeric and character codes indicating the structure and composition of the vegetation cover for ecosystem component 2. This field is a concatenation of polygon attributes from the RISC Long Table including structural stage and stand composition codes.				String	3
30	Ecosystem Label of Ecosystem Component 3 (ECOLBL_3)	contains a string of numeric and character codes representing the ecosystem label for ecosystem component 3. This field is a concatenation of polygon attributes from the RISC Long Table including decile, ecosystem unit, site modifier, structural stage, stand composition and seral community codes.				String	26
31	Ecosystem Decile of Ecosystem Component 3 (SDEC_3)	contains a number from 0-3 indicating the proportion of the polygon covered by ecosystem component 3. Enter zero (0) when not recorded.	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		1 to 3 (Zero values are to be replaced by NULL.)	SmallInteger	2

32	Site Series Label of Ecosystem Component 3 (SITES_LBL3)	contains a string of numeric and character codes indicating the type of plant community present in ecosystem component 3. This field is a concatenation of polygon attributes from the RISC Long Table including site series numbers and seral community type codes. Codes are unique within individual Biogeoclimatic subzones and variants.				String	11
33	Site Series Map Code Label of Ecosystem Component 3 (SITEMCLBL3)	contains a string of character codes indicating the type of plant community present in ecosystem component 3. This field is a concatenation of polygon attributes from the RISC Long Table including site series mapcodes and seral community types. Codes are unique within individual Biogeoclimatic subzones and variants.				String	11

34	Sensitive Ecosystem Label of Ecosystem Component 3 (SEILBL_3)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 3. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.				String	7
35	Sensitive Ecosystem Class of Ecosystem Component 3 (SECL_3)	contains a string of upper case character codes indicating the sensitive ecosystem class for SEI component 3. SEI classes group ecosystems based on similar disturbance sensitivity or at-risk status.		SEI_Class		String	2
36	Sensitive Ecosystem Subclass of Ecosystem Component 3 (SESUBCL_3)	contains a string of numeric and character codes representing the sensitive ecosystem label for SEI component 3. This field is a concatenation of polygon attributes from the RISC Long Table including decile, sensitive ecosystem class and subclass codes.		SEI_Subclass		String	2

37	Condition of Ecosystem Component 3 (COND_3)	contains a single numeric code indicating the condition of the sensitive ecosystem in SEI component 3. Condition is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the ecosystem and the degree to which they affect the continued existence of the ecosystem.		Condition		String	1
38	Viability of Ecosystem Component 3 (VIAB_3)	contains a single numeric code indicating the probability the sensitive ecosystem for SEI component 3 will persist based on its size, condition, and landscape context.		Viability		String	1
39	Structural Stage Label of Ecosystem Component 3 (STRCTLBL_3)	contains a string of numeric and character codes indicating the structure and composition of the vegetation cover for ecosystem component 1. This field is a concatenation of polygon attributes from the RISC Long Table including structural stage and stand composition codes.				String	3

40	Terrain Polygon Label (TER_LBL)	contains an string of characters representing the full terrain label including surficial material texture, surficial material, and surface expression codes for the surface and subsurface of all three terrain components and the geomorphological process codes for the polygon. This field is a concatenation of polygon attributes from the RISC Long Table.				String	85
41	Decile of Terrain Component 1 (TDEC_1)	Describes the proportion of the polygon covered by Terrain Component 1, in deciles (i.e., a proportion out of 10). See Table: Component Relation Delimiters Codes. Note: This field is typically used for Ecosystem Mapping .	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		4 to 10 (NULL is permitted if there is no associated data.)	SmallInteger	2
42	First Terrain Label (TERLBL_1A)	contains a string of characters representing the terrain label for the surface layer of terrain component 1. This field is a concatenation of polygon attributes from the RISC Long Table including surficial material texture, surficial material and surface expression codes.				String	11

43	First Subsurface Terrain Label (TERLBL_1B)	contains a string of characters representing the terrain label for the subsurface layer of terrain component 1. This field is a concatenation of polygon attributes from the RISC Long Table including surficial material texture, surficial material and surface expression codes.				String	10
44	Bedrock Type of Terrain Component 1 (BEDROCK_1)	The type of bedrock in the terrain component. (This is only applicable where surficial material is of origin type `R'). See Table: Bedrock Classification Codes. The intent of using the bedrock code is to provide auxiliary information, to help qualify texture and/or terrain stability information. It is not intended to provide bedrock stratigraphy.		Bedrock_Type		String	2

45	Relation of Terrain Component 1 and 2 (COMREL1_2)	A general indicator of the relative areal proportions of the first and second terrain components within the current polygon. (Note: These proportional indicators are commonly used for terrain stability mapping in place of deciles). See Table: Component Relation Delimiters Codes.		Component_Relationship		String	2
46	Decile of Terrain Component 2 (TDEC_2)	Describes the proportion of the polygon covered by Terrain Component 2, in deciles (i.e., a proportion out of 10). See Table: Component Relation Delimiters Codes. Note: This field is typically used for Ecosystem Mapping .	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		1 to 5 (Zero values are to be replaced by NULL.)	SmallInteger	2
47	Second Terrain Label (TERLBL_2A)	contains a string of characters representing the terrain label for the surface layer of terrain component 2. This field is a concatenation of polygon attributes from the RISC Long Table including surficial material texture, surficial material and surface expression codes.				String	11

48	Second Subsurface Terrain Label (TERLBL_2B)	contains a string of characters representing the terrain label for the subsurface layer of terrain component 2. This field is a concatenation of polygon attributes from the RISC Long Table including surficial material texture, surficial material and surface expression codes.				String	10
49	Bedrock Type of Terrain Component 2 (BEDROCK_2)	The type of bedrock in the terrain component. (This is only applicable where surficial material is of origin type `R'). See Table: Bedrock Classification Codes. The intent of using the bedrock code is to provide auxiliary information, to help qualify texture and/or terrain stability information. It is not intended to provide bedrock stratigraphy.		Bedrock_Type		String	2

50	Relation of Terrain Component 2 and 3 (COMREL2_3)	A general indicator of the relative areal proportions of the first and second terrain components within the current polygon. (Note: These proportional indicators are commonly used for terrain stability mapping in place of deciles). See Table: Component Relation Delimiters Codes.		Component_Relationship		String	2
51	Decile of Terrain Component 3 (TDEC_3)	Describes the proportion of the polygon covered by Terrain Component 3, in deciles (i.e., a proportion out of 10). See Table: Component Relation Delimiters Codes. Note: This field is typically used for Ecosystem Mapping .	e.g., a decile of 10=100%of polygon, 8=80% of polygon, 2=20% of polygon		1 to 3 (Zero values are to be replaced by NULL.)	SmallInteger	2
52	Third Terrain Label (TERLBL_3A)	contains a string of characters representing the terrain label for the surface layer of terrain component 3. This field is a concatenation of polygon attributes from the RISC Long Table including surficial material texture, surficial material and surface expression codes.				String	11

53	Third Subsurface Terrain Label (TERLBL_3B)	contains a string of characters representing the terrain label for the subsurface layer of terrain component 3. This field is a concatenation of polygon attributes from the RISC Long Table including surficial material texture, surficial material and surface expression codes.				String	10
54	Bedrock Type of Terrain Component 3 (BEDROCK_3)	The type of bedrock in the terrain component. (This is only applicable where surficial material is of origin type `R'). See Table: Bedrock Classification Codes. The intent of using the bedrock code is to provide auxiliary information, to help qualify texture and/or terrain stability information. It is not intended to provide bedrock stratigraphy.		Bedrock_Type		String	2
55	Geomorph Process Label (GEOP_LBL)	contains a string of characters representing the geomorphological processes and subclasses that affect terrain within the polygon.				String	21

56	Drainage Label (DRAIN_LBL)	contains a string of character codes indicating soil drainage class(es) of the terrain polygon. Soil drainage refers to the rapidity and extent of water removal from the soil in relation to additions.				String	14
57	Slope Range Label (SLOPE_LBL)	contains a string of numeric and character codes indicating the typical or range of slopes in percent [i.e., rise/run*100] within the terrain polygon.				String	15
58	Slope Stability Class with Roads Qualifier Flag (SLPSTBCLSR)	contains the slope stability class code with a road qualifier flag.	This field is automatically derived.	Slope_Stability_Classes_with_Roads_Qualifier_Flag		String	4

59	Surface Erosion Potential Class of Terrain Polygon (SFCERO_POT)	The Surface erosion potential class for the terrain polygon. A class which indicates the likelihood of soil erosion on bare or disturbed soil after logging or road construction (e.g. from ditches or cutbanks). Surface erosion refers to the removal of soil, particle by particle, by surface runoff. It results in sheet erosion and the development of rills and gullies. See Table: Surface Erosion Potential Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Potential		String	2
60	Landslide Induced Stream Sedimentation Class (LSSED_CLS)	A rating class indicating the likelihood of landslide-induced stream sedimentation for the polygon. See Table: Landslide Induced Stream Sediment Class Codes.	Submit table of class definitions with project files and include definitions in map legend.	Landslide_Induced_Stream_Sedimentation		SmallInteger	2

61	Surface Erosion Sedimentation Class (SESED_CLS)	A rating class indicating the likelihood of stream sedimentation due to surface erosion. This rating is assigned by the terrain mapper on the basis of air photo interpretation with occasional field confirmation. See Table: Class Codes for Potential Sediment Delivery From Surface Erosion Sources.	Submit table of class definitions with project files and include definitions in map legend.	Surface_Erosion_Sedimentation		String	2
62	Slope Stability Class Text (SSC_TXT)	contains roman numerals or an upper-case letter code representing a class of slope stability for the terrain polygon. Stability criteria are project specific.		Slope_Stability_Class_with_Roads_Qualifier_Flag		String	40
63	Surface Erosion Potential Class Text (SEP_TXT)	contains 1-2 upper-case letter codes indicating the surface erosion potential class for the terrain polygon. A class which indicates the likelihood of soil erosion on bare or disturbed soil after logging or road construction (e.g. from ditches or cutbanks). Surface erosion refers to the removal of soil, particle by particle, by surface runoff. Erosion potential criteria are project specific.				String	20

64	Landslide Induced Stream Sedimentation Class Text (LISSC_TXT)	contains a numeric code indicating the likelihood of landslide-induced stream sedimentation for the terrain polygon. Stream sedimentation criteria are project specific.				String	10
65	Surface Erosion Sedimentation Class Text (SESC_TXT)	contains a 1-2 lower-case letter code indicating the likelihood of stream sedimentation due to surface erosion for the terrain polygon. Erosion sedimentation criteria are project specific.				String	20
66	Polygon Texture Class (POLY_TEX)	contains character codes representing the generalized texture class of the dominant surficial material for the terrain polygon. Used for ecosystem mapping and modeling (e.g. Predictive Ecosystem Mapping).				String	4
67	Polygon Thickness Class (POLY_THK)	contains character codes representing the interpreted thickness of the surficial material(s) in the terrain polygon. Used for ecosystem mapping and modeling (e.g. Predictive Ecosystem Mapping).				String	3

68	Dominant Surficial Material (SURFM_DOM )	contains a text string indicating the dominant surficial material for the terrain polygon.				String	50
69	Theme Display 1 (THEME_1)	is a field created to hold an alphanumeric code representing a theme derived from terrain and ecosystem attribute(s).				String	20
70	Theme Display 2 (THEME_2)	is a field created to hold an alphanumeric code representing a theme derived from terrain and ecosystem attribute(s).				String	20
71	Theme Display 3 (THEME_3)	is a field created to hold an alphanumeric code representing a theme derived from terrain and ecosystem attribute(s).				String	20

72	Polygon Comments (POLY_COM)	This field may be used to record any pertinent information regarding the polygon. At all times attempt to use referenced classifications which are well defined and understood in the science, or provide thorough definitions for the user. This project specific data will be stored in flat file format, unless keyword or standard designations are required, then contact the data custodian. The data custodian will keep records of new or additional classifications, which are commonly used for project specific applications.	Renamed from 'Comments'.			String	254
73	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
74	Field Check of Polygon (SMPL_TYPE)	A class which describes the level of field checking done on the current polygon (detailed/reconnaissance/visual) . See Table: Field Check Class.	Renamed from 'Fldchktp'	Field_Check_Type		String	1

75	Map Legend Comments (LEGEND_COM )	Contains a description of the generic map legend found at MAP LEGEND DATA DOWNLOAD LINK (MAP_LEG). For example, Information on how to interpret terrain labels is available at the following site.				String	140
76	Map Legend Link (LEGEND_URL)	Contains a link to an internet resource related to the map legend or compilation methods.				String	100
77	Original Map Label (ORIG_LBL)	contains a one-line character string representing the original map label for the polygon. Used for map conversion projects to preserve the original old or non-standard map codes.				String	50
78	Polygon Stability Classification Type (PSTBCLS_TP)			Polygon_Stability_C lassification_Type		String	1

79	Error Summary (ERROR_SUM)	contains a list of attribute code and geometry errors found by automated data quality control tools including errors relating to invalid codes, values outside a valid range, cross field (paired attribute) rules, and geometry. Erroneous attribute entries are in ().				String	500
----	---------------------------	--	--	--	--	--------	-----

**Table 8: Details of TEI\_Symbols\_Lines template.**

TEI\_Symbols\_Lines contains linear on-site symbols used to highlight features not adequately delineated and described by TEI\_Long\_Tbl polygons (e.g., landslide tracks or eskers).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10

4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254
5	Terrestrial Feature OnSite Symbol Tag (TEF_TAG)	If a terrain point or line on-site symbol is assigned a unique identifier, the identifier should be captured here.	Use this field to link symbols to reports and other non-standard data.			String	18
6	Terrestrial Feature OnSite Symbol ID (TEF_ID)	This field contains the unique identifier (PK) for the TEF Point Attributes detailed geometry. This key may change between snapshots of the database.	This field is automatically generated.		System assigned integer.	Integer	4

**Table 9: Details of TEI\_Symbols\_Points template.**

TEI\_Symbols\_Points contains point on-site symbols used to highlight features not adequately delineated and described by TEI\_Long\_Tbl polygons (e.g., landslide headscarp).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10

3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10
4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254
5	Direction (DIRECTION)	Value indicating directionality (of slides, for example)			degrees azimuth	SmallInteger	2
6	Terrestrial Feature OnSite Symbol Tag (TEF_TAG)	If a terrain point or line on-site symbol is assigned a unique identifier, the identifier should be captured here.	Use this field to link symbols to reports and other non-standard data.			String	18
7	Terrestrial Feature OnSite Symbol ID (TEF_ID)	This field contains the unique identifier (PK) for the TEF Point Attributes detailed geometry. This key may change between snapshots of the database.	This field is automatically generated.		System assigned integer.	Integer	4

**Table 10: Details of TEI\_Symbols\_Polys template.**

TEI\_Symbols\_Polys contains polygon on-site symbols used to highlight features not adequately delineated and described by TEI\_Long\_Tbl polygons (e.g., block fields or large earthflow features).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4

2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10
4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254
5	Terrestrial Area Feature OnSite Symbol Tag (TEA_TAG)	If a terrain area on-site symbol is assigned a unique identifier, the identifier should be captured here.	Use this field to link symbols to reports and other non-standard data.			String	18
6	Terrestrial Area Feature OnSite Symbol ID (TEA_ID)	This field contains the unique identifier (PK) for the TEA Polygon Attributes detailed geometry. This key may change between snapshots of the database.	This field is automatically generated.		System assigned integer.	Integer	4

**Table 11: Details of TEI\_Symbols\_Polys\_Arcs template.**

TEI\_Symbols\_Polys\_Arcs contains the polygon arcs corresponding to the TEI\_Symbols\_Polys feature class, with fcodes representing line reliability solid (definite), dashed (approximate) and dotted (assumed) as described in Specifications and Guidelines For Terrain Mapping in BC. If it is stated in the Proj\_Com field and in the report that 'all area symbol lines are assumed dashed TEI\_Area\_Symbols unless otherwise superseded by the TEI\_Area\_Symbols\_Arc feature class', then only dashed and dotted line types need be collected.

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
---	------	-------------	-----------------------	--------------	-------------	------------	--------

1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Feature Code (FCODE)	FEATURE CODE contains a value based on the Canadian Council of Surveys and mapping's (CCSM) system for classification of geographic features.				String	10
3	Source Feature Code (SRC_FCODE)	This field contains the source geometry feature code for the polygon.	Contains the FCODE of the feature used to create the geometry if it comes from another location (TRIM).			String	10
4	Comment (COMMENT)	This field contains comments about the feature.	Any comments related to the creation, precision, or accuracy of the geometry.			String	254
5	Terrestrial Area Feature OnSite Symbol Tag (TEA_TAG)	If a terrain area on-site symbol is assigned a unique identifier, the identifier should be captured here.	Use this field to link symbols to reports and other non-standard data.			String	18
6	Terrestrial Area Feature OnSite Symbol ID (TEA_ID)	This field contains the unique identifier (PK) for the TEA Polygon Attributes detailed geometry. This key may change between snapshots of the database.	This field is automatically generated.		System assigned integer.	Integer	4

**Table 12: Details of TEI\_Usr\_Dfn\_Data template.**

TEI\_Usr\_Dfn\_Data contains user defined (project specific) fields containing codes or ranges relating to user defined values (i.e., fields and attributes that are not RISC standard).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
1	TEIS Primary Key (TEIS_ID)	The unique identifier (PK) for the TEIS detailed geometry. This key may change between snapshots of the database.			Unique numeric ID for detailed polygons. (Non-soils.)	Integer	4
2	Project Polygon Identifier (PROJPOLYID)	This field contains a unique polygon identifier for linking attribute data to spatial data for TER, TEM, PEM and SEI data. A unique identifier within a project, that when combined with the BAPID creates a unique identifier within the province. This field can be used for linking foreign key data (user defined fields, report references, etc.).				String	50
3	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4

**Table 13: Details of TEI\_Usr\_Dfn\_Fields template.**

TEI\_Usr\_Dfn\_Fields contains project specific field names, definitions, descriptions, domains and ranges for user defined fields (i.e., fields that are not RISC standard).

#	Name	Description	Instructions/Comments	Domain Table	Valid Range	Field Type	Length
---	------	-------------	-----------------------	--------------	-------------	------------	--------

1	Business Area Project ID (BAPID)	This field contains a unique project identifier. The project BAPID is used in all .e00 files.	If not already done, request a project BAPID from Soilterrain@victoria1.gov.bc.ca			Integer	4
2	Applies To (APPLIES)	The section of the TEM database that the user defined information pertains to. Ex. Project, Ecosystem, Terrain, etc.				String	10
3	Column Name (COLM_NAME)	The column name of the attribute being referred to. It can be an existing column name or a new 'user defined' column name. Ex. Existing - Mapcode				String	10
4	Value Type (VALUE_TYP)	The field data type. Valid types are String, Integer and SmallInteger. SmallInteger fields can only store values between - 32,768 and 32,767; Integer stores values between - 2,147,483,648 and 2,147,483,647.				String	12
5	Length (LENGTH)	For String fields, the maximum length of a valid string value. For Integer and SmallInteger fields, this value is always 4 and 2 respectively.				Integer	2

6	Decimals (DECIMAL)	For Float and Double field types, the number of decimal places to be stored in the field. All digits are counted, no matter what side of the decimal they are on.				Integer	2
7	Required (REQUIRED)	Designates whether the field is mandatory (Y or N).				String	1
8	Case (CASE)	For String fields, the allowed case of the string value. L - Lower; U - Upper; M - Mixed.				String	2
9	Minimum Value (MIN_VALUE)	For numeric fields, the minimum value allowed in the field.				Integer	4
10	Maximum Value (MAX_VALUE)	For numeric fields, the maximum value allowed in the field.				Integer	4
11	Unit of Measure (UOFM)	The unit of measure implied by the entry. Ex. Centimeters, Hectares, etc.				String	20
12	Description (DESCRIP)	A textual description or definition of the field.				String	255
13	Value (VALUE)	For String fields, one of the valid values. (For each valid value, make a new record in this table.)				String	10
14	Value Description (VALUE_DESC)	A textual description or definition of the value.				String	255

## **Appendix B: Domains and Ranges**

**Table 1: Contents of Domain\_Accuracy\_Assessment\_Level table**

Code	Short_Name	Description	Notes
1	Level 1 - Quality Assurance	100% of sample polygons or areas evaluated by air photo interpretation, preferably at larger scale using computer-based, softcopy photogrammetric mapping technology. 10-25% of sample polygons or areas field assessed by air or ground calls.	
2	Level 2 - Quality Assurance	100% of sample polygons or areas evaluated by air photo interpretation, preferably at larger scale using computer-based, softcopy photogrammetric mapping technology. 26-50% of sample polygons or areas field assessed by air and ground calls at a 75:25 ratio.	
3	Level 3 - Quality Assurance	100% of sample polygons or areas evaluated by air photo interpretation, preferably at larger scale using computer-based, softcopy photogrammetric mapping technology. 51-75% of sample polygons or areas field assessed by air and ground calls at a 75:25 ratio.	
4	Level 4 - Accuracy Assessment	100% of sample polygons or areas assessed by ground checks. 3-5 sample plots in polygon or small area, randomly or systematically located; map simple map entities at large scale (e.g., 1:5000); or conduct single-line, line-intercept sampling.	Accuracy assessment requires that polygon content be assessed with high confidence. Obvious or very general map units may allow for remote determination.
5	Level 5 - Accuracy Assessment	100% of sample polygons or areas assessed by ground checks. 6-20 sample plots in polygon (area) randomly or systematically located; or two line-intercept transects located.	Accuracy assessment requires that polygon content be assessed with high confidence. Obvious or very general map units may allow for remote determination.

6	Level 6 - Accuracy Assessment	100% of sample polygons or areas assessed by ground checks. 21-50 sample plots in polygon (area) randomly or systematically located; or three or more line-intercept transects located.	Accuracy assessment requires that polygon content be assessed with high confidence. Obvious or very general map units may allow for remote determination.
---	-------------------------------	---	---

**Table 2: Contents of Domain\_Avalanche\_Hazard\_Flag table**

Code	Short_Name	Description	Notes
a	avalanche hazard flag	Flag indicating that timber removal may result in snow avalanches likely to adversely affect timber values, or to damage roads or other structures, or pose a hazard to humans.	

**Table 3: Contents of Domain\_Bedrock\_Type table**

Code	Short_Name	Description	Notes
k	clastic calcareous	clastic calcareous	
kf	clastic calcareous: fine grained	clastic calcareous: fine grained	
kz	calcareous siltstone	calcareous siltstone	
kd	calcareous mudstone	calcareous mudstone	
kh	calcareous shale	calcareous shale	
km	clastic calcareous: medium grained	clastic calcareous: medium grained	
ks	calcareous sandstone	calcareous sandstone	
kg	calcareous greywacke	calcareous greywacke	
ka	calcareous arkose	calcareous arkose	
kc	clastic calcareous: coarse grained	clastic calcareous: coarse grained	
kn	calcareous conglomerate	calcareous conglomerate	
kb	calcareous breccia	calcareous breccia	
u	clastic non-calcareous	clastic non-calcareous	

uf	clastic non-calcareous: fine grained	clastic non-calcareous: fine grained	
zl	siltstone	siltstone	
md	mudstone	mudstone	
sh	shale	shale	
um	clastic non-calcareous: medium grained	clastic non-calcareous: medium grained	
ss	sandstone	sandstone	
gk	greywacke	greywacke	
ak	arkose	arkose	
uc	clastic non-calcareous: coarse grained	clastic non-calcareous: coarse grained	
cg	conglomerate	conglomerate	
bk	breccia	breccia	
p	precipitates	precipitates	
pk	precipitates: calcareous	precipitates: calcareous	
tv	travertine	travertine	
ls	limestone	limestone	
do	dolomite	dolomite	
pu	precipitates: non- calcareous	precipitates: non-calcareous	
gy	gypsum	gypsum	
li	limonite	limonite	
ba	barite	barite	
o	organic	organic	
ok	organic: calcareous	organic: calcareous	
ma	marl	marl	
lg	lignite	lignite	
oc	organic: carbonaceous	organic: carbonaceous	

co	coal	coal	
i	intrusive	intrusive	
ia	acid (felsic)	acid (felsic)	
sy	syenite	syenite	
gr	granite	granite	
qm	quartz monzonite	quartz monzonite	
gd	granodiorite	granodiorite	
ii	intermediate	intermediate	
qd	quartz diorite	quartz diorite	
di	diorite	diorite	
ib	basic	basic	
qg	quartz gabbro	quartz gabbro	
gb	gabbro	gabbro	
py	pyroxenite	pyroxenite	
pd	peridotite	peridotite	
du	dunite	dunite	
e	extrusive	extrusive	
ea	acid (felsic)	acid (felsic)	
tr	trachyte	trachyte	
rh	rhyolite	rhyolite	
da	dacite	dacite	
ei	intermediate	intermediate	
an	andesite	andesite	
qb	quartz basalt	quartz basalt	
bs	basalt	basalt	
la	recent lava flow	recent lava flow	
ep	pyroclastic	pyroclastic	
tu	tuff	tuff	
vb	volcanic breccia	volcanic breccia	
ag	agglomerate	agglomerate	
f	foliated	foliated	
ff	foliated: fine grained	foliated: fine grained	
sl	slate	slate	
ph	phyllite	phyllite	

fm	foliated: medium to coarse grained	foliated: medium to coarse grained	
sc	schist	schist	
gn	gneiss	gneiss	
gg	granite gneiss	granite gneiss	
dg	diorite gneiss	diorite gneiss	
fc	foliated: coarse grained	foliated: coarse grained	
mi	migmatite	migmatite	
n	non-foliated	non-foliated	
nf	non-foliated: fine grained	non-foliated: fine grained	
ar	argillite	argillite	
sp	serpentinite	serpentinite	
nm	non-foliated: medium to coarse grained	non-foliated: medium to coarse grained	
gl	granulite	granulite	
qt	quartzite	quartzite	
hf	hornfels	hornfels	
nc	non-foliated: coarse grained	non-foliated: coarse grained	
am	amphibolite	amphibolite	
hb	hornblendite	hornblendite	
nk	non-foliated: calcareous	non-foliated: calcareous	
mb	marble	marble	
dm	dolomite marble	dolomite marble	
sm	serpentine marble	serpentine marble	
	Null Value	Null value.	

**Table 4: Contents of Domain\_Component\_Relationship table**

Code	Short_Name	Description	Notes
------	------------	-------------	-------

.	dot	components on either side of the symbol are approximately equal, in proportion (Note: The = sign can appear on the plotted map as a '.')	
/	slash	the component in front of the symbol is more extensive than the one that follows	
//	double slash	the component in front of the symbol is considerably more extensive than the component that follows	

**Table 5: Contents of Domain\_Condition table**

Code	Short_Name	Description	Notes
1	Excellent	Excellent	retired
2	Good	Good	retired
3	Marginal	Marginal	retired
4	Poor	Poor	retired
0	No Data	No data available (not mapped).	
E	Excellent	Excellent	
G	Good	Good	
M	Marginal	Marginal	
P	Poor	Poor	

**Table 6: Contents of Domain\_Drainage table**

Code	Short_Name	Description	Notes
x	very rapidly drained	Water is removed from the soil very rapidly in relation to supply.	
r	rapidly drained	Water is removed from the soil rapidly in relation to supply	
w	well drained	Water is removed from the soil readily but not rapidly	
m	moderately well drained	Water is removed from the soil somewhat slowly in relation to supply	

i	imperfectly drained	Water is removed from the soil sufficiently slowly in relation to supply to keep the soil wet for a significant part of the growing season	
p	poorly drained	Water is removed so slowly in relation to supply that the soil remains wet for a comparatively large part of the time the soil is not frozen	
v	very poorly drained	Water is removed from the soil so slowly that the water table remains at or on the surface for the greater part of the time the soil is not frozen	

**Table 7: Contents of Domain\_Drainage\_Separator table**

Code	Short_Name	Description	Notes
,	comma	'w, i' indicates that no intermediate classes between well and imperfectly drained are present	
-	dash	'w-i' indicates that all intermediate classes between well and imperfectly drained are present.	
/	slash	'r/p' rapid drainage is dominant, poor drainage is sub-dominant	
//	double slash	'r//p' rapid drainage is significantly dominant, poor drainage is minor	
.	dot	'r.p' rapid drainage and poor drainage are equally present.	

**Table 8: Contents of Domain\_Field\_Check\_Type table**

Code	Short_Name	Description	Notes
------	------------	-------------	-------

d	Detailed	A complete description of the terrain features, including material, topography, hydrology, and processes if evident, is done on a site(s) in the polygon. Usually involves use of a data form.	
r	Reconnaissance	A reconnaissance level description of the terrain features, necessary to confirm mapping, done during traverse of a polygon. Usually involves short free-format notes in a notebook.	
v	Visual	Site viewed from a distance during foot or air traverses; applies only to terrain types that can be reliably mapped by visual inspection; optional: briefly note on air photo or map.	
E	Ecosystem Field Plots	1998 versions - FS882 (1- 7). 1996 versions - FS882. Previous to 1996 - Luttmerding et al. (DEIF, 1990).	
G	Ground Inspection Form (1998)	Revised version of the 1996 Visual Inspection Form. Quick plots where data is recorded to confirm the identification of the ecosystem units and provide some data for characterizing ecosystem attributes. Done on the ground by walking to/through a site and characterizing the site, confirming an existing polygon designation, or confirming existing polygon designation along with providing added site information for clarification during the mapping process.	
V	Visual Inspection	Site visit to the polygon: walking or driving with field notes taken.	
A	Air Visual Inspection	Site visit flying with field notes taken	
P	Air Photos		

**Table 9: Contents of Domain\_Generalized\_Texture\_Class table**

Code	Short_Name	Description	Notes
f	fine	Fine-textured soils - including silt and silt loam with less than 20% coarse fragment volume; and clay, silty clay, silty clay loam, clay loam, sandy clay and heavy clay with less than 35% coarse fragment volume.	
m	medium	Medium-textured soils - including sandy loam, loam and sandy clay loam with less than 70% coarse fragment volume; silt loam and silt with more than 20% coarse fragment volume; and clay, silty clay, silty clay loam, clay loam, sandy clay and heavy clay with more than 35% coarse fragment volume	
c	coarse	Coarse-textured soils - including sand and loamy sand; and also sandy loam, loam, and sandy clay loam with greater than 70% coarse fragment volume.	
v	very coarse	coarse fragments comprise 90% or more of the soil mass (by volume), with too little fine earth (<10% by volume) to fill interstices larger than 1 mm	

**Table 10: Contents of Domain\_Geomorphological\_Process table**

Code	Short_Name	Description	Notes
A	Snow avalanches	Slopes modified by frequent snow avalanches.	Active Mass Movement
B	Braiding channel	Channel zone with many diverging and rejoining channels; channels are laterally unstable.	Active Fluvial
C	Cryoturbation	Heaving and churning of soil/surficial materials due to frost action.	Active Periglacial

D	Deflation	Removal of sand and silt particles by wind action.	Active Erosional
E	Channeled by meltwater	Areas crossed by meltwater channels that are too small or too numerous to map individually.	Inactive Deglacial
F	Slow mass movements	Slope experiencing slow mass movement, such as sliding or slumping.	Active Mass Movement
H	Kettled	Area includes numerous small depressions and/or lakes where buried blocks of ice melted.	Inactive Deglacial
I	Irregularly sinuous channel	Channel displays irregular turns and bends.	Active Fluvial
J	Anastomosing channel	Channels diverge and converge around semi-permanent islands.	Active Fluvial
K	Karst processes	Solution of carbonates (limestone, dolomite) resulting in development of collapse and subsidence features.	Active Erosional
L	Surface Seepage	Abundant seepage.	Active Hydrologic
M	Meandering channel	Channel characterized by regular turns and bends.	Active Fluvial
N	Nivation	Surface modified by hollows developed around semi-permanent snowbanks.	Active Periglacial
P	Piping	Subsurface erosion of silty sediments by flowing water resulting in the formation of underground conduits.	Active Erosional
R	Rapid mass movements	Slope affected by processes such as debris flows, debris slides, and rockfall.	Active Mass Movement
S	Solifluction	Slope modified by slow downslope movement of seasonally frozen regolith.	Active Periglacial
U	Inundated	Areas submerged in standing water from a seasonally high watertable.	Active Hydrologic
V	Gully erosion	Slope affected by gully erosion.	Active Erosional
W	Washing	Winnowing of fines by flowing water; development of lag deposits.	Active Erosional

X	Permafrost processes	Processes related to the presence of permafrost and permafrost aggradation or degradation.	Active Periglacial
Z	General periglacial processes	Solifluction, nivation and cryoturbation occurring together in a single terrain polygon.	Active Periglacial
1	Place Holder 1	From Terrain Translation Project - Code 1.	
2	Place Holder 2	From Terrain Translation Project - Code 2.	
0	No Data	No data available.	

**Table 11: Contents of Domain\_Geomorphological\_Process\_Initiation\_Zone\_Component table**

Code	Short_Name	Description	Notes
^	active	A symbol that indicates that the polygon is an initiation zone for a subclasses of the first geomorphological process.	

**Table 12: Contents of Domain\_Geomorphological\_Process\_Initiation\_Zone\_Polygon table**

Code	Short_Name	Description	Notes
"	active	A symbol that indicates that the polygon is an initiation zone for one or more of the subclasses of the first geomorphological process.	

**Table 13: Contents of Domain\_Geomorphological\_Process\_Qualifier table**

Code	Short_Name	Description	Notes
A	Active		
I	Inactive		

**Table 14: Contents of Domain\_Geomorphological\_Process\_Subclass table**

Code	Short_Name	Description	Notes
------	------------	-------------	-------

c	soil creep	slow movement of soil	Allowable codes are dependant on the value in the corresponding GEOP field.
g	rock creep	slow movement of angular debris under periglacial conditions (e.g. rock glaciers)	Allowable codes are dependant on the value in the corresponding GEOP field.
k	tension cracks	open fissures, commonly near crest of slope	Allowable codes are dependant on the value in the corresponding GEOP field.
p	lateral spread in bedrock	lateral extension of a fractured mass of bedrock; movement is predominantly horizontal	Allowable codes are dependant on the value in the corresponding GEOP field.
j	lateral spread in surficial material	lateral extension of a surficial material; movement is predominantly horizontal	Allowable codes are dependant on the value in the corresponding GEOP field.
e	earthflow	slow viscous flow of material containing a high proportion of silt and clay	Allowable codes are dependant on the value in the corresponding GEOP field.
m	slump in bedrock	sliding of internally cohesive masses of bedrock along a slip plane that is concave upward or planar	Allowable codes are dependant on the value in the corresponding GEOP field.
u	slump in surficial material	sliding of internally cohesive masses of surficial material along a slip plane that is concave upward or planar	Allowable codes are dependant on the value in the corresponding GEOP field.
x	slump earthflow	combined slump (upper part) and earthflow (lower part)	Allowable codes are dependant on the value in the corresponding GEOP field.
f	debris fall	descent of a mass of surficial material by falling, bouncing and rolling	Allowable codes are dependant on the value in the corresponding GEOP field.
b	rockfall	descent of masses of bedrock by falling, bouncing and rolling	Allowable codes are dependant on the value in the corresponding GEOP field.
s	debris slide	sliding of disintegrating mass of surficial material	Allowable codes are dependant on the value in the corresponding GEOP field.
r	rockslide	descent of large masses of disintegrating bedrock by sliding	Allowable codes are dependant on the value in the corresponding GEOP field.
d	debris flow	rapid flow of saturated debris	Allowable codes are dependant on the value in the corresponding GEOP field.
t	debris torrent	rapid flow of a mixture of water, earth and vegetation debris down a steep, well-defined stream channel	Allowable codes are dependant on the value in the corresponding GEOP field.

"	initiation zone	includes sites or zones of instability, head scarps of debris slides and other kinds of mass movement, and sources of rockfall and debris flows	Allowable codes are dependant on the value in the corresponding GEOP field.
f	avalanche tracks - major	in zones of coniferous forest: broad avalanche track(s) occupied by predominantly shrubby, deciduous vegetation, conifers largely absent	Allowable codes are dependant on the value in the corresponding GEOP field.
m	avalanche tracks - minor	similar to above, but generally narrower than the height of adjacent trees	Allowable codes are dependant on the value in the corresponding GEOP field.
w	avalanche tracks - mixed	polygon includes both major and minor avalanche tracks	Allowable codes are dependant on the value in the corresponding GEOP field.
o	avalanche tracks - old	tracks are clearly visible on air photos, but are less well defined than active tracks because they are partly or completely occupied by young conifers	Allowable codes are dependant on the value in the corresponding GEOP field.
u	progressive bank erosion	persistent bank erosion, indicated by the presence of undercut banks, overhanging and fallen trees and much timber in the channel; old air photos and historical information can be used as evidence	Allowable codes are dependant on the value in the corresponding GEOP field.
a	abrupt channel diversion	present channel has recently shifted abruptly to a previously vegetated area; former channel can be identified on air photos or on ground	Allowable codes are dependant on the value in the corresponding GEOP field.
b	aversion backchannels (undivided)	small channels on a floodplain which may or may not be connected to the main channel	Allowable codes are dependant on the value in the corresponding GEOP field.
p	permanent river-fed backchannels	joined to the main channel at the upstream end, allowing flowing or standing water all year	Allowable codes are dependant on the value in the corresponding GEOP field.
e	ephemeral river-fed backchannels	joined to the main channel at the upstream end, but dry during late summer	Allowable codes are dependant on the value in the corresponding GEOP field.
s	spring-fed backchannels	water is maintained during the late summer by the emergence of floodplain groundwater	Allowable codes are dependant on the value in the corresponding GEOP field.

t	permanent, tributary-fed backchannels	either flowing or standing water from tributaries is present in the backchannel all year	Allowable codes are dependant on the value in the corresponding GEOP field.
r	ephemeral, tributary-fed backchannels	normally fed by tributaries, but dry during late summer	Allowable codes are dependant on the value in the corresponding GEOP field.
p	palsas peat plateaus	flat-topped or rounded mounds and ridges of peat or peaty earth formed by differential frost-heaving; contain perennial ice lenses and a core of permafrost	Allowable codes are dependant on the value in the corresponding GEOP field.
t	thermokarst: subsidence	ground surface depressions which are created by the thawing of ice-rich permafrost and associated soil subsidence	Allowable codes are dependant on the value in the corresponding GEOP field.
e	thermokarst: thermal erosion by water	gullies and depressions created by melting of ice-rich permafrost due to heat loss transfer from flowing water or lakes	Allowable codes are dependant on the value in the corresponding GEOP field.
f	thaw flow slides	slope failures caused by the thawing of permafrost on slopes	Allowable codes are dependant on the value in the corresponding GEOP field.
w	ice-wedge polygons	intersecting narrow cracks that contain ice-wedges comprise polygonal patterns on ground underlain by permafrost	Allowable codes are dependant on the value in the corresponding GEOP field.
r	patterned ground	collective term for the regular surface features, like stone polygons, frost boils, and stone stripes, that are characteristic of ground that is subject to intensive frost (freeze thaw) action; subclass can also be applied to other periglacial processes	Allowable codes are dependant on the value in the corresponding GEOP field.

**Table 15: Contents of Domain\_Landscape\_Fragmentation table**

Code	Short_Name	Description	Notes
UF			
PF			
HF			

**Table 16: Contents of Domain\_Landslide\_Induced\_Stream\_Sedimentation table**

Code	Short_Name	Description	Notes
1	low	Low likelihood that a landslide originating in the polygon will enter a stream. Refer to project specific criteria and definitions.	
2	medium	Moderate likelihood that a landslide originating in the polygon will enter a stream. Refer to project specific criteria and definitions.	
3	high	High likelihood that a landslide originating in the polygon will enter a stream. Refer to project specific criteria and definitions.	
0	No Data	No data available.	

**Table 17: Contents of Domain\_Low\_Reliability\_Flag table**

Code	Short_Name	Description	Notes
L	low reliability flag	Low reliability flag. This applies, for example to areas on air photos which have cloud cover, snow cover or are in heavy shadow, and have been mapped with significantly less reliability than adjacent polygons.	

**Table 18: Contents of Domain\_Partial\_Cover\_Flag table**

Code	Short_Name	Description	Notes
/	Partial Cover Flag	A flag indicating that the overlying material in the terrain component only partially covers the underlying material. It means a moderately extensive but discontinuous cover of surface material. Eolian veneer is an example.	

**Table 19: Contents of Domain\_Polygon\_Stability\_Classification\_Type table**

Code	Short_Name	Description	Notes
R	Reconnaissance		Populated by a lookup on Slope Stability Class.
D	Detailed		Populated by a lookup on Slope Stability Class.
E	Es		This code is now obsolete.

**Table 20: Contents of Domain\_Project\_Status table**

Code	Short_Name	Description	Notes
Started	Project Initiated	Project has been initiated; project boundary has been identified, funding and contractors are in place and project is underway. No data is available yet.	
Draft	Data Delivered	All project data and reports have been delivered to the data custodian. Quality Control has not yet been completed.	
QC	Data undergoing quality control process.		
Boundary Only	Non-standard data	This data is available, but is not in a standard format. The boundary is available for query.	
Cancelled	Project Cancelled	Project was cancelled after initiation or was not completed.	
Incomplete			
Complete	Project Complete and Available	All project deliverables are in standard format, and available from all sources.	

Source Data Missing	Source Data Missing	The source information is not currently available (reports, hard copy or digital maps, etc.) so QC can not proceed as the standards and legend information is unknown. Data is provided as is.	
Data Issues	Data Issues	There are known data issues with this project.	
Report Listed	Report Listed	The project exists but the location of the source report and data is unknown.	
Report Only	Report Only	The report and project boundary are available, but the detailed polygons are unavailable.	

**Table 21: Contents of Domain\_Project\_Type table**

Code	Short_Name	Description	Notes
PEM	Predictive Ecosystem Mapping	Predictive Ecosystem Mapping	temp
TEM	Terrestrial Ecosystem Mapping	Terrestrial Ecosystem Mapping is a RISC standard format that includes ecosystem, structural stage and bioterrain attributes.	
NEM	Terrestrial Ecosystem Mapping with no Bioterrain	Terrestrial Ecosystem Mapping with no Bioterrain	
TEMNSS	Terrestrial Ecosystem Mapping with Bioterrain and no Structural Stage	Terrestrial Ecosystem Mapping with Bioterrain and no Structural Stage	
NEMNSS	Terrestrial Ecosystem Mapping with no Bioterrain or Structural Stage	Terrestrial Ecosystem Mapping with no Bioterrain or Structural Stage	
TEMPRE	Biophysical Mapping	Pre-TEM (aka biophysical mapping); Precursor to the current RISC standard TEM	

NEMPRE	Biophysical Mapping with no Bioterrain	Pre-TEM (aka biophysical mapping) with no Bioterrain	
SEI	Sensitive Ecosystem Inventory Mapping	Sensitive Ecosystem Inventory Mapping	
TEMSEI	Terrestrial Ecosystem Mapping with Sensitive Ecosystem Inventory.	Terrestrial Ecosystem Mapping with interpreted Sensitive Ecosystem Inventory.	
TEMSET	Terrestrial Ecosystem Mapping with Sensitive Ecosystem Inventory and terrain stability attributes.	Terrestrial Ecosystem Mapping project with interpreted Sensitive Ecosystem Inventory, and terrain stability attributes.	
TEMTSM	Terrestrial Ecosystem Mapping with bioterrain and Terrain Stability attributes	Terrestrial Ecosystem Mapping with bioterrain and Terrain Stability attributes	
TSM	Terrain Stability Mapping	Terrain Stability Mapping	
TSMREC	Reconnaissance Terrain Stability Mapping	Reconnaissance Terrain Stability Mapping	
TSMDET	Detailed Terrain Stability Mapping	Detailed Terrain Stability Mapping	
TIM	Terrain Inventory Mapping	Terrain Inventory Mapping	The old code was TER, but this conflicted with the broad project types, and was changed at the end of 2009.
TBS	Bioterrain Mapping with Terrain Stability Classes	Bioterrain Mapping with Terrain Stability Classes	
TBT	Bioterrain Mapping	Bioterrain Mapping	
TIMSOI	Soil and Landform Mapping	Soil and Landform Mapping (contains soil and terrain inventory attributes)	The old code was TERSOI, but this conflicted with the broad project types, and was changed at the end of 2009.

SOIL	Soils Inventory Mapping	Soils Inventory Mapping	
PREM	Predictive Rare Ecosystem Mapping	Predictive Rare Ecosystem Mapping	
BPEM	Broad Predictive Ecosystem Mapping	Broad Predictive Ecosystem Mapping	
STS	Structural Stage Mapping	Structural Stage Mapping	
HAB	Habitat Mapping	Habitat Mapping (that does not follow the RISC standards for Wildlife Habitat Ratings mapping.)	
EST	Estuary Mapping	Estuary Mapping	
WET	Wetland Mapping	Wetland Mapping	
VEG	Vegetation Mapping	Vegetation Mapping	
FED	Federal Government Mapping	Mapping completed by the Federal Government - most likely soil mapping	Any project of this type should be reclassified based on their theme.
SSGEO	Soils & Surficial Geology	Soils & Surficial Geology	Retired. Replaced by TIM and SOIL project types.
SSLO	Soils & Slopes	Soils & Slopes	Retired. Replaced by SOIL project type.
SGEO	Surficial Geology	Surficial Geology	Retired. Replaced by TIM project type.
GenSGEO	Generalized Surface Geology	Generalized Surface Geology	Retired. Replaced by TIM project type.
SSGEOT	Soils, Surficial Geology & Topography	Soils, Surficial Geology & Topography	Retired. Replaced by TIM and SOIL project types.
SGEOD	Surficial Geology and Drainage	Surficial Geology and Drainage	Retired. Replaced by TIM project type.
SGEOSLO	Surficial Geology and Slopes	Surficial Geology and Slopes	Retired. Replaced by TIM project type.
SGEOST	Surficial Geology and Slopes and Topography	Surficial Geology and Slopes and Topography	Retired. Replaced by TIM project type.

SGEOSLOGH	Surficial Geology and Slopes and Topography	Surficial Geology and Slopes and Topography	Retired. Replaced by TIM project type.
SGEOSLOH	Surficial Geology and Slopes and Hazards	Surficial Geology and Slopes and Hazards	Retired. Replaced by TIM project type.
PEMWHR	Predictive Ecosystem Mapping with Wildlife Habitat Ratings	Predictive Ecosystem Mapping with an interpreted Wildlife Habitat Ratings	
PEMSDM	Predictive Ecosystem Mapping with a Species Distribution Mapping interpreted theme	Predictive Ecosystem Mapping with interpreted Species Distribution Mapping	
TEMWHR	Terrestrial Ecosystem Mapping with Wildlife Habitat Ratings	Terrestrial Ecosystem Mapping with interpreted Wildlife Habitat Ratings.	
TEMSDM	Terrestrial Ecosystem Mapping with Species Distribution Mapping	Terrestrial Ecosystem Mapping with interpreted Species Distribution Mapping	
TEMPRW	Biophysical Mapping with Wildlife Habitat Ratings	Pre-TEM (aka biophysical mapping - precursor to current RISC standard TEM) with interpreted Wildlife Habitat Ratings	
NEMPRW	Biophysical Mapping with no Bioterrain and with Wildlife Habitat Ratings	Pre-TEM (aka biophysical mapping) with no Bioterrain, and with interpreted Wildlife Habitat Ratings	
SEIWHR	Sensitive Ecosystem Inventory and Wildlife Habitat Ratings	Sensitive Ecosystem Inventory mapping and Wildlife Habitat Ratings. May or may not have been themed on an existing ecosystem mapping project, but was conducted independantly of the original project (which remains unchanged).	Identity related projects using the Related BAPIDS table, if applicable.

BEIWHR	Broad Ecosystem Inventory mapping with Wildlife Habitat Ratings	Broad Ecosystem Inventory mapping with interpreted Wildlife Habitat Ratings.	
BEISDM	Broad Ecosystem Inventory mapping and Species Distribution Mapping	Broad Ecosystem Inventory mapping with interpreted Species Distribution Mapping.	
SEIWHR	Sensitive Ecosystem Inventory mapping and Wildlife Habitat Ratings	Sensitive Ecosystem Inventory mapping with interpreted Wildlife Habitat Ratings	
SDM	Species Distribution Mapping	Species Distribution Mapping following the RISC standards. May have been themed from an existing TEM, PEM, BEI, SEI or other project, but was conducted independantly of the original project.	Identify base project types in the project title; Identity related projects using the Related BAPIDS table.
WHR	Wildlife Habitat Ratings	Wildlife Habitat Ratings following RISC standards. May have been themed from a TEM, PEM, BEI, SEI or other project, but was conducted independantly of the original project.	Identify base project types in the project title; Identity related projects using the Related BAPIDS table.
SOILSW	Soils Inventory Mapping and Wildlife Habitat Ratings	Soils Inventory Mapping with interpreted Wildlife Habitat Ratings	
PEMTBT	Predictive Ecosystem Mapping with Bioterrain Mapping	Predictive Ecosystem Mapping with Bioterrain Mapping attributes included (ecosystem and bioterrian attributes use the same mapped polygons).	Added 2012_06_18.
ESA	Environmentally Sensitive Areas Mapping	Environmentally Sensitive Areas polygons mapped ES1 and ES2. Areas with actual or potentially fragile or unstable soils that may deteriorate after harvest.	Older mapping type. No longer RISC standard. Superseded by TSM

EXC	Exceptions Mapping	Bioterrain and Terrestrial Ecosystem Exceptions Mapping. Used for modelling PEM and DSM.	Currently no digital standards
AGCAP	Agricultural Capability Mapping	Agricultural Capability Mapping	some mapping also uses Decile
DSM	Digital Soil Mapping	Soil inventory mapping based on modelling (rather than air photo interpretation).	Currently no RISC standards.
NEMWHR	Terrestrial Ecosystem Mapping with no Bioterrain and with Wildlife Habitat Ratings	Terrestrial Ecosystem Mapping with no Bioterrain and with Wildlife Habitat Ratings	

**Table 22: Contents of Domain\_Road\_Stability\_Flag table**

Code	Short_Name	Description	Notes
R	Slope stability qualifier for roads	Qualifier for roads. This symbol is used to modify terrain stability class IV in terrain that responds differently to logging and road building. It indicates a low likelihood of landslides after timber harvesting, but a moderate likelihood of slides as a result of road construction. (The mapper must provide a suitable description in the map legend). E.g. IVR	

**Table 23: Contents of Domain\_SEI\_Class table**

Code	Short_Name	Description	Notes
AP	Alpine		
AS	Antelope-brush Steppe		
BW	Broadleaf Woodland		
CB	Coastal Bluff		Retired code.

CL	Cliff		
DG	Disturbed Grasslands		Retired code.
FS	Seasonally Flooded Agricultural Fields		
FW	Freshwater		
GR	Grasslands		
HB	Herbaceous		
HT	Terrestrial Herbaceous		Retired code.
IT	Intertidal		
MF	Mature Forest		
NA	Non-Sensitive		Duplicate code.
NS	Non-Sensitive		Duplicate code.
OF	Old Forest		
RI	Riparian		
SG	Older Second Growth Forest		Retired code.
SS	Sagebrush Steppe		
SV	Spasely Vegetated		
WD	Woodland		
WN	Wetland		

**Table 24: Contents of Domain\_SEI\_Subclass table**

Code	Short_Name	Description	Notes
ac	aspen copse		
as	antelope-brush steppe		Duplicate code.
bd	broadleaf		
bg	bog		
cc	coastal		
cl	cliff		Retired code.
co	coniferous		
cs	coastal		

dg	disturbed		Duplicate code.
ds	disturbed		Duplicate code. Retired code.
du	dune		
ff	fringe		
fh	high bench		
fl	low bench		
fm	medum bench		
fn	fen		
fp	floodplain		Duplicate code.
fp	bench or forested floodplain		Duplicate code. Retired code.
g	gully		Retired code.
ge	gentle slope		
gr	grasslands		Duplicate code.
gr	shallow soil		Duplicate code.
gu	gully		
hb	herbaceous		
ic	inland		
kr	krummholz		
la	lake		
ms	marsh		
mx	mixed		
pd	pond		
pf	parkland forest		
ri	river		
ro	rock outcrop		
sc	shrub carr		
sd	coastal sand dunes		Retired code.
sh	shrub		Duplicate code.
sh	shrublands		Duplicate code.
sh	shrub floodplain		Duplicate code.
sp	spit		Duplicate code.
sp	swamp		Duplicate code.

ss	steep slope, shallow soils		Duplicate code.
ss	sagebrush steppe		Duplicate code.
st	steep slope, deep soils		
sw	shallow water		
ta	talus		
vs	vegetated shoreline		
wm	wet meadow		
as	aspen seepage		Duplicate code.

**Table 25: Contents of Domain\_Slope\_Stability\_Class table**

Code	Short_Name	Description	Notes
I	Stable: negligible landslide potential	A slope in which no significant stability problems exist. Refer to project specific criteria and definitions.	
II	Stable: very low landslide potential	A slope in which there is a very low likelihood of landslides following timber harvesting or road construction. However minor slumping is expected along road cuts especially for on or two years following construction. Refer to project specific criteria and definitions.	
III	Stable: low landslide potential	A slope on which stability problems can develop. Timber harvesting should not significantly reduce terrain stability; there is a low likelihood of landslide initiation following timber harvesting. Minor slumping is expected along road cuts, especially for one or two years following construction; there is a low likelihood of landslide initiation following road-building. Refer to project specific criteria and definitions.	

IV	Potentially unstable	A terrain polygon expected to contain areas with a moderate likelihood of landslide initiation following timber harvesting or road construction. Wet season construction will significantly increase the potential for road related landslides. A field inspection of these areas is to be made by a qualified terrain specialist prior to any development, to assess the stability of the affected area. Refer to project specific criteria and definitions.	
V	Unstable	A terrain polygon expected to contain areas with a high likelihood of landslide initiation following timber harvesting or road construction. Wet season construction will significantly increase the potential for road related landslides. A field inspection of these areas is to be made by a qualified terrain specialist prior to any development, to assess the stability of the affected area. Refer to project specific criteria and definitions.	
S	Stable	Stable. There is negligible to low likelihood of landslide initiation following timber harvesting or roadbuilding. Refer to project specific criteria and definitions.	
P	Potentially unstable	Potentially unstable. Expected to contain areas with a moderate likelihood of landslide initiation following timber harvesting or road building. Refer to project specific criteria and definitions.	
U	Unstable	Unstable, Natural landslide scars are present. Expected to contain areas with a high likelihood of landslide initiation following timber harvesting or road building. Refer to project specific criteria and definitions.	

ES1	High sensitivity - Extremely fragile or unstable soils	High. Areas having extremely fragile or unstable soils.	Old environmentally sensitive areas mapping soil categories and classes.
ES2	Moderate sensitivity- Fragile or unstable soils	Moderate. Areas having significantly fragile or unstable soils, but less than those for ES1.	Old environmentally sensitive areas mapping soil categories and classes.

**Table 26: Contents of Domain\_Slope\_Stability\_Class\_with\_Roads\_Qualifier\_Flag table**

Code	Short_Name	Description	Notes
I	Stable: negligible landslide potential	A slope in which no significant stability problems exist. Refer to project specific criteria and definitions.	
II	Stable: very low landslide potential	A slope in which there is a very low likelihood of landslides following timber harvesting or road construction. However minor slumping is expected along road cuts especially for on or two years following construction. Refer to project specific criteria and definitions.	
III	Stable: low landslide potential	A slope on which stability problems can develop. Timber harvesting should not significantly reduce terrain stability; there is a low likelihood of landslide initiation following timber harvesting. Minor slumping is expected along road cuts, especially for one or two years following construction; there is a low likelihood of landslide initiation following road- building. Refer to project specific criteria and definitions.	

IV	Potentially unstable	A terrain polygon expected to contain areas with a moderate likelihood of landslide initiation following timber harvesting or road construction. Wet season construction will significantly increase the potential for road related landslides. A field inspection of these areas is to be made by a qualified terrain specialist prior to any development, to assess the stability of the affected area. Refer to project specific criteria and definitions.	
V	Unstable	A terrain polygon expected to contain areas with a high likelihood of landslide initiation following timber harvesting or road construction. Wet season construction will significantly increase the potential for road related landslides. A field inspection of these areas is to be made by a qualified terrain specialist prior to any development, to assess the stability of the affected area. Refer to project specific criteria and definitions.	
S	Stable	Stable. There is negligible to low likelihood of landslide initiation following timber harvesting or roadbuilding. Refer to project specific criteria and definitions.	
P	Potentially unstable	Potentially unstable. Expected to contain areas with a moderate likelihood of landslide initiation following timber harvesting or road building. Refer to project specific criteria and definitions.	
U	Unstable	Unstable, Natural landslide scars are present. Expected to contain areas with a high likelihood of landslide initiation following timber harvesting or road building. Refer to project specific criteria and definitions.	

IVR	Potentially unstable following road construction	Expected to contain areas with a moderate likelihood of landslide initiation following road construction and a low or very low likelihood of landslide initiation following timber harvesting.	
ES1	High sensitivity - Extremely fragile or unstable soils	High sensitivity. Areas having extremely fragile or unstable soils.	
ES2	Moderate sensitivity - Fragile or unstable soils	Moderate sensitivity. Areas having significantly fragile or unstable soils, but less than those for ES1.	

**Table 27: Contents of Domain\_Stand\_Composition\_Modifier table**

Code	Short_Name	Description	Notes
C	coniferous	Greater than 3/4 of total tree layer cover is coniferous.	
B	broadleaf	Greater than 3/4 of total tree layer cover is broadleaf.	
M	mixed	Neither coniferous or broadleaf account for greater than 3/4 of total tree layer cover.	

**Table 28: Contents of Domain\_Structural\_Stage table**

Code	Short_Name	Description	Notes
1	Sparse/bryoid	Initial stages of primary and secondary succession; bryophytes and lichens often dominant, can be up to 100%; time since disturbance less than 20 years for normal forest succession, may be prolonged (50–100+ years) where there is little or no soil development (bedrock, boulder fields); total shrub and herb cover less than 20%; total tree layer cover less than 10%.	

1a	Sparse	Less than 10% vegetation cover	
1b	Bryoid	Bryophyte- and lichen-dominated communities (greater than 1/2 of total vegetation cover).	
2	Herb	Early successional stage or herbaceous communities maintained by environmental conditions or disturbance (e.g., snow fields, avalanche tracks, wetlands, grasslands, flooding, intensive grazing, intense fire damage); dominated by herbs (forbs, graminoids, ferns); some invading or residual shrubs and trees may be present; tree layer cover less than 10%, shrub layer cover less than or equal to 20% or less than 1/3 of total cover, herb-layer cover greater than 20%, or greater than or equal to 1/3 of total cover; time since disturbance less than 20 years for normal forest succession; many herbaceous communities are perpetually maintained in this stage.	
2a	Forb-dominated	Herbaceous communities dominated (greater than 1/2 of the total herb cover) by non-graminoid herbs, including ferns.	
2b	Graminoid-dominated	Herbaceous communities dominated (greater than 1/2 of the total herb cover) by grasses, sedges, reeds, and rushes.	
2c	Aquatic	Herbaceous communities dominated (greater than 1/2 of the total herb cover) by floating or submerged aquatic plants; does not include sedges growing in marshes with standing water (which are classed as 2b).	

2d	Dwarf shrub	Communities dominated (greater than 1/2 of the total herb cover) by dwarf woody species such as <i>Phyllodoce empetriformis</i> , <i>Cassiope mertensiana</i> , <i>Cassiope tetragona</i> , <i>Arctostaphylos arctica</i> , <i>Salix reticulata</i> , and <i>Rhododendron lapponicum</i> . (See list of dwarf shrubs assigned to the herb layer in the Field Manual for Describing Terrestrial Ecosystems).	
3	Shrub/Herb	Early successional stage or shrub communities maintained by environmental conditions or disturbance (e.g., snow fields, avalanche tracks, wetlands, grasslands, flooding, intensive grazing, intense fire damage); dominated by shrubby vegetation; seedlings and advance regeneration may be abundant; tree layer cover less than 10%, shrub layer cover greater than 20% or greater than or equal to 1/3 of total cover.	
3a	Low shrub	Communities dominated by shrub layer vegetation less than 2 m tall; may be perpetuated indefinitely by environmental conditions or repeated disturbance; seedlings and advance regeneration may be abundant; time since disturbance less than 20 years for normal forest succession.	
3b	Tall shrub	Communities dominated by shrub layer vegetation that are 2–10 m tall; may be perpetuated indefinitely by environmental conditions or repeated disturbance; seedlings and advance regeneration may be abundant; time since disturbance less than 40 years for normal forest succession.	

4	Pole/Sapling	Trees greater than 10 m tall, typically densely stocked, have overtopped shrub and herb layers; younger stands are vigorous (usually greater than 10–15 years old); older stagnated stands (up to 100 years old) are also included; self-thinning and vertical structure not yet evident in the canopy – this often occurs by age 30 in vigorous broadleaf stands, which are generally younger than coniferous stands at the same structural stage; time since disturbance is usually less than 40 years for normal forest succession; up to 100+ years for dense (5000–15 000+ stems per hectare) stagnant stands.	
5	Young Forest	Self-thinning has become evident and the forest canopy has begun differentiation into distinct layers (dominant, main canopy, and overtopped); vigorous growth and a more open stand than in the pole/sapling stage; time since disturbance is generally 40–80 years but may begin as early as age 30, depending on tree species and ecological conditions.	
6	Mature Forest	Trees established after the last disturbance have matured; a second cycle of shade tolerant trees may have become established; understories become well developed as the canopy opens up; time since disturbance is generally 80–140 years for biogeoclimatic group A5 and 80–250 years for group B.6	

7	Old Forest	Old, structurally complex stands composed mainly of shade-tolerant and regenerating tree species, although older seral and long-lived trees from a disturbance such as fire may still dominate the upper canopy; snags and coarse woody debris in all stages of decomposition typical, as are patchy understories; understories may include tree species uncommon in the canopy, due to inherent limitations of these species under the given conditions; time since disturbance generally greater than 140 years for biogeoclimatic group A5 and greater than 250 years for group B.6	
0	No Data	No data available.	
1c	Lichen	lichen dominated	
7a	Old Forest	Stands with moderately to well developed structural complexity; stands comprised mainly of shade-tolerant tree species in canopy and regeneration layers, although older seral trees from a disturbance such as fire may still dominate the upper canopy; fire-maintained stands may have a 'single-storied' appearance (see modifiers); time since standreplacing disturbance is generally 140 - 250 years for biogeoclimatic units with Natural Disturbance Type (NDT) 32 and > 250 years for NDT 1, 2 & 4.3 See BECdb database <sup>4</sup> for the current NDTs	

7b	Very Old Forest	Very old stands having complex structure with abundant large-sized trees, snags and coarse woody debris (size is relative to the specific ecosystem); snags and CWD occur in all stages of decomposition; stands are comprised entirely of shade-tolerant overstorey species with well-established canopy gaps; time since stand-replacing disturbance generally > 250 years for BGCs with Natural Disturbance Types (NDT) 32 and > 400 years for NDT 1, 2 & 4.3	
----	-----------------	--	--

**Table 29: Contents of Domain\_Structural\_Stage\_Modifier table**

Code	Short_Name	Description	Notes
s	single storied	Closed forest stand dominated by the overstory crown class (dominant and co-dominant trees); intermediate and suppressed trees account for less than 20% of all crown classes combined <sup>3</sup> ; advance regeneration in the understory is generally sparse.	
t	two storied	Closed forest stand co-dominated by distinct overstory and intermediate crown classes; the suppressed crown class is lacking or accounts for less than 20% of all crown classes combined <sup>3</sup> ; advance regeneration is variable.	
m	multistoried	Closed forest stand with all crown classes well represented; each of the intermediate and suppressed classes account for greater than 20% of all crown classes combined; advance regeneration is variable.	

i	irregular	Forest stand with very open overstory and intermediate crown classes (totaling less than 30% cover), and well-developed suppressed crown class; advance regeneration is variable.	
h	shelterwood	Forest stand with very open overstory (less than 20% cover) and well-developed suppressed crown class and/or advance regeneration in the understory; intermediate crown class is generally absent.	

**Table 30: Contents of Domain\_Surface\_Erosion\_Potential table**

Code	Short_Name	Description	Notes
VL	Very low	No or only very minor surface erosion. Refer to project specific criteria and definitions.	
L	Low	Expect minor erosion of fines in ditch lines and disturbed soils. Refer to project specific criteria and definitions.	
M	Moderate	Expect moderate erosion when water is channeled down road surfaces or ditches. Refer to project specific criteria and definitions.	
H	High	Significant erosion problems can be created when water is channeled onto or over exposed soil on these sites. Refer to project specific criteria and definitions.	
VH	Very high	Severe surface and gully erosion problems can be created when water is channeled onto or over these sites. Refer to project specific criteria and definitions.	

**Table 31: Contents of Domain\_Surface\_Erosion\_Sedimentation table**

Code	Short_Name	Description	Notes
------	------------	-------------	-------

vl	very low	very low likelihood of sediment originating from surface erosion in the polygon will enter a stream. Refer to project specific criteria and definitions.	
l	low	low likelihood of sediment originating from surface erosion in the polygon will enter a stream. Refer to project specific criteria and definitions.	
m	medium	moderate likelihood of sediment originating from surface erosion in the polygon will enter a stream. Refer to project specific criteria and definitions.	
h	high	high likelihood of sediment originating from surface erosion in the polygon will enter a stream. Refer to project specific criteria and definitions.	
vh	very high	very high likelihood of sediment originating from surface erosion in the polygon will enter a stream. Refer to project specific criteria and definitions.	

**Table 32: Contents of Domain\_Surface\_Expression table**

Code	Short_Name	Description	Notes
a	moderate slope	An unidirectional (planar) surface with a slope 16 to 26° (27 to 50%), and a smooth, longitudinal profile that is either straight, or slightly concave or convex; local surface irregularities generally have a relief of less than 1 metre.	

b	blanket	A layer of unconsolidated material thick enough to mask minor irregularities of the surface of the underlying material, but still conforms to the general underlying topography. A blanket is greater than 1 metre thick and possesses no constructional forms typical of the material's genesis; outcrops of the underlying unit are rare.	
c	cone(s)	A cone or sector of a cone with a relatively smooth surface, and mostly steeper than 15° (26%), and a longitudinal profile that is either straight, or slightly concave or convex.	
d	depressions(s)	Circular or irregular area of lower elevation (hollow) than the surrounding terrain and delimited by an abrupt break in slope; side slopes within the depression are steeper than the surrounding terrain; depressions are two or more metres in depth.	
f	fan(s)	A fan is a relatively smooth sector of a cone with a slope gradient from apex to toe up to and including 15° (26%), and a longitudinal profile that is either straight, or slightly concave or convex.	
h	hummock(s)	Steep sided hillock(s) and hollow(s) with multidirectional slopes dominantly between 15 and 35° (26 to 70%) if composed of unconsolidated materials; bedrock slopes may be steeper. Local relief is greater than 1 metre. In plan, an assemblage of non-linear, generally chaotic forms that are rounded or irregular in cross-profile.	

j	gentle slope	An unidirectional (planar) surface with slope gradient 4 to 15° (7 to 26%), and a smooth, longitudinal profile that is either straight, or slightly concave or convex; local surface irregularities generally have a relief of less than 1 metre.	
k	moderately steep slope	An unidirectional (planar) surface with a slope gradient 27 to 35° (50 to 70%), and a smooth, longitudinal profile that is either straight, or slightly concave or convex; local surface irregularities generally have a relief of less than 1 metre.	
m	rolling	Elongate hillock(s) with slopes dominantly between 3 and 15° (5 to 26%) with local relief greater than 1 metre. In plan, an assemblage of parallel or sub-parallel linear forms with subdued relief.	
p	plain	A level or very gently sloping, unidirectional (planar) surface with gradients 0 to 3° (0 to 5%); local surface irregularities generally have a relief of less than 1 metre.	
r	ridges	Elongate hillock(s) with slopes dominantly between 15 and 35° (26 to 70%) if composed of unconsolidated materials; bedrock slopes may be steeper. Local relief is greater than 1 metre. In plan, an assemblage of parallel or sub-parallel linear forms.	
s	steep slopes	An unidirectional (planar) surface with gradients greater than 35° (70%), and a smooth longitudinal profile that is either straight, or slightly concave or convex; local surface irregularities generally have a relief of less than 1 metre; bedrock slopes may be more irregular.	

t	terrace(s)	A single or assemblage of step-like forms where each step-like form consists of a scarp face and a horizontal or gently inclined surface (tread) above it.	
u	undulating	Gently sloping hillock(s) and hollow(s) with multidirectional slopes generally up to 15° (26%); local relief is greater than 1 metre. In plan, an assemblage of non-linear, generally chaotic forms that are rounded or irregular in cross-profile.	
v	veneer	A layer of unconsolidated materials too thin to mask the minor irregularities of the surface of the underlying material. It is between about 10 cm and 1m in thickness, and possesses no constructional form typical of the material genesis.	
w	mantle of variable thickness	A layer or discontinuous layer of surficial material of variable thickness (typically 0 to 3 m) that fills or partly fills depressions in an irregular substrate. It is generally too thin to mask prominent irregularities in the underlying material.	
x	thin veneer	A very thin layer of unconsolidated material about 2-20 cm in thickness.	
1	Place Holder 1	From Terrain Translation Project - Code 1.	
2	Place Holder 2	From Terrain Translation Project - Code 2.	
3	Place Holder 3	From Terrain Translation Project - Code 3.	
4	Place Holder 4	From Terrain Translation Project - Code 4.	
5	Place Holder 5	From Terrain Translation Project - Code 5.	

**Table 33: Contents of Domain\_Surficial\_Material table**

Code	Short_Name	Description	Notes
------	------------	-------------	-------

A	Anthropogenic Material	Artificial materials, or geological materials so modified by human activities that their original physical properties (e.g. structure, cohesion, compaction) have been drastically altered.	Assumed status of formative process = Active (A)
C	Colluvium	Materials that have reached their present positions as a result of direct, gravity-induced movement involving no agent of transportation such as water or ice, although the moving material may have contained water and/or ice.	Assumed status of formative process = Active (A)
CG	Glaciocolluvium	Materials that have reached their present positions as a result of direct, gravity-induced movement involving no agent of transportation such as water or ice; although the moving material may have contained water and/or ice. Must be evidence of ice contact (e.g. kettle wholes or landslide onto ice)	Assumed status of formative process = Inactive (I). Only used where evidence of ice contact is present (e.g., kettle wholes or landslide onto ice)
D	Weathered Bedrock (in situ)	Bedrock decomposed or disintegrated in situ by processes of mechanical and/or chemical weathering.	Assumed status of formative process = Active (A)
E	Eolian	Materials transported and deposited by wind action.	Assumed status of formative process = Inactive (I)
F	Fluvial Material	Materials transported and deposited by streams and rivers; synonymous with alluvial.	Assumed status of formative process = Inactive (I)
FG	Glaciofluvial Material	Materials that exhibit clear evidence of having been deposited by glacial meltwater streams either directly in front of, or in contact with, glacier ice.	Assumed status of formative process = Inactive (I)
I	Ice	Areas of snow and ice where evidence of active glacier movement is present.	Assumed status of formative process = Active (A)

L	Lacustrine Material	Sediments that have settled from suspension and underwater gravity flows, such as turbidity currents, in bodies of standing fresh water, or sediments that have accumulated at their margins through the action of waves.	Assumed status of formative process = Inactive (I)
LG	Glaciolacustrine Material	Lacustrine materials deposited in or along the margins of glacial (ice-dammed) lakes; includes sediments that were released by the melting of floating ice.	Assumed status of formative process = Inactive (I)
M	Morainal Material (till)	Material deposited directly by glacier ice without modification by any other agent of transportation.	Assumed status of formative process = Inactive (I)
N	Not Classified	Used for areas within a study area boundary that are not mapped for a variety of reasons.	Used for areas not mapped within the study area.
O	Organic Material	Sediments composed largely of organic materials resulting from the accumulation of vegetative matter. They contain at least 30% organic matter by weight (17% or more organic carbon).	Assumed status of formative process = Active (A)
R	Bedrock	Bedrock outcrops and rock covered by a thin mantle (up to 10 cm thick) of unconsolidated or organic materials.	
U	Undifferentiated Material	A layered sequence of several types of surficial material outcropping on a steep, erosional (scarp) slope.	
V	Volcanic Material	Unconsolidated pyroclastic sediments.	Assumed status of formative process = Inactive (I)
W	Marine Material	Sediments deposited in salt or brackish water bodies by settling from suspension and submarine gravity flows, or sediments that have accumulated in the littoral zone through shoreline processes such as wave action and longshore drift.	Assumed status of formative process = Inactive (I)

WG	Glaciomarine Material	Sediments of glacial origin laid down in a marine environment in close proximity to glacier ice. Includes materials settling from suspension, from submarine gravity flows, and settled particles released by melting of floating ice or ice shelves.	Assumed status of formative process = Inactive (I)
1	Ablation Till	1 replaces 'A' = Ablation Till on some pre-1976 landform maps. Used only for converting 1:50,000 non-standard terrain datasets to current standards. Do not use.	Assumed status of formative process = Inactive (I)

**Table 34: Contents of Domain\_Surficial\_Material\_Qualifier table**

Code	Short_Name	Description	Notes
A	active		
G	glacial		should be moved to SURFM field.
I	inactive		
4	Place Holder 4	From Terrain Translation Project - Place Holder 4.	

**Table 35: Contents of Domain\_TRIM\_Version table**

Code	Short_Name	Description	Notes
1	Original TRIM Product		
2	TRIM 2		

**Table 36: Contents of Domain\_Terrain\_Texture table**

Code	Short_Name	Description	Notes
a	blocks	Angular particles greater than 256 mm in size.	
b	boulders	Rounded particles greater than 256 mm in size.	
c	clay	Particles less than 2 µm (less than 0.002 mm) in size.	

d	mixed fragments	A mixture of rounded and angular particles greater than 2 mm in size.	
e	fibric	The least decomposed of all organic materials. It contains amounts of well-preserved fibre (40% or more) that can be identified as to botanical origin upon rubbing.	used only with surfm = O or F
g	gravel	A mixture of two or more size ranges of rounded particles greater than 2 mm in size (e.g. a mixture of boulders, cobbles and pebbles); may include interstitial sand.	
h	humic	Organic material at an advanced stage of decomposition; it has the lowest amount of fibre, the highest bulk density, and the lowest saturated water holding capacity of the organic materials; fibres that remain after rubbing constitute less than 10% of the volume of the material.	used only with surfm = O or F
k	cobbles	Rounded particles between 64 and 256 mm in size.	
m	mud	A mixture of silt and clay; may also contain a minor fraction of fine sand.	
p	pebbles	Rounded particles between 64 and 256 mm in size.	
r	rubble	Angular particles between 2 and 256 mm; may include interstitial sand. Note: In general, little or no fine material will be visible on a rubble surface. At depth, sand and smaller particles may occupy the interstices between the coarser particles.	
s	sand	Particles between .0625 and 2 mm in size.	
u	mesic	Organic material at a stage of decomposition intermediate between fibric and humic.	used only with surfm = O or F

x	angular fragments	A mixture of angular fragments greater than 2 mm in size (i.e., a mixture of blocks and rubble).	
y	shells	A sediment consisting dominantly of shells and/or shell fragments.	
z	silt	Particles between 2 µm and .0625 mm in size.	
2	Place Holder 2	From Terrain Translation - Code 2.	
1	Place Holder 1	From Terrain Translation - Code 1.	
3	Place Holder 3	From Terrain Translation - Code 3.	

**Table 37: Contents of Domain\_Thickness\_Class table**

Code	Short_Name	Description	Notes
A	very thin	Less than 20 cm thick	
B	thin	20-100 cm thick	
C	thick	101-300 cm thick	
D	very thick	more than 300 cm thick	
N	not applicable	not applicable	

**Table 38: Contents of Domain\_Tracker\_File\_Status table**

Code	Short_Name	Description	Notes
Y	File(s) Exist	File(s) were found for this BAPID in the data folder structure	
N	File(s) Do Not Exist	File not found for this BAPID, either because no such file was submitted for this BAPID, or because the project files for this BAPID have not yet been loaded into the folder structure	

**Table 39: Contents of Domain\_VLD\_DIST table**

Code	Short_Name	Description	Notes
A	Atmosphere-related effects		Requires cross field validation.

Ae	climatic extremes		Requires cross field validation.
Aeco	extreme cold		Requires cross field validation.
Aeht	extreme heat		Requires cross field validation.
Aegl	glaze ice		Requires cross field validation.
Aeha	severe hail		Requires cross field validation.
Aesn	heavy snow		Requires cross field validation.
Ap	atmospheric pollution		Requires cross field validation.
Apac	acid rain		Requires cross field validation.
Apto	toxic gases		Requires cross field validation.
Aw	windthrow		Requires cross field validation.
B	Biotic effects		Requires cross field validation.
Bb	beaver tree cutting		Requires cross field validation.
Bd	domestic grazing/browsing		Requires cross field validation.
Bw	wildlife grazing/browsing		Requires cross field validation.
Be	excrement accumulation		Requires cross field validation.
Bi	insects		Requires cross field validation.
Biki	insect kill		Requires cross field validation.
Biin	infestation		Requires cross field validation.
Bp	disease		Requires cross field validation.
Bv	aggressive vegetation		Requires cross field validation.
D	Disposals		Requires cross field validation.
Dc	chemical spill or disposal		Requires cross field validation.
De	effluent disposal		Requires cross field validation.
Dg	domestic garbage disposal		Requires cross field validation.
Do	oil spill or disposal		Requires cross field validation.
Dr	radioactive waste disposal or exposure		Requires cross field validation.
F	Fires		Requires cross field validation.

Fc	overstorey crown fire		Requires cross field validation.
Fg	light surface (ground) fire		Requires cross field validation.
Fr	repeated light surface fires		Requires cross field validation.
Fs	severe surface fire		Requires cross field validation.
Fi	repeated severe surface fires		Requires cross field validation.
Fl	burning of logging slash		Requires cross field validation.
Flbb	broadcast burn		Requires cross field validation.
Flpb	piled and burned		Requires cross field validation.
Flwb	burned windrows		Requires cross field validation.
L	Forest harvesting		Requires cross field validation.
Ll	land clearing (includes abandoned agriculture)		Requires cross field validation.
La	patch cut system		Requires cross field validation.
Lawr	with reserves		Requires cross field validation.
Lc	clearcut system (if slashburned, see also "Fires")		Requires cross field validation.
Lcwr	with reserves (patch retention)		Requires cross field validation.
Ld	seed tree system		Requires cross field validation.
Ldun	uniform		Requires cross field validation.
Ldgr	grouped		Requires cross field validation.
Le	selection system		Requires cross field validation.
Legr	group selection		Requires cross field validation.
Lesi	single tree		Requires cross field validation.
Lest	strip		Requires cross field validation.
Ls	shelterwood system		Requires cross field validation.
Lsun	uniform		Requires cross field validation.
Lsgr	group		Requires cross field validation.

Lsst	strip		Requires cross field validation.
Lsir	irregular		Requires cross field validation.
Lsna	natural		Requires cross field validation.
Lsnu	nurse tree		Requires cross field validation.
Lo	coppice		Requires cross field validation.
M	Plant or site modification effects		Requires cross field validation.
Mc	herbicide use (chemical)		Requires cross field validation.
Mf	fertilization (specify type under "Notes")		Requires cross field validation.
Mi	irrigation		Requires cross field validation.
Mg	seeded or planted to grasses		Requires cross field validation.
Mh	seeded or planted to herbs		Requires cross field validation.
Ms	planted or seeded to shrubs		Requires cross field validation.
Mt	planted or seeded to trees		Requires cross field validation.
P	Gathering or removal of plant products		Requires cross field validation.
Pf	firewood gathering		Requires cross field validation.
Pm	mushrooms		Requires cross field validation.
Po	moss		Requires cross field validation.
Ps	shrubs (e.g., salal, falsebox)		Requires cross field validation.
Px	other (specify under "Notes")		Requires cross field validation.
S	Soil disturbance		Requires cross field validation.
Sa	cultivation (agricultural)		Requires cross field validation.
Sc	compaction		Requires cross field validation.

Sg	gouging (>5cm into mineral soil)		Requires cross field validation.
Ss	scalping (forest floor removed)		Requires cross field validation.
Sf	sidecast/fill		Requires cross field validation.
Sr	road bed, abandoned		Requires cross field validation.
St	railway, abandoned		Requires cross field validation.
Se	excavation		Requires cross field validation.
Sm	mining effects		Requires cross field validation.
Smpt	placer tailings		Requires cross field validation.
Smrq	rock quarrying (including open pit mines)		Requires cross field validation.
Smta	tailings		Requires cross field validation.
Sp	mechanical site preparation		Requires cross field validation.
Spbb	brush blading		Requires cross field validation.
Spds	drag scarification (anchor chain or shark fin)		Requires cross field validation.
Spdt	disc trenching		Requires cross field validation.
Spmd	mounding		Requires cross field validation.
Spps	patch scarification		Requires cross field validation.
Spvp	V-plowing		Requires cross field validation.
Spxx	other (specify under "Notes")		Requires cross field validation.
T	Terrain-related effects		Requires cross field validation.
Ta	avalanche		Requires cross field validation.
Td	recent deglaciation		Requires cross field validation.
Te	eolian (active deflation or deposition)		Requires cross field validation.

Ts	terrain failures (active/recent slumps, slides, solifluction, etc.)		Requires cross field validation.
Tv	volcanic activity		Requires cross field validation.
W	Water-related effects		Requires cross field validation.
Wi	innundation (including temporary inundation resulting from beaver activity)		Requires cross field validation.
Ws	temporary seepage (usually artificial; excludes intermittent seepage from climatic conditions)		Requires cross field validation.
Wd	water table control (diking, damming)		Requires cross field validation.
We	water table depression (associated with extensive water extraction from wells)		Requires cross field validation.
X	Miscellaneous		Requires cross field validation.
Bt	Biotic effects		Requires cross field validation.

**Table 40: Contents of Domain\_VLD\_GEOPSCM table**

Code	Short_Name	Description	Notes
D	Deflation	The removal of sand and silt sized particles from unconsolidated materials by wind action (i.e., wind erosion).	

K	Karst Processes	Processes associated with the solution of carbonates (e.g., limestone, dolomite) and other soluble rocks; includes surface and underground weathering, and collapse and subsidence resulting from solution.	
P	Piping	Subterranean erosion of surficial materials by flowing water that results in the formation of tubular conduits due to the removal of particulate matter.	
V	Gully Erosion	The modification of unconsolidated and consolidated surfaces by various processes such as running water, mass movement and snow avalanching, resulting in the formation of parallel and sub-parallel long, narrow ravines.	
W	Washing	The modification of a surficial material by wave action or, occasionally, by running water (e.g., meltwater) resulting in lag deposits formed by the removal of fines from a mixture of coarse and fine particles.	
B	Braiding Channel	Active channel zone is characterized by many diverging and converging channels separated by unvegetated bars. Many channels are dry at moderate and low flows, but during major floods, the entire channel zone may be occupied by flowing water.	
I	Irregularly Sinuous Channel	A clearly defined main channel displaying irregular turns and bends without repetition of similar features; backchannels may be common, and minor side channels and a few bars and islands may be present, but regular and irregular meanders are absent.	

J	Anastamosing Channel	A channel zone where channels diverge and converge around many islands. The islands are vegetated and have surfaces that are relatively far above mean maximum discharge levels. Some channels are dry at moderate or low flows.	
M	Meandering Channel	A clearly defined channel characterized by a regular and repeated pattern of bends with relatively uniform amplitude and wave length.	
A	Snow Avalanches	Rapid downslope movement of snow and ice, as well as incorporated rock, surficial material and vegetation debris, by flowing or sliding.	
F	Slow Mass Movement	Slow downslope movement of masses of cohesive or non-cohesive surficial material and/or bedrock by creeping, flowing or sliding.	
R	Rapid Mass Movement	Rapid downslope movement by falling, rolling, sliding or flowing of dry, moist or saturated debris derived from surficial material and/or bedrock.	
C	Cryoturbation	Movement of surficial materials by heaving and/or churning due to frost action (repeated freezing and thawing).	
N	Nivation	Erosion of bedrock or surficial materials beneath and along the margin of snow patches by freeze-thaw processes (frost shattering and heave), meltwater action and snow creep	
S	Solifluction	Slow gravitational downslope movement of saturated non-frozen overburden across a frozen or otherwise impermeable substrate.	
Z	General Periglacial Processes	Solifluction, cryoturbation and nivation occurring together within a single terrain unit.	

X	Permafrost	Processes controlled by the presence of permafrost, and permafrost aggradation or degradation. "Permafrost" is earth material whose temperature remains below 0°C continuously for two years or longer.	
E	Channeled by Meltwater	Erosion and channel formation by meltwater alongside, beneath, or in front of a glacier or ice sheet.	
H	Kettled	Depressions in surficial materials resulting from the melting of buried or partially buried glacier ice.	
U	Inundated	Terrain seasonally under standing water which results from high watertable.	
L	Surface Seepage	Abundant surface seepage, or evidence of substantial seasonal seepage, is provided by physical or vegetation indicators.	
G	Antroprogenic	Ground altered by anthroprogenic processes. Used when the original matial maintains much of it's character but is subject to active anthroprogenic processes.	
Af	Snow Avalanches - major avalanche tracks	in zones of coniferous forest: broad avalanche track(s) occupied by predominantly shrubby, deciduous vegetation; conifers are largely absent.	
Am	Snow Avalanches - minor avalanche tracks	in zones of coniferous forest: relatively narrow predominantly shrubby tracks; generally narrower than the height of adjacent trees	
Aw	Snow Avalanches - mixed major and minor avalanche tracks	polygon includes both major and minor avalanche tracks	

Ao	Snow Avalanches - old avalanche tracks	track are clearly visible on air photos but are less well defined than active avalanche tracks because they are partly or completely occupied by young conifers	
Fc	Slow Mass Movement - soils creep	slow movement of soil	
Fg	Slow Mass Movement - rock creep	slow movement of angular debris under periglacial conditions (e.g. rock glaciers)	
Fk	Slow Mass Movement - tension cracks	open fissures, commonly near crest of slope	
Fp	Slow Mass Movement - lateral spread in bedrock	lateral extension of a fractured mass of bedrock; movement is predominantly horizontal	
Fj	Slow Mass Movement - lateral spread in surficial material	lateral extension of a fractured mass of surficial material; movement is predominantly horizontal	
Rf	Rapid Mass Movement - debris fall	rapid descent of a mass of surficial material by falling, bouncing and rolling.	
Rb	Rapid Mass Movement - rock fall	rapid descent of masses of bedrock by falling, bouncing and rolling	
Rd	Rapid Mass Movement - debris flow	rapid flow of saturated debris torrent	
Rt	Rapid Mass Movement - debris torrent	rapid flow of a mixture of water, earth and vegetation debris down a steep, well-defined stream channel.	
Fe	Slow Mass Movement - earthflow	slow viscous flow of material containing a high proportion of silt and clay	
Fm	Slow Mass Movement - slump in bedrock	slow sliding of internally cohesive masses of bedrock along a slip plane that is concave upward or planar	

Fu	Slow Mass Movement - slump in surficial material	slow sliding of internally cohesive masses of surficial material along a slip plane that is concave upward or planar	
Fx	Slow Mass Movement - slump-earthflow	slow movement of combined slump (upper part) and earthflow (lower part)	
Fs	Slow Mass Movement - debris slide	slow sliding of disintegrating mass of surficial material	
Fr	Slow Mass Movement - rock slide	Slow descent of large masses of disintegrating bedrock by sliding	
Re	Rapid Mass Movement - earthflow	rapid viscous flow of material containing a high proportion of silt and clay	
Rm	Rapid Mass Movement - slump in bedrock	rapid sliding of internally cohesive masses of bedrock along a slip plane that is concave upward or planar	
Ru	Rapid Mass Movement - slump in surficial material	rapid sliding of internally cohesive masses of surficial material along a slip plane that is concave upward or planar	
Rx	Rapid Mass Movement - slump-earthflow	rapid movement of combined slump (upper part) and earthflow (lower part)	
Rs	Rapid Mass Movement - debris slide	rapid sliding of disintegrating mass of surficial material	
Rr	Rapid Mass Movement - rock slide	rapid descent of large masses of disintegrating bedrock by sliding	
Zp	Periglacial Processes - palsas, peat plateaus	flat-topped or rounded mounds and ridges of peat or peaty earth formed by differential frost-heaving; contain perennial ice lenses and a core of permafrost e.g., Op-Zp	

Zt	Periglacial Processes - thermokarst subsidence	ground-surface depressions which are created by the thawing of ice-rich permafrost and associated soil subsidence e.g., zLpd-Zt	
Ze	Periglacial Processes - thermokarst thermal erosion by water	gullies and depressions created by melting of ice-rich permafrost due to heat transfer from water bodies; either streams or lakes e.g., mWj-ZeV	
Zf	Periglacial Processes - thaw-flow slides	slope failures caused by the thawing of permafrost e.g., dzsMb-Zf	
Zw	Periglacial Processes - ice wedge polygons	intersecting narrow cracks that contain ice-wedges comprise polygonal patterns on the ground underlain by permafrost e.g., sFt-Zw	
Zr	Periglacial Processes - patterned ground	a collective term for the regular surface features, such as stone polygons, frost boils and stone stripes, that are characteristic of ground that is subject to intensive frost (freeze-thaw) action e.g., rCv-Zr	
Xp	Permafrost Processes - palsas, peat plateaus	flat-topped or rounded mounds and ridges of peat or peaty earth formed by differential frost-heaving; contain perennial ice lenses and a core of permafrost e.g., Op-Xp	
Xt	Permafrost Processes - thermokarst subsidence	ground-surface depressions which are created by the thawing of ice-rich permafrost and associated soil subsidence e.g., zLpd-Xt	
Xf	Permafrost Processes - thaw-flow slides	slope failures caused by the thawing of permafrost e.g., dzsMb-Xf	
Xw	Permafrost Processes - ice wedge polygons	intersecting narrow cracks that contain ice-wedges comprise polygonal patterns on the ground underlain by permafrost e.g., sFt-Xw	
Xr	Permafrost Processes - patterned ground	a collective term for the regular surface features, such as stone polygons, frost boils and stone stripes, that are characteristic of ground that is subject to intensive frost (freeze-thaw) action e.g., rCv-Xr	

Bu	Braiding Channel - progressive bank erosion	persistent bank erosion indicated by the presence of undercut banks, overhanging and fallen trees, and much timber in the channel; old air photos and historical information can also be used as evidence e.g., sFAp-Bu	
Ba	Braiding Channel - abrupt channel diversion; avulsion	the present channel has recently shifted abruptly to a previously vegetated area; the former channel can be identified by air photos or on the ground e.g., gFAf-Ba	
Bb	Braiding Channel - backchannels	small channels which may or may not be connected to the main channel e.g., sgFAp-Bb	
Bp	Braiding Channel - permanent river-fed backchannels	backchannels joined to the main channel at the upstream end, allowing flowing or standing water all year e.g., sgFAp-Bp	
Be	Braiding Channel - ephemeral river-fed backchannels	backchannels joined to the main channel at the upstream end, but dry during the late summer e.g., gFAf-Be	
Bs	Braiding Channel - spring-fed backchannels	backchannels in which water is maintained during the late summer by the emergence of floodplain groundwater e.g., sFAp-Bs	
Bt	Braiding Channel - permanent tributary-fed backchannels	either flowing or standing water from tributaries is present in the backchannel all year e.g., sgFAp-Bt	
Bd	Braiding Channel - ephemeral tributary-fed backchannels	backchannels normally fed by tributaries, but dry during late summer e.g., sgFAp-Btr	
Iu	Irregularly Sinuous Channel - progressive bank erosion	persistent bank erosion indicated by the presence of undercut banks, overhanging and fallen trees, and much timber in the channel; old air photos and historical information can also be used as evidence e.g., sFAp-Iu	

Ia	Irregularly Sinuous Channel - abrupt channel diversion; avulsion	the present channel has recently shifted abruptly to a previously vegetated area; the former channel can be identified by air photos or on the ground e.g., gFAf-Ia	
Ib	Irregularly Sinuous Channel - backchannels	small channels which may or may not be connected to the main channel e.g., sgFAP-Ib	
Ip	Irregularly Sinuous Channel - permanent river-fed backchannels	backchannels joined to the main channel at the upstream end, allowing flowing or standing water all year e.g., sgFAP-Ip	
Ie	Irregularly Sinuous Channel - ephemeral river-fed backchannels	backchannels joined to the main channel at the upstream end, but dry during the late summer e.g., gFAf-Ie	
Is	Irregularly Sinuous Channel - spring-fed backchannels	backchannels in which water is maintained during the late summer by the emergence of floodplain groundwater e.g., sFAP-Is	
It	Irregularly Sinuous Channel - permanent tributary-fed backchannels	either flowing or standing water from tributaries is present in the backchannel all year e.g., sgFAP-It	
Id	Irregularly Sinuous Channel - ephemeral tributary-fed backchannels	backchannels normally fed by tributaries, but dry during late summer e.g., sgFAP-Itr	
Ju	Anastomosing Channel - progressive bank erosion	persistent bank erosion indicated by the presence of undercut banks, overhanging and fallen trees, and much timber in the channel; old air photos and historical information can also be used as evidence e.g., sFAP-Ju	

Ja	Anastamosing Channel - abrupt channel diversion; avulsion	the present channel has recently shifted abruptly to a previously vegetated area; the former channel can be identified by air photos or on the ground e.g., gFAf-Ja	
Jb	Anastamosing Channel - backchannels	small channels which may or may not be connected to the main channel e.g., sgFAP-lb	
Jp	Anastamosing Channel - permanent river-fed backchannels	backchannels joined to the main channel at the upstream end, allowing flowing or standing water all year e.g., sgFAP-Jp	
Je	Anastamosing Channel - ephemeral river-fed backchannels	backchannels joined to the main channel at the upstream end, but dry during the late summer e.g., gFAf-Je	
Js	Anastamosing Channel - spring-fed backchannels	backchannels in which water is maintained during the late summer by the emergence of floodplain groundwater e.g., sFAP-Js	
Jt	Anastamosing Channel - permanent tributary-fed backchannels	either flowing or standing water from tributaries is present in the backchannel all year e.g., sgFAP-Jt	
Jd	Anastamosing Channel - ephemeral tributary-fed backchannels	backchannels normally fed by tributaries, but dry during late summer e.g., sgFAP-Jtr	
Mu	Meandering Channel - progressive bank erosion	persistent bank erosion indicated by the presence of undercut banks, overhanging and fallen trees, and much timber in the channel; old air photos and historical information can also be used as evidence e.g., sFAP-Mu	

Ma	Meandering Channel - abrupt channel diversion; avulsion	the present channel has recently shifted abruptly to a previously vegetated area; the former channel can be identified by air photos or on the ground e.g., gFAf-Ma	
Mb	Meandering Channel - backchannels	small channels which may or may not be connected to the main channel e.g., sgFAp-Mb	
Mp	Meandering Channel - permanent river-fed backchannels	backchannels joined to the main channel at the upstream end, allowing flowing or standing water all year e.g., sgFAp-Mp	
Me	Meandering Channel - ephemeral river-fed backchannels	backchannels joined to the main channel at the upstream end, but dry during the late summer e.g., gFAf-Me	
Ms	Meandering Channel - spring-fed backchannels	backchannels in which water is maintained during the late summer by the emergence of floodplain groundwater e.g., sFAp-Ms	
Mt	Meandering Channel - permanent tributary-fed backchannels	either flowing or standing water from tributaries is present in the backchannel all year e.g., sgFAp-Mt	
Md	Meandering Channel - ephemeral tributary-fed backchannels	backchannels normally fed by tributaries, but dry during late summer e.g., sgFAp-Mtr	
0	No Data	No data available.	
1	Place Holder 1	From Terrain Translation Project - Code 1.	
2	Place Holder 2	From Terrain Translation Project - Code 2.	

**Table 41: Contents of Domain\_VLD\_SEI table**

Code	Short_Name	Description	Notes
AP	Alpine	Alpine ecosystems	SE
APhb	Alpine:herbaceous	Alpine ecosystems dominated by forbs or graminoid vegetation.	SE

APkr	Alpine:krummholz	Alpine ecosystems dominated by krummholz trees.	SE
APpf	Alpine:parkland forest	Ecosystems at the transition between alpine and subalpine where trees occur in distinct clumps.	SE
APsh	Alpine:shrub	Alpine ecosystems dominated by dwarf shrubs.	SE
AS	Antelope-brush Steppe	Shrub ecosystems dominated by antelope-brush	SE
ASas	Antelope-brush Steppe	Shrub ecosystems dominated by antelope-brush in fair to good condition.	SE
ASds	Antelope-brush Steppe: disturbed	Shrub ecosystems dominated by antelope-brush in poor condition	SE
BW	Broadleaf Woodland	Ecosystems dominated by deciduous species at climax	SE
BWac	Broadleaf Woodland:aspen copse	Permanent aspen ecosystems in moist depressions in grasslands	SE
BWas	Broadleaf Woodland:aspen seepage	Permanent aspen ecosystems on seepage slopes, usually in forested areas	SE
CB	Coastal Bluff	Vegetated rocky islets and shorelines. Historical use only, now mapped as HB:cs or HB:vs.	SE-retired
CBcl	Coastal Bluff:cliff	Vegetated coastal cliffs and bluffs. Historical use only, now mapped as CL:cc	SE-retired
CL	Cliff	Steep slopes, often with exposed bedrock.	SE
CLcc	Cliff:coastal	coastal cliffs	SE
CLic	Cliff:inland	inland cliffs	SE
DG	Disturbed Grasslands	Grasslands with 20-60% noxious weeds or invasive alien plants. This unit was used only in the Central and North Okanagan. Historical use only, now mapped as Gr:dg.	OIE-retired

FS	Seasonally Flooded Agricultural Fields	Annually flooded cultivated fields or hay fields	OIE
FW	Freshwater	Freshwater ecosystems include bodies of water such as lakes and ponds that usually lack floating vegetation	SE
FWla	Freshwater: lake	Naturally occurring, static body of open water greater than 2 m deep and generally greater than 50 ha, with little to no floating vegetation.	SE
FWpd	Freshwater: pond	Small body of open water, greater than 2 m deep and generally less than 50 ha, with little to no floating vegetation.	SE
GR	Grasslands	Ecosystems dominated by bunchgrasses and shrubland ecosystems that occur in a grassland matrix	SE
GRdg	Grasslands:disturbed	Greater than 60% of plant cover is comprised of invasive alien species; overrides all other grassland subclasses where it occurs.	SE
GRge	Grasslands:gentle slope	Mixed grass/forb grassland ecosystems on slopes <25%. Optional subclass for use where it helps meet project objectives.	SE
GRgr	Grasslands:grasslands	Ecosystems dominated by bunchgrasses; less than 10% tree cover	SE
GRsh	Grasslands:shrublands	Moist ecosystems dominated by shrubs (usually rose and snowberry); occur in a grassland matrix	SE
GRss	Grasslands:steep slope, shallow soils	Mixed grass/forb grassland ecosystems on slopes >25%; shallow soils. Optional subclass for use where it helps meet project objectives.	SE
GRst	Grasslands:steep slope, deep soils	Mixed grass/forb grassland ecosystems on slopes >25%; deep soils. Optional subclass for use where it helps meet project objectives.	SE

HB	Herbaceous	Non-forested ecosystems with less than 10% tree cover. Most have shallow soils and bedrock outcrops.	SE
HBcs	Herbaceous:coastal	Influenced by proximity to the ocean: > 20% vegetation cover of grasses, herbs, mosses and lichens.	SE
HBdu	Herbaceous:dune	Ridge, hill or beach area created by windblown sand; variable vegetation cover	SE
HBhb	Herbaceous:herbaceous	Inland sites dominated by herbaceous vegetation; shrubs account for less than 20% of the vegetation: >10% tree cover, generally shallow soils.	SE
HBsh	Herbaceous:shrub	Shrubs account for more than 20% of the vegetation, with grasses and herbs.	SE
HBsp	Herbaceous:spit	Sand and gravel deposits with low to moderate cover of salt-tolerant grasses and herbs	SE
HBvs	Herbaceous:vegetated shoreline	Low-lying rocky shorelines with less than 20% vegetation	SE
HT	Terrestrial Herbaceous	Sites with continuous herbaceous dominated vegetation cover. Historical unit, now mapped as HB:hb.	SE-retired
HTro	Terrestrial Herbaceous:rock outcrop	Sites with rock outcrops. Historical unit, now mapped as Sv:ro	SE-retired
HTsh	Terrestrial Herbaceous:shrub	Sites with more than 20% shrub cover. Historical unit, now mapped as HB:sh	SE-retired
IT	Intertidal	Mudflats, beaches and rocky shorelines that link the marine and terrestrial environments	SE

MF	Mature Forest	Large patches of conifer-dominated forest where stand structure includes vertical heterogeneity and the average tree age is generally 80 years or more (Sunshine Coast). Forests dominated by mature trees (Okanagan).	OIE
MFbd	Mature Forest:broadleaf	Dominated by broadleaf trees (>75%)	OIE
MFco	Mature Forest:coniferous	Dominated by coniferous trees (>75%)	OIE
MFmx	Mature Forest:mixed	Dominated by a mixture of coniferous and broadleaf trees (<75% coniferous and > 25% broadleaf)	OIE
NS	Non-Sensitive	Used when displaying non-sensitive ecosystems themed from TEM/PEM	NS
OF	Old forest	Patches of conifer-dominated forest with complex vertical structure, where the average tree age is generally 250 years or more (Sunshine Coast). Historically defined as forests older than 100 years for Vancouver Island.	SE
OFbd	Old forest: broadleaf	Forests dominated by large old broadleaf trees.	SE
OFco	Old forest:coniferous	Forests dominated by large old coniferous trees (Central Okanagan); coniferous forests that appear to be older than 140 years (South Okanagan). Conifer-dominated (>75%) forests generally >250 years (Sunshine Coast)	SE
OFmx	Old forest:mixed	Forests dominated with a mixture of coniferous and broadleaf trees (<75% coniferous and > 25% broadleaf).	SE

RI	Riparian	Ecosystems associated with and influenced by water. Includes areas along creeks, streams, gullies, canyons and larger floodplains. Includes fringes along ponds, lakeshores, and some sites with significant seepage.	SE
Rlff	Riparian:fringe	Fringe ecosystems associated with streams, pond or lake shorelines or sites with significant seepage but no floodplain.	SE
Rlfh	Riparian:high bench	High bench floodplain terraces (only periodically and briefly inundated by high waters but lengthy subsurface flow in the rooting zone.	SE
Rlfl	Riparian:low bench	Low bench floodplain terraces (flooded at least every other year)	SE
Rlfm	Riparian:medium bench	Medium bench floodplain terraces (flooded every 1-5 years for short periods).	SE
Rlfp	Riparian:floodplain	Benches along creeks and rivers (high, medium, or low benches in the Central Okanagan); forested floodplain (South Okanagan)	SE
Rlg	Riparian:gully	Gullies. Historical unit, now mapped as RI:gu	SE-retired
Rlgu	Riparian:gully	Watercourse is in a steep V-shaped gully (Sunshine Coast); gullies with intermittent or permanent creeks (Central Okanagan/ South Okanagan)	SE
Rlri	Riparian:river	Large river watercourses including gravel bars	SE
Rlsh	Riparian:shrub floodplain	Shrub dominated floodplain or lakeshore.	SE
SGco	Older Second Growth Forest: coniferous	Conifer forests 60-100 years old with <15% deciduous. Historical unit, now mapped as MF:co.	OIE-retired
SGmx	Older Second Growth Forest: mixed	Older forests 60-100 years old with >15% deciduous. Historical unit, now mapped as MF:mx.	OIE-retired

SS	Sagebrush steppe	Optional class where sagebrush dominated ecosystems are separated from grasslands	SE
SSds	Sagebrush steppe:disturbed	Shrub steppe ecosystems where greater than 60% of plant cover is comprised of invasive alien species; overrides all other shrub steppe subclasses where it occurs.	SE
SSss	Sagebrush steppe:sagebrush steppe	Typical sagebrush steppe ecosystems. Optional subclass for use where it helps meet project objectives.	SE
SSss	Sagebrush steppe	Shrub steppe ecosystems on slopes <25% in fair to good condition. Variable soil depth.	SE
SSst	Grasslands:steep slope, deep soils	Shrub steppe ecosystems on slopes >25%; deep soils. Optional subclass for use where it helps meet project objectives.	SE
SV	Sparsely Vegetated	Areas with 5-10% cover of vascular vegetation	SE
SVcl	Sparsely Vegetated:cliff	Steep rock slopes, often near vertical, with exposed bedrock; may have <5% vegetation cover	SE
SVgr	Sparsely Vegetated:shallow soil	Sparse grassland vegetation on very shallow soils (<20cm deep)	SE
SVro	Sparsely Vegetated:rock outcrop	Rock outcrops not dominated by shrubs (was HB:ro)	SE
SVsd	Sparsely Vegetated:coastal sand dunes	Sand dunes. Historical unit, now mapped as HB:du.	SE-retired
SVsh	Sparsely Vegetated:shrub	Shrub dominated rock outcrop areas	SE
SVsp	Sparsely Vegetated:sand spits	Coastal gravels and sand spits. Historical unit, now mapped as HB:sp.	SE-retired
SVta	Sparsely Vegetated:talus	Areas dominated by rubbly blocks of rock (talus)	SE

WD	Woodland	Dry, open stands generally with between 10 and 25% tree cover (Sunshine Coast). Open stands of Douglas-fir or ponderosa pine, often on shallow soils, 10-20% canopy	SE
WDbd	Woodland:broadleaf	Broadleaved (Garry oak and trembling aspen) dominated woodland stands. Historical unit, now mapped as BW	SE-retired
WDco	Woodland:coniferous	Conifer dominated woodland stands including open stands on shallow soils, steep warm aspects or high elevations where climate restricts tree productivity.	SE
WDmx	Woodland:mixed	Mixed conifer and broadleaf stands. Greater than 25% coniferous and >25% broadleaf trees.	SE
WN	Wetland	Areas characterized by daily, seasonal or year-round water at or above the surface.	SE
WNbg	Wetland:bog	Bog. Nutrient-poor peat wetlands on organic (sphagnum) soils; water source from precipitation.	SE
WNfn	Wetland:fen	Fen. Groundwater-fed peat (sedge) wetlands; primary water source is groundwater or runoff.	SE
WNms	Wetland:marsh	Marsh. Graminoid or forb-dominated freshwater, estuarine or saline nutrient-rich wetlands that are permanently or seasonally inundated.	SE
WNsc	Wetland:shrub carr	Shrub carr. Shrub-dominated ecosystems with moist soils on frost-prone depressions.	SE
WNsp	Wetland:swamp	Swamp. Shrub or tree-dominated wetlands with temporary shallow flooding and significant above or below ground water flow	SE
WNsw	Wetland:shallow water	Shallow water. Permanently flooded, less than 2m deep mid-summer and less than 10% cover of emergent vegetation.	SE

WNwm	Wetland:wet meadow	Wet meadow. Briefly inundated, graminoid-dominated meadows.	SE
NA	Non-Sensitive	Used when displaying non-sensitive ecosystems themed from TEM/PEM	
XX	Not an SEI polygon	Used when SEI polygons create polygons that were not mapped	
CA	Canal	An artificial watercourse created for transport, drainage or irrigation purposes. Or a channelized natural watercourse.	OIE
RE	Reservoir	An artificial basin created by the impoundment of water behind a human-made structure such as a dam, berm, dyke or wall.	OIE

**Table 42: Contents of Domain\_Viability table**

Code	Short_Name	Description	Notes
1	Excellent	Excellent	retired
2	Good	Good	retired
3	Marginal	Marginal	retired
4	Poor	Poor	retired
0	No Data	No data available (not mapped).	
E	Excellent	Excellent	
G	Good	Good	
M	Marginal	Marginal	
P	Poor	Poor	

# Appendix C: Summary of Changes

## Changes to version 2.0

The major sections and subsections were reorganized to more logically group the information in the document.

All relevant non-spatial data formats, naming conventions and requirements from previous digital standards were added to section 2 to make this document complete so that it will replace earlier digital standards for TEM, PEM and terrain.

## Changes to version 1.1

### Introduction

- Added **Project Definition** subsection.
- **Folder Structure Specifications** subsection: more detail added. New requirement that all submitted Feature Class names be suffixed with the current BAPID number.
- Added **File Naming Conventions** subsection.

### Logical Data Description and Deliverables

- Merged **Logical Data Description** and **Physical Data Description** sections.
- **Data Dictionary** subsection: separated Mandatory, Mandatory if Collected, and Optional feature classes into separate categories.
- Deliverable Feature Class names have been changed as follows:

**Table 1 - Changes to Deliverable Feature Class Names**

Current Name	Previous Name
TEI_Long_Tbl	TEIS_Master_Long_Tbl
TEI_Project_Details	TEIS_Project_Details
TEI_Sample_Site_Lines	TEIS_Linear_Sample_Sites
TEI_Sample_Site_Points	TEIS_Point_Sample_Sites
TEI_Symbols_Lines	TEIS_Terrestrial_Line_Symbols
TEI_Symbols_Points	TEIS_Terrestrial_Point_Symbols
TEI_Symbols_Polys	TEIS_Terrestrial_Area_Sym_Poly
TEI_Usr_Dfn_Data	(Not specified)

Current Name	Previous Name
TEI_Usr_Dfn_Fields	(Not specified)
TEI_Long_Tbl_Arcs	TEIS_Terrestrial_Polygon_Arcs
TEI_Project_Boundaries	TEIS_Project_Boundaries
TEI_Short_Tbl	TEIS_Master_Short_Tbl
TEI_Symbols_Polys_Arcs	TEIS_Terrestrial_Area_Sym_Arc

- Moved feature class data description tables to Appendices A through C.
- **User-Defined Data** subsection: revised wording to differentiate between user-defined fields and user-defined values for existing fields; introduced templates for submission of user-defined fields and field descriptions.
- Added **Data Format** and **Domains and Ranges** subsections.

## Digital Data Capture Rules / Requirements

- Merged **Precision** and **Resolution** subsections into **Resolution and Tolerance** subsection. Revised wording.

## Quality Assurance Procedures

- Added **Attributes**, **Geometry** and **Topology** subsections.
- **Cross Project Boundaries** subsection renamed **Adjacent Project Boundaries**. Revised wording.

## Appendices

- Replaced previous data dictionary appendices with current Appendices A through C.
- Removed data descriptions of non-deliverable LRDW SDE feature class layers and views.
- Added **Appendix D: Table and Feature Class Attribute Field Domains**.
- Added **Appendix E: Feature Class Attribute Table Cross-Field Rules**.
- Added **Appendix F: Summary of Changes**.

## Changes to version 2.2

- Changed all deliverables to be within ArcSuite 10.1 or higher.
- Changed the Appendices, they are now created within the TEIS Environment as script. The outputs are appended to the digital standards document as PDF's
- Changed to **Appendix A: Tables**
- Changed to **Appendix B: Domains and Ranges**
- Changed to **Appendix C: Summary of Changes**
- Changed the definition within the Digital Standards of User Defined Fields and User Defined Attributes to match the TEIS Environment.