

**GEOGRAPHIC INFORMATION/GEOMATICS -  
FEATURE AND ATTRIBUTE CODES**

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**Committee representation**

*will be decided by the committee of TC2*

The Information Technology, Telecommunications and Multimedia Industry Standards Committee (ISC G) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia  
Communication and Multimedia Commission  
Computer Industry Association of Malaysia  
Department of Standards Malaysia  
Federation of Malaysian Manufacturers  
Institut Tadbiran Awam Negara  
Malaysian Administrative, Modernisation and Management Planning Unit  
Malaysian Industry Government Group for High Technology  
Malaysian Institute of Microelectronics Systems  
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Ministry of Energy, Communication and Multimedia  
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The Institution of Engineers, Malaysia  
Universiti Teknologi Mara (UiTM)  
Universiti Teknologi Malaysia  
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The Technical Committee on Geographic Information/Geomatics which developed this Malaysian Standard consists of representatives from the following organisations:

C-Tel Technologies Sdn Bhd  
Department of Survey and Mapping Malaysia  
ESRI South Asia Sdn Bhd  
GeoInfo Services Sdn Bhd  
Malaysian Agriculture Research and Development Institute  
Malaysian Centre for Geospatial Data Infrastructure  
Malaysian Centre for Remote Sensing  
Minerals and Geoscience Department  
Public Works Department  
SIRIM Berhad (Secretariat)  
Universiti Teknologi Mara (UiTM)  
Universiti Sains Malaysia  
Universiti Teknologi Malaysia

## **FOREWORD**

This Malaysian Standard was developed by the Technical Committee on Geographic Information/Geomatics under the authority of the Information Technology, Telecommunication and Multimedia Industry Standards Committee based on the working draft prepared by the Technical Standards Committee of the Malaysian Geospatial Data Infrastructure (MyGDI).

This Standard cancels and replaces MS 1074:1992, Code of practice for the exchange of digital feature coded mapping data.

## GEOGRAPHIC INFORMATION/GEOMATICS - FEATURE AND ATTRIBUTE CODES

### 0. Introduction

This Malaysian Standard is intended for use by all businesses that produce, distribute or utilise geospatial data, either alone or in conjunction with non-geospatial data. These range from geographic information systems, decision support systems, data mining, data warehousing, to modelling and simulations. Application areas include but not limited to resource planning and management, automated mapping, geo-engineering, construction, communication, transportation and utilities.

It provides a system for feature and attribute coding by which producers and users of geographic information may use in structuring their digital spatial data. This standard facilitates sharing and exchanging between both data producers and users.

This Standard represents a major improvement over MS 1074:1992 and contains some 2000 additional features and organised into twelve main categories such as aeronautical, geology, soil, utility and special use.

### 1. Scope

This Malaysian Standard specifies the method for encoding of geospatial data and provides the description of features and their associated attributes for the exchange of digital geographic information.

### 2. Normative references

The following normative references are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the normative reference (including any amendments) applies.

ISO/DIS 19104: <sup>1)</sup>, -*Geographic information - Terminology*

ISO/DIS 19110: <sup>2)</sup>, -*Geographic information - Methodology for feature cataloguing*

DIGEST Part 4 - Feature and Attribute Coding Catalogue (FACC)

United Nation Convention on Laws of the Sea (1982)

National Land Code (1965)

Laws of Sarawak, Land Code

Sabah Land Ordinance (1930)

<sup>1</sup> To be published.

<sup>2</sup> To be published.

### **3. Terms and definitions**

For the purposes of this Malaysian Standard, the terms and definitions given in ISO/DIS 19104 apply.

### **4. Features and attributes**

This Standard describes the encoding of the world in terms of features and attributes. Features are real world objects while attributes are properties or characteristics associated with the objects.

#### **4.1 Coding of features and attributes**

This standard has not been developed to the requirements of any single application or level of resolution. This standard is also not meant to support any specific digital product.

As with any dictionary, there may be more than one way to encode spatial entities, either by offering a choice of features or a combination of features and attributes. For example, an airport is listed as feature AB0010 - Aerodrome (A defined area on land or water intended to be used either wholly or in part for the arrival, departure and surface movement of aircrafts, could also be coded as feature BD0010 - Institutional Building with attribute INU (Institutional Usage) with a coded value of 001 (Airport Terminal). The choice is entirely up to user's own application and interpretation; to code only the terminal building or the entire aerodrome area.

Feature codes are shown in Annex A and Attribute codes and values are given in Annex B. Annex B also provides information as to the units, formats, ranges, increments and maximum text characters typically associated with each actual value attribute.

If a feature does not reside within this standard, it is allowed for a user-designated features and associated attributes. Otherwise, features and attributes shall be encoded using this standard. The process for amending and updating this standard is described in 4.3.

#### **4.2 Coding structure**

##### **4.2.1 Features**

Each feature is identified by a unique six-character code. The first character corresponds to the feature category and can have an alphabetic value from A through Z. Currently there are twelve feature categories, including one category, X, which has been reserved for special use (dataset-specific) features. The categories are as follows:

<b>CODE</b>	<b>CATEGORY</b>
A	Aeronautical
B	Built Environment
D	Demarcation
G	Geology
H	Hydrography
R	Hypsography
S	Soil
T	Transportation

U	Utility
V	Vegetation
X	Special Use (Dataset-specific)
Z	General

Each major category is further divided into subcategories which are identified by the second character of the six-digit code, containing an alphabetic value from A through Z. The subcategories that have currently been defined for each major category are as follows:

**A-Aeronautical**

AA	Air Space
AB	Aerodrome

**B-Built Environment**

BA	Residential
BB	Commercial
BC	Industrial
BD	Institutional
BE	Educational
BF	Religious
BG	Recreational
BH	Cemetery
BJ	Built-up

**D-Demarcation**

DA	Topographic
DB	Maritime
DC	Cadastral
DD	Planning Land Use

**G-Geology**

GA	Geolithology
GB	Mineral
GC	Fossils
GD	Mining
GE	Exploration
GF	Geological Features
GG	Geoscience

**H-Hydrography**

HA	Coastal Hydrography
HB	Shoreline Structures
HC	Fishing Facilities
HD	Ports and Harbours
HE	Navigation Aids
HF	Danger and Hazard
HG	Depth Information
HH	Inland Water
HJ	River Structure
HK	Offshore
HL	Island
HM	Miscellaneous

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### R-Hypsography

RA Relief Portrayal

### S-Soil

SA Histosols  
SB Spodosols  
SC Andisols  
SD Oxisols  
SE Vertisols  
SF Ultisols  
SG Mollisols  
SH Alfisols  
SI Inceptisols  
SK Entisols

### T-Transportation

TA Land Transportation  
TB Water Transportation

### U-Utility

UA Electricity  
UB Telecommunication  
UC Water Supply  
UD Oil and Gas  
UE Broadcasting  
UF Sewerage  
UG Waste Management  
UH Meteorological

### V-Vegetation

VA Agriculture  
VB Forest  
VC Miscellaneous

### X-Special Use (Dataset specific)

XA Terrain Analysis Dataset  
XB Meteorological Dataset

### Z-General

ZA Control Points  
ZB Label of Geographical Names  
ZC Environmental Controls

The third, fourth, fifth and sixth characters of the six-character feature code are a numeric value from 0000 through 9999. This value provides unique feature identification within categories yet allows flexibility. All features shall be identified by all six alphanumeric characters (for example, the feature "Road" is represented by TA0060). The block of feature code values from 8000 through 8999 has been reserved for special usage, e.g. usage within a particular agency or a group of users.

Due to hierarchical nature of geology and soil features, the third, fourth, fifth and sixth characters (the first through fourth numeric) represent the level of hierarchy of the feature within a particular subcategory. The first numeric represents the first level, the second numeric represents the second level, the third numeric represents the third level, and so on, if they are non-zeros. The value of the numeric is the feature number within that particular level. Zero value of the numeric means that the level is undefined.

For other categories of features (other than geology and soil), the numeric simply represents feature number within a particular subcategory.

## 4.2.2 Attributes

Attributes are used to describe characteristics of a feature. Each attribute is described by using attribute codes to represent the category of information. Attribute value format statements provide a computer interpretation for the attribute value data type (e.g. real, alphanumeric) and attribute values give quantitative/qualitative meaning to the attribute code. An attribute can be used by any feature, but care must be taken so that only meaningful attributes are chosen for a particular feature. For example, syntactically, an attribute "Lift Facilities" can be used with feature "Rail Line", but semantically, the combination is useless. A list of possible attributes for each feature have been provided for the convenient of users.

### 4.2.2.1 Attribute codes

Each attribute is identified by a unique three character alphanumeric code. For example, the attribute "Road Service Area" has the code RDS and the attribute "Bridge Construction Material Type" has the code BMT.

### 4.2.2.2 Attribute values

There are two types of attribute values: coded and actual. A given attribute has only one type of value, which is specified in Annex B. Coded values may range from 0 to 999 and each of the value has its own meaning. Actual values are typically real measurements like height, width, date, etc. *Attribute values can be given as alpha, numeric or combination of alpha and numeric.* The units of measurement associated with an attribute are abbreviated according to the units of measurement codes as detailed in Annex B. A coded value attribute can be logically depicted as shown below:

Attribute Coded	Attribute Value Format	Attribute Value (coded in this case)
<b>RDS</b>	<b>I</b>	<b>2</b>

where

**RDS** represents Road Service Area;

**I** is the format of the coded value (in this case the format is that of a 4-byte integer);  
and

**2** represents the coded value of the RUC attribute (in this case Rural).

For consistency and unless otherwise stated, the following coded values will be used where relevant:

0	is "Unknown"
996	is "None"
997	is "Mixed"
998	is "Not Applicable"
999	is "Others"

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The block of coded attribute values from 600 through 899 has been reserved for special usage, e.g. usage within a particular agency or a group of users.

Actual value can have a format of either:

A	Alphanumeric,
I	Integer,
L	Lexical,
R	Real Number or
S	Structure Text.

For example, an Road (feature code TA0060) which has the route number “J23”, has four lanes, and is dual carriageway, would be attributed as follows:

Attribute code	Attribute value format	Attribute value (actual)
RTN (Route Number)	A	J23
LAN (Number of Lane)	I	4
CWT (Carriageway Type)	I	2

### 4.2.2.3 Range value attributes

Normally attributes are single valued text strings, numbers or enumerated values. However, at times it is necessary to assign values that fall within predetermined ranges. This can be done through an enumerated list that pre-defined the permitted ranges. For example, an attribute for height may be defined as:

0	< 10
1	10 - <20
2	20 - <30
3	30 - <40
4	> 40

### 4.3 Rules for documenting new features and attributes

This standard should be used during the development of specifications of digital application systems to support and satisfy the exchange of spatial information. However, this standard can be modified and updated in response to dynamic technology and evolving requirements. If this standard does not contain the required features, the standard allows for amendment to incorporate extensions and additions.

This sub clause lists the rules that are used to document the features and attributes contained in Annexes A and B. All extensions and additions shall also follow these rules:

- a) feature and attribute names should be precise and unambiguous;
- b) attribute values should be self-describing;
- c) a feature and attribute should not have the same name;
- d) a feature or attribute can have multiple names but only one definition;
- e) a feature or attribute name should not be used in the description of the feature or attributes;
- f) a feature name or definition should not specify if the feature is an area, point or line feature;

- g) a feature should be relatively permanent;
- h) a feature should not be duplicated between categories;
- i) all attribute values are positive unless otherwise stated;
- j) a boundary is just a spatial object or information that be considered a line feature and not a perimeter or solid surface of an area or spatial feature; and
- k) the systematic structure of the coding schema should be permanent.

The features and attributes in this standard represent both spatial information and information which is considered important in geographic information system. Care should be taken to restrict additions to this standard to items of a stable nature only. Users should, for the development of their feature and attribute requirements, seek inter-organisation co-operation and co-ordination.

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**Feature**

**Page**

List of features based on ascending alphabet

**Annex A**  
(normative)

**Feature Codes**

**A - AERONAUTICAL**

**Feature Code:** **A00000**  
**Feature Name:** Aeronautical  
**Description:** Contains geospatial information related to air transportation such as air space, aerodrome and airport  
**Feature Class:** Polygon, Point  
**Possible Attribute:** Name (NAM), Area Measured (km<sup>2</sup>) (ARK),

**AA - Air Space**

**Feature Code:** **AA0010**  
**Feature Name:** Air Space  
**Description:** Designated airspace within which some or all aircraft may be subjected to air traffic control.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (km<sup>2</sup>) (ARK), Airspace Identification Attribute (AIA), Air Space Category (ASC)

**Feature Code:** **AA0020**  
**Feature Name:** Limited Activity Air Space  
**Description:** Air space where activities must be confined because of their nature and/or where limitations may be imposed upon aircraft operations.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (km<sup>2</sup>) (ARK), Airspace Use Limitations (AUL)

**Feature Code:** **AA0030**  
**Feature Name:** Navigation Aid  
**Description:** Any visual electronic device which provides point-to-point guidance information or position data.  
**Feature Class:** Point  
**Possible Attribute:** Name (NAM), Navigation Aid Type (NAT)

**Feature Code:** **AA0040**  
**Feature Name:** Air Route  
**Description:** A specific route designated for channelling the flow of traffic as necessary for the provision of air traffic service.  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM), Air Route Segments Length (ALN), Air Route Usage (ARU)

**AB - Aerodrome**

Feature Code:	<b>AB0010</b>
Feature Name:	Aerodrome
Description:	A defined area on land or water (including any buildings, installations and equipments) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>AB0020</b>
Feature Name:	Airfield
Description:	A land aerodrome with limited facilities.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Airfield Type (APT)
Feature Code:	<b>AB0030</b>
Feature Name:	Aerodrome Control Tower
Description:	A high rise structure from where air traffic control service to aerodrome is provided.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>AB0040</b>
Feature Name:	Aerodrome Beacon
Description:	A light, visible intermittently at all azimuths, used to indicate the location of an aerodrome from the air.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>AB0050</b>
Feature Name:	Runway
Description:	A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Length (LEN)
Feature Code:	<b>AB0060</b>
Feature Name:	Runway Strip
Description:	A defined area including the runway and stopway, if provided, intended: <ul style="list-style-type: none"> <li>a) To reduce the risk or damage to aircraft running off a runway and,</li> <li>b) To protect aircraft flying over it during take-off or landing operations.</li> </ul>
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Length (LEN)
Feature Code:	<b>AB0070</b>
Feature Name:	Stopway
Description:	A defined rectangular area at the end of a runway in the direction of take-off, which has been selected or prepared as a suitable area in which an aircraft can be stopped after an interrupted take-off.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

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Feature Code:	<b>AB0080</b>
Feature Name:	Clearway
Description:	A rectangular area at the end of the take-off run, available, selected, or prepared as a suitable area over which an aircraft may make a portion of its initial climb to a specified height.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>AB0090</b>
Feature Name:	Approach Surface
Description:	A surface sloping up outwards located preceding threshold that defines the volume of upwards airspace that should be kept free from obstacles to protect aircraft in the final phase of approach.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Slope Gradient (SGR)
Feature Code:	<b>AB0100</b>
Feature Name:	Take-off Climb Surface
Description:	A surface sloping up outwards located beyond the end of the TORA or clearway that defines the volume of upwards airspace that should be kept free from obstacles to protect aircraft on take-off.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Slope Gradient (SGR)
Feature Code:	<b>AB0110</b>
Feature Name:	Transitional Surface
Description:	A surface around a runway strip sloping up outwards to the inner horizontal surface that defines the volume of upwards air space that should be kept free from obstacles to protect aircraft in their final phase of approach.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Slope Gradient (SGR), Width (WID)
Feature Code:	<b>AB0120</b>
Feature Name:	Inner Horizontal Surface
Description:	A horizontal surface around a runway strip above an aerodrome and its vicinity that defines the volume of upwards air space that should be kept free from obstacles to protect aircraft for visual circling prior to landing.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Z Orthometric (ZOR), Width (WID)
Feature Code:	<b>AB0130</b>
Feature Name:	Conical Surface
Description:	A surface sloping up outwards from the periphery of the inner horizontal surface that defines the volume of upwards air space that should be kept free from obstacles to protect aircraft for visual circling prior to landing.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Slope Gradient (SGR), Width (WID)

Feature Code: **AB0140**  
 Feature Name: Outer Horizontal Surface  
 Description: A specified portion of a horizontal plane beyond the limit of the conical surface that defines the volume of upwards air space that should be kept free from obstacles to facilitate instrument approach procedures.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Z Orthometric (ZOR), Width (WID)

Feature Code: **AB0150**  
 Feature Name: Obstacle Free Zone (OFZ)  
 Description: A volume of air space in the immediate vicinity of a precision approach runways defined by the inner approach, inner transitional and balked landing surfaces, which must be kept free from fixed objects.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **AB0160**  
 Feature Name: Threshold  
 Description: The beginning of that portion of the runway usable for landing.  
 Feature Class: Line, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **AB0170**  
 Feature Name: Holding Point  
 Description: A location on the manoeuvring area of an aerodrome at which an aircraft carries out an engine run-up or is held before entering a runway for take-off.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **AB0180**  
 Feature Name: Taxiway  
 Description: A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another.  
 Feature Class: Line, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **AB0190**  
 Feature Name: Aircraft Parking Area  
 Description: A specially prepared or selected part of an aerodrome within which aircraft may be parked.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **AB0200**  
 Feature Name: Apron  
 Description: A define area on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, and for fuelling, parking or maintenance.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

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Feature Code: **AB0210**  
Feature Name: Localiser  
Description: A device on the ground that provides azimuth guidance to a runway (runway centre line) to an approaching aircraft.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0220**  
Feature Name: Glideslope  
Description: A device on the ground that provides landing slope to an approaching aircraft.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0230**  
Feature Name: Radar  
Description: A radio detection device on the ground which provides information on range, azimuth and/or elevation of aircraft.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0240**  
Feature Name: Landing Directional Indicator  
Description: A device to indicate visually the direction currently designated for landing and take-off.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0250**  
Feature Name: Wind Direction Indicator  
Description: A visual device used to provide wind information.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0260**  
Feature Name: Obstacle  
Description: All fixed (whether temporary or permanent) and mobile objects, or part thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0270**  
Feature Name: Obstruction Light  
Description: Lights mounted on or adjacent to obstructions or potential hazards to aircraft moving on the ground or in the navigable airspace, for the purpose of indicating the aircraft by night.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0280**  
Feature Name: Obstruction Marker  
Description: Markers on or adjacent to obstructions or potential hazards to aircraft moving on the ground or in the navigable airspace, for the purpose of indicating the aircraft by day.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **AB0290**  
Feature Name: Aeronautical Ground Light  
Description: Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.  
Feature Class: Point  
Possible Attribute: Name (NAM), Light Characteristic Category (LCC)

Feature Code: **AB0300**  
Feature Name: Helicopter Landing Site  
Description: A place that is authorised to be used as an aerodrome for the purpose of the landing and taking-off of helicopter.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Landing Base Type (LBT)

Feature Code: **AB0310**  
Feature Name: Final Approach and Take-off Area  
Description: An area of land or water associated with a helicopter-landing site, over which the final phase of the approach maneuver to hover or landing is completed and from which the take-off maneuver is commenced.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **AB0320**  
Feature Name: Touchdown and Lift Off Area  
Description: A load bearing area on which a helicopter may touch down or lift off.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

## B - BUILT ENVIRONMENT

**Feature Code:** **B00000**  
**Feature Name:** Built Environment  
**Description:** An area contains building, property or place designated for use as premises For residential, commercial, industrial, institutional, educational, religious, recreational, cemetery and built up structures.  
**Feature Class:** Polygon, Point  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM),

### BA - Residential

**Feature Code:** **BA0010**  
**Feature Name:** Residential Building  
**Description:** Building or property designated for use as premises for dwelling units or home.  
**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Residential Building Type (RET), Number of Storey (NOS), Lift Facilities (LIF), Residential Usage (REU)

### BB - Commercial

**Feature Code:** **BB0010**  
**Feature Name:** Commercial Building  
**Description:** Building or property designated for use as premises for business related activities such as trading and services.  
**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Commercial Building Type (CBT), Number of Storey (NOS), Lift Facilities (LIF), Commercial Building Usage (CBU)

**Feature Code:** **BB0011**  
**Feature Name:** Bank  
**Description:** A financial institution and a financial intermediary that accepts deposits and channels those deposits into lending activities, either directly by loaning or indirectly through capital markets.

**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Commercial Building Type (CBT), Number of Storey (NOS), Lift Facilities (LIF), Commercial Building Usage (CBU)

**Feature Code:** **BB0012**  
**Feature Name:** Post Office  
**Description:** a building or an office where mail is received, sorted, and delivered, stamps and other postal materials are sold and other postal business is conducted  
**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Commercial Building Type (CBT), Number of Storey (NOS), Lift Facilities (LIF), Commercial Building Usage (CBU)

Feature Code: **BB0020**  
Feature Name: Billboard  
Description: A huge structure used for advertising panels  
Feature Class: Point  
Possible Attribute: Name (NAM), **Billboard Structure (BBS)**, **Billboard Size (BSZ)**, Registered Number (RNO), **Project or Company Name (PRJ)**

### **BC - Industrial**

Feature Code: **BC0010**  
Feature Name: Industrial Building  
Description: Building or property designated for use as premises for manufacturing and processing related industry, repairing, servicing activities, foundries and warehousing/storage.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Industrial Building Type (IDT), Number of Storey (NOS), Lift Facilities (LIF), Category of Industry (IDC), Industry Permit Status (IDL), Industrial Planned Category (IDP), Industry Tax Status (IDS), Industrial Usage (IDU)

### **BD - Institutional**

Feature Code: **BD0010**  
Feature Name: Institutional Building  
Description: Building or premises designated specifically for use by government and its agencies, foreign embassies and other public purposes.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Institutional Building Type (INT), Institutional Usage (INU), Number of Storey (NOS), Lift Facilities (LIF), Institutional Category (INC)

Feature Code: **BD0011**  
Feature Name: **Hospital**  
Description: **An institution that provides medical, surgical, or psychiatric care and treatment for the sick or the injured.**  
Feature Class: **Point, Polygon**  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Institutional Building Type (INT), Institutional Usage (INU), Number of Storey (NOS), Lift Facilities (LIF), Institutional Category (INC)

Feature Code: **BD0012**  
Feature Name: Police Station  
Description: A station that serves as headquarters for police in a particular district  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Institutional Building Type (INT), Institutional Usage (INU), Number of Storey (NOS), Lift Facilities (LIF), Institutional Category (INC)

Feature Code: **BD0013**  
Feature Name: Fire and Rescue Station  
Description: A building or department in which the members of a fire department and the equipment used to put out fires are located.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Institutional Building Type (INT), Institutional Usage (INU), Number of Storey (NOS), Lift Facilities (LIF), Institutional Category (INC)

#### **BE - Educational**

Feature Code: **BE0010**  
Feature Name: Educational Building  
Description: Building or premises designated for education-related activities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Building Name (BA1), Building Number (BA2), Street Name (BA3), Post Code (BA4), State Name (BA5), Educational Building Type (EDT), Number of Storey (NOS), Educational Category (EDC), Educational Level (EDL), Educational Stream (EDS), Educational Boarding Facilities (EDB)

#### **BF - Religious**

Feature Code: **BF0010**  
Feature Name: Building of Worship  
Description: A building or premises used as a place of worship, religious talks and other related activities  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Religious Building Usage (RBU)

#### **BG - Recreational**

Feature Code: **BG0010**  
Feature Name: Stadium  
Description: An enclosed large open or closed roofed concrete building or premises with seats in tiers specifically built as a sports arena.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

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Feature Code:	<b>BG0020</b>
Feature Name:	Sport Complex
Description:	An area comprising more than one building or premises specifically built to be used for various sports purposes.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BG0030</b>
Feature Name:	Swimming Complex
Description:	An enclosed area comprising a few swimming pools including training and wading pools.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BG0040</b>
Feature Name:	Swimming Pool
Description:	An opened area comprising a few swimming pools including training and wading pools.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BG0050</b>
Feature Name:	Velodrome
Description:	An enclosed large open-roofed concrete building specifically built with walls slanting at a 45° and laid with certain graded wood for cycling competitions.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BG0060</b>
Feature Name:	Play Ground
Description:	An open turf premises used for recreational purposes and provided with game facilities for children.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Playground Services (PGS)
Feature Code:	<b>BG0070</b>
Feature Name:	Golf Course
Description:	A man-made landscaped open premises specifically built for playing golf.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BG0080</b>
Feature Name:	Polo Field
Description:	An area or premises for recreational activities of the polo sports fraternity.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BG0090</b>
Feature Name:	Park
Description:	A natural or man-made open area or ground equipped with leisure and recreational facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

Feature Code: **BG0100**  
Feature Name: Theme Park  
Description: A man-made recreational area or premises designed for sports and leisure activities based on a theme concept.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BG0110**  
Feature Name: Racing Circuit  
Description: A premise specifically designed and built for motor racing pursuits and competitions.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BG0120**  
Feature Name: Race Course  
Description: A premise specifically designed and built for horse racing pursuits and competitions.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BG0130**  
Feature Name: Golf Driving Range  
Description: A premise specifically designed and built with driving range for golf training.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BG0140**  
Feature Name: Zoo  
Description: An area with a collection of live animals usually for public display.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **BG0150**  
Feature Name: Firing Line  
Description: Line of fire for shooting practice or competition.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **BG0151**  
Feature Name: Firing Target  
Description: Target board for shooting practice or competition.  
Feature Class: Point  
Possible Attribute: Name (NAM),

## BH - Cemetery

Feature Code: **BH0010**  
Feature Name: Cemetery  
Description: A place for the burial of the dead.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), ~~Religious Cemetery Type~~  
[Religious Burial Ground Type \(RCT\)](#)

Feature Code: **BH0020**  
Feature Name: Crematorium  
Description: A building or premises used for cremating bodies of the deceased and where the ashes are collected.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BH0030**  
Feature Name: Memorial Park Cemetery  
Description: A burial site designed and landscaped as a cemetery cum recreational park and operated on a commercial basis.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **BH0040**  
Feature Name: Columbarium  
Description: A building or premises to house the ashes of the deceased which are kept in urns.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

## BJ - Built-Up

Feature Code: **BJ0010**  
Feature Name: Taxi Terminal  
Description: The end point of taxi routes including taxi parking area, administrative building and passenger facilities.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0020**  
Feature Name: Bus Terminal  
Description: The end point of bus routes including bus parking area, administrative building and passenger facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0021**  
Feature Name: Bus Stop  
Description: A place where the buses load and unload passengers  
Feature Class: Polygon, Point  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Custodian (CUS), Date (DAT), Status (STA), Route Number (RTN), [Section Number \(SEC\)](#), [Project Name \(PRJ\)](#), [Bus Stop Material Type \(BMA\)](#), [Small Variable Message System Type \(SVM\)](#)

Feature Code: **BJ0030**  
Feature Name: Rail Terminal  
Description: The end point of rail routes including administrative building and other facilities.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), [Rail Usage \(RTU\)](#)

Feature Code: **BJ0040**  
Feature Name: Integrated Transportation Terminal  
Description: The end point of transportation routes including parking area, administrative building and passenger facilities.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), [Rail Usage \(RTU\)](#)

Feature Code: **BJ0050**  
Feature Name: Bus Depot  
Description: An area designated for repairs and maintenance of buses.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0060**  
Feature Name: Rail Depot  
Description: An area designated for repairs and maintenance of trains.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), [Rail Usage \(RTU\)](#)

Feature Code: **BJ0070**  
Feature Name: Freight Depot  
Description: An area designated for receiving, storing and re-distributing of freight.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0080**  
Feature Name: Jetty Terminal  
Description: A jetty including its supporting structures and facilities for loading and unloading of cargo or passengers.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Jetty Category (JYC)

Feature Code: **BJ0090**  
Feature Name: Power Station Complex  
Description: A power station including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Power Station Type (PST)

Feature Code: **BJ0100**  
Feature Name: Substation Complex  
Description: A substation including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Substation Category (SSC)

Feature Code: **BJ0110**  
Feature Name: Reservoir Complex  
Description: A reservoir including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Reservoir Type (RVT) Custodian (CUS)

Feature Code: **BJ0120**  
Feature Name: Water Treatment Plant Complex  
Description: A water treatment plant including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM),

Feature Code: **BJ0130**  
Feature Name: Water Intake Complex  
Description: A water intake including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0140**  
Feature Name: Pump House Complex  
Description: A pump house including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Water Pump Category (WPC), Water Pump Type (WPT), Custodian (CUS), Pump House Usage (PHU)

Feature Code: **BJ0150**  
Feature Name: Tank Complex  
Description: A tank including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Tank Type (TAT), Tank Usage (TAU)

Feature Code: **BJ0160**  
Feature Name: Earth Satellite Complex  
Description: An earth satellite receiving station including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0170**  
Feature Name: VSAT Station Complex  
Description: A VSAT station including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0180**  
Feature Name: Cellular Radio Base Station Complex  
Description: A cellular radio base station including its supporting structures and facilities.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0190**  
 Feature Name: Exchange Building Complex  
 Description: An exchange building including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0200**  
 Feature Name: Hill Station Complex  
 Description: A hill station including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0210**  
 Feature Name: Radio Station Complex  
 Description: A radio station including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0220**  
 Feature Name: Antenna Tower Complex  
 Description: An antenna tower including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0230**  
 Feature Name: Telecom Tower Complex  
 Description: A telecom tower including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0240**  
 Feature Name: Bin Point Complex  
 Description: A bin point including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0250**  
 Feature Name: Transfer Station Complex  
 Description: A transfer station including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Waste Type (WAT)

Feature Code: **BJ0260**  
 Feature Name: Secured Landfill Complex  
 Description: A secured landfill including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Waste Type (WAT)

Feature Code: **BJ0270**  
 Feature Name: Waste Treatment Plant Complex  
 Description: A waste treatment plant including its supporting structures and facilities.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Waste Type (WAT)

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Feature Code:	<b>BJ0280</b>
Feature Name:	Incineration Plant Complex
Description:	An incineration plant including its supporting structures and facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Waste Type (WAT)
Feature Code:	<b>BJ0290</b>
Feature Name:	Sewerage Treatment Plant Complex
Description:	A sewerage treatment plant including its supporting structures and facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Sewerage Treatment Plant Type (STT)
Feature Code:	<b>BJ0300</b>
Feature Name:	Sewerage Pump Station Complex
Description:	A sewerage pump station including its supporting structures and facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BJ0310</b>
Feature Name:	Pond Complex
Description:	A pond including its supporting structures and facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Pond Type (POT), Custodian (CUS), Pond Complex Usage (PCU)
Feature Code:	<b>BJ0320</b>
Feature Name:	City Gate Station Complex
Description:	A city gate station including its supporting structures and facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BJ0330</b>
Feature Name:	Petrol Station
Description:	An area designated for filling of petrol.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BJ0340</b>
Feature Name:	Residential Complex
Description:	An area consisting of one or more residential buildings and other supporting features.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>BJ0350</b>
Feature Name:	Industrial Complex
Description:	An area consisting of one or more industrial buildings and other supporting features.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

Feature Code: **BJ0360**  
Feature Name: Commercial Complex  
Description: An area consisting of one or more commercial buildings and other supporting features.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **BJ0370**  
Feature Name: Parking Area  
Description: A designated area for parking of vehicles.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Parking Area Type (PAT)

Feature Code: **BJ0380**  
Feature Name: Historical Site  
Description: Site or area declared to be of historical or heritage significance.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Historical Site Category (HSC)

Feature Code: **BJ0390**  
Feature Name: Wall  
Description: An upright structure made of stone or brick, that divides one area from another or surrounds an area  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **BJ0400**  
Feature Name: Fence  
Description: A structure that surrounds an area  
Feature Class: Line  
Possible Attribute: Name (NAM), Fence Type (FET), Fence Material (FEM)

Feature Code: **BJ0410**  
Feature Name: Trench  
Description: Channel used for certain purposes  
Feature Class: Line  
Possible Attribute: Name (NAM), Trench Type (TRT), Trench Usage (TRU)

Feature Code: **BJ0420**  
Feature Name: Conduit  
Description: Casing buried under the ground or otherwise which is used to place an easily damaged and/or obstructive utilities.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **BJ0430**  
Feature Name: Centralized Air Conditioning Building  
Description: A building to locate all the centralizing air conditioning units like a compressor, condenser, throttling valve and the evaporator  
Feature Class: Polygon, point  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM),

Feature Code	<b>BJ0440</b>
Feature Name	Guard House
Description	A guard house is a building used to house personnel and security equipment
Feature Class	Polygon, point
Possible Attribute	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

## D - DEMARCATION

### DA - Topographic (Boundaries/Limits/Zones)

Feature Code:	<b>DA0010</b>
Feature Name:	International or Country Boundary
Description:	A line defining the limit of a country.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT), <b>Boundary Status (BDS)</b>

Feature Code:	<b>DA0020</b>
Feature Name:	Country Coverage
Description:	An area of land that falls within an international or country boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)

Feature Code:	<b>DA0030</b>
Feature Name:	State Boundary
Description:	A line defining the limit of a state or federal territory.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT), <b>Boundary Status (BDS)</b>

Feature Code:	<b>DA0040</b>
Feature Name:	State Coverage
Description:	An area of land that falls within a state boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)

Feature Code:	<b>DA0050</b>
Feature Name:	Division Boundary
Description:	A line defining the limit of a division.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)

Feature Code:	<b>DA0060</b>
Feature Name:	Division Coverage
Description:	An area of land that falls within a division boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)

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Feature Code: **DA0070**  
Feature Name: District or Jajahan Boundary Administrative  
Description: A line defining the limit of a district or jajahan for administrative purpose.  
Feature Class: Line  
Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0075**  
Feature Name: District or Jajahan Boundary Land  
Description: A line defining the limit of a district or jajahan for land management purpose.  
Feature Class: Line  
Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0080**  
Feature Name: District or Jajahan Coverage Administrative  
Description: An area of land that falls within a district or jajahan boundary for administrative purpose.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0085**  
Feature Name: District or Jajahan Coverage Land  
Description: An area of land that falls within a district or jajahan boundary for land management purpose.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0086**  
Feature Name: Sub-district Boundary Administrative  
Description: A line defining the limit of a sub-district for administrative purpose.  
Feature Class: Line  
Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0087**  
Feature Name: Sub-district Boundary Land  
Description: A line defining the limit of a sub-district for land management purpose.  
Feature Class: Line  
Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0088**  
Feature Name: Sub-district Coverage Administrative  
Description: An area of land that falls within a sub-district boundary for administrative purpose.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0089**  
Feature Name: Sub-district Coverage Land  
Description: An area of land that falls within a sub-district boundary for land management purpose.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code:	<b>DA0090</b>
Feature Name:	Mukim Boundary Administrative
Description:	A line defining the limit of a mukim for administrative purpose.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)
Feature Code:	<b>DA0095</b>
Feature Name:	Mukim Boundary Land
Description:	A line defining the limit of a mukim for land management purpose.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)
Feature Code:	<b>DA0100</b>
Feature Name:	Mukim Coverage Administrative
Description:	An area of land that falls within a mukim boundary for administrative purpose.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0105</b>
Feature Name:	Mukim Coverage Land
Description:	An area of land that falls within a mukim boundary for land management purpose.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0110</b>
Feature Name:	Town Boundary Administrative
Description:	A line defining the limit of a town for administrative purpose.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)
Feature Code:	<b>DA0115</b>
Feature Name:	Town Boundary Land
Description:	A line defining the limit of a town for land management purpose.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)
Feature Code:	<b>DA0120</b>
Feature Name:	Town Coverage Administrative
Description:	An area of land that falls within a town boundary for administrative purpose.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0125</b>
Feature Name:	Town Coverage Land
Description:	An area of land that falls within a town boundary for land management purpose.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)

Feature Code: **DA0130**  
 Feature Name: Pekan Boundary Administrative  
 Description: A line defining the limit of a pekan for administrative purpose.  
 Feature Class: Line  
 Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0135**  
 Feature Name: Pekan Boundary Land  
 Description: A line defining the limit of a pekan for land management purpose.  
 Feature Class: Line  
 Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0140**  
 Feature Name: Pekan Coverage Administrative  
 Description: An area of land that falls within a pekan boundary for administrative purpose.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0145**  
 Feature Name: Pekan Coverage Land  
 Description: An area of land that falls within a pekan boundary for land management purpose.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0150**  
 Feature Name: Kampung Boundary Administrative  
 Description: A line defining the limit of a kampung for administrative purpose.  
 Feature Class: Line  
 Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0155**  
 Feature Name: Kampung Boundary Land  
 Description: A line defining the limit of a kampung for land management purpose.  
 Feature Class: Line  
 Possible Attribute: Name (NAM), Boundary Type (BDT)

Feature Code: **DA0160**  
 Feature Name: Kampung Coverage Administrative  
 Description: An area of land that falls within a kampung boundary for administrative purpose.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK), Kampung Coverage Type (KCT)

Feature Code: **DA0165**  
 Feature Name: Kampung Coverage Land  
 Description: An area of land that falls within a kampung boundary for land management purpose.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code:	<b>DA0170</b>
Feature Name:	Section Boundary Administrative
Description:	A line defining the limit of a section for administrative purpose.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)
Feature Code:	<b>DA0175</b>
Feature Name:	Section Boundary Land
Description:	A line defining the limit of a section for land management purpose.
Feature Class:	Line
Possible Attribute:	Name (NAM), Boundary Type (BDT)
Feature Code:	<b>DA0180</b>
Feature Name:	Section Coverage Administrative
Description:	An area of land that falls within a section boundary for administrative purpose.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0185</b>
Feature Name:	Section Coverage Land
Description:	An area of land that falls within a section boundary for land management purpose.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0190</b>
Feature Name:	Precinct Boundary
Description:	A line defining the limit of a precinct.
Feature Class:	Line
Possible Attribute:	Name (NAM), <a href="#">Boundary Type (BDT)</a>
Feature Code:	<b>DA0200</b>
Feature Name:	Precinct Coverage
Description:	An area of land that falls within a precinct boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>DA0210</b>
Feature Name:	Local Authority Boundary
Description:	A line defining the limit of a local authority area.
Feature Class:	Line
Possible Attribute:	Name (NAM), <a href="#">Boundary Type (BDT)</a>
Feature Code:	<b>DA0220</b>
Feature Name:	Local Authority Area
Description:	An area of land that falls within a local authority boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>DA0230</b>
Feature Name:	Housing Estate Boundary
Description:	A line defining the limit of a housing estate.
Feature Class:	Line
Possible Attribute:	Name (NAM)

Feature Code: **DA0240**  
 Feature Name: Housing Estate  
 Description: An area of land that falls within a housing estate boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0250**  
 Feature Name: Census Enumeration Block Boundary  
 Description: A line gazetted as the limit of a census enumeration block.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0260**  
 Feature Name: Census Enumeration Block  
 Description: An area of land that falls within a census enumeration block boundary.  
 Feature Class: Polygon, **Point**  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0270**  
 Feature Name: Parliamentary Electoral Boundary  
 Description: A line gazetted as the limit of a parliamentary electoral area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0280**  
 Feature Name: Parliamentary Electoral Area  
 Description: An area of land that falls within a parliamentary electoral boundary.  
 Feature Class: Polygon,  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0290**  
 Feature Name: State Electoral Boundary  
 Description: A line gazetted as the limit of a state electoral area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0300**  
 Feature Name: State Electoral Area  
 Description: An area of land that falls within a state electoral boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA0310**  
 Feature Name: Postcode Boundary  
 Description: A line defining the limit of a postcode area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0320**  
 Feature Name: Postcode Area  
 Description: An area of land that falls within a postcode boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code:	<b>DA0330</b>
Feature Name:	Police District Boundary
Description:	A line defining the limit of a police district.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0340</b>
Feature Name:	Police District Area
Description:	An area of land that falls within a police district boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0350</b>
Feature Name:	Fire and Rescue Station Boundary
Description:	A line defining the limit of a fire and rescue service station.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0360</b>
Feature Name:	Fire and Rescue Station Area
Description:	An area of land that falls within a fire and rescue station boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0370</b>
Feature Name:	Medical Emergency Station Boundary
Description:	A line defining the limit of a medical emergency station.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0380</b>
Feature Name:	Medical Emergency Station Area
Description:	An area of land that falls within a medical emergency station boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (km <sup>2</sup> ) (ARK)
Feature Code:	<b>DA0390</b>
Feature Name:	Agriculture Land Scheme Boundary
Description:	A line defining the limit of an agricultural land scheme.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0400</b>
Feature Name:	Agriculture Land Scheme Area
Description:	An area of land that falls within an agricultural land scheme boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>DA0410</b>
Feature Name:	Trigonometrical Station Boundary
Description:	A line defining the limit of a trigonometrical station area.
Feature Class:	Line
Possible Attribute:	Name (NAM)

**Feature Code:** **DA0420**  
**Feature Name:** Trigonometrical Station Area  
**Description:** An area of land that falls within a trigonometrical station boundary.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

**Feature Code:** **DA0430**  
**Feature Name:** Irrigation Scheme Boundary  
**Description:** A line either gazetted or not, defining the limit of an irrigation scheme.  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM)

**Feature Code:** **DA0440**  
**Feature Name:** Irrigation Scheme Area  
**Description:** An area of land either gazetted or not, that falls within an irrigation scheme boundary.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (h) (ARH), Irrigation Scheme Category (IGC), Irrigation Scheme Type (IGT)

**Feature Code:** **DA0450**  
**Feature Name:** Animal Husbandry Boundary  
**Description:** A line defining the limit of an animal husbandry area.  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM)

**Feature Code:** **DA0460**  
**Feature Name:** Animal Husbandry Area  
**Description:** An area of land that falls within an animal husbandry boundary.  
**Feature Class:** Polygon, **Point**  
**Possible Attribute:** Name (NAM), Area Measured (h) (ARH)

**Feature Code:** **DA0470**  
**Feature Name:** Transmission Line ROW Boundary  
**Description:** A line defining the limit of a transmission line ROW.  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM)

**Feature Code:** **DA0480**  
**Feature Name:** Transmission Line ROW Area  
**Description:** An area of land that falls within a transmission line ROW boundary.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Power Line Category (PLA), Power Line Characteristics (PLC), Voltage (VLT)

**Feature Code:** **DA0510**  
**Feature Name:** Drainage Reserve Boundary  
**Description:** A line gazetted as the limit of a drainage reserve.  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM)

**Feature Code:** **DA0515**  
**Feature Name:** Agricultural Drainage Reserve Boundary  
**Description:** A line gazetted as the limit of a drainage reserve where agricultural drainage infrastructures has been provided.  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM)

- Feature Code: **DA0520**  
 Feature Name: Drainage Reserve Area  
 Description: An area of land that falls within a drainage reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH), Authority (AUT)
- Feature Code: **DA0525**  
 Feature Name: Agricultural Drainage Reserve Area  
 Description: An area of land that falls within a drainage reserve boundary where agricultural drainage infrastructures has been provided.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH), Authority (AUT)
- Feature Code: **DA0530**  
 Feature Name: Park Reserve Boundary  
 Description: A line gazetted as the limit of a park reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)
- Feature Code: **DA0540**  
 Feature Name: Park Reserve Area  
 Description: An area of land, marine, estuarine, or freshwater that falls within a park reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)
- Feature Code: **DA0550**  
 Feature Name: Grazing Reserve Boundary  
 Description: A line gazetted as the limit of a grazing reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)
- Feature Code: **DA0560**  
 Feature Name: Grazing Reserve Area  
 Description: An area of land that falls within a grazing reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)
- Feature Code: **DA0570**  
 Feature Name: Forest Reserve Boundary  
 Description: A line gazetted as the limit of a forest reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)
- Feature Code: **DA0580**  
 Feature Name: Forest Reserve Area  
 Description: An area of land that falls within a forest reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0590**  
Feature Name: Water Catchment Reserve Boundary  
Description: A line gazetted as the limit a water catchment reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0600**  
Feature Name: Water Catchment Reserve Area  
Description: An area of land that falls within a water catchment reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0610**  
Feature Name: Wildlife Reserve Boundary  
Description: A line gazetted as the limit a wildlife reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0620**  
Feature Name: Wildlife Reserve Area  
Description: An area of land that falls within a wildlife reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0630**  
Feature Name: Game Reserve Boundary  
Description: A line gazetted as the limit of a game reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0640**  
Feature Name: Game Reserve Area  
Description: An area of land that falls within a game reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DA0650**  
Feature Name: Sanctuary Reserve Boundary  
Description: A line defining the limit of a sanctuary reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0660**  
Feature Name: Sanctuary Reserve  
Description: An area of land that falls within a sanctuary reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0670**  
Feature Name: Agriculture Reserve Boundary  
Description: A line gazetted as the limit of an agricultural reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0680**  
 Feature Name: Agriculture Reserve Area  
 Description: An area of land that falls within an agricultural reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0690**  
 Feature Name: Aquaculture Reserve Boundary  
 Description: A line gazetted as the limit of an aquaculture reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0700**  
 Feature Name: Aquaculture Reserve Area  
 Description: An area of land that falls within an aquaculture reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0710**  
 Feature Name: Malay Reserve Boundary  
 Description: A line gazetted as the limit of a Malay reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0720**  
 Feature Name: Malay Reserve Area  
 Description: An area of land that falls within a Malay reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0730**  
 Feature Name: Government Reserve Boundary  
 Description: A line gazetted as the limit of a government reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0740**  
 Feature Name: Government Reserve Area  
 Description: An area of land that falls within a government reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA0750**  
 Feature Name: Firing Range Reserve Boundary  
 Description: A line gazetted as the limit of a firing range reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0760**  
 Feature Name: Firing Range Reserve Area  
 Description: An area of land that falls within a firing range reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code:	<b>DA0770</b>
Feature Name:	Road Reserve Boundary
Description:	A line gazetted as the limit of a road reserve.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0780</b>
Feature Name:	Road Reserve Area
Description:	An area of land that falls within a road reserve boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>DA0790</b>
Feature Name:	Rail Reserve Boundary
Description:	A line gazetted as the limit of a rail reserve.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0800</b>
Feature Name:	Rail Reserve Area
Description:	An area of land that falls within a rail reserve boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Rail Usage (RTU)
Feature Code:	<b>DA0810</b>
Feature Name:	Oil and Gas Pipeline Reserve Boundary
Description:	A line gazetted as the limit of an oil and gas pipeline reserve.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0820</b>
Feature Name:	Oil and Gas Pipeline Reserve Area
Description:	An area of land that falls within an oil and gas pipeline reserve boundary.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>DA0830</b>
Feature Name:	Irrigation Reserve Boundary
Description:	A line gazetted as the limit of an irrigation reserve where irrigation infrastructures have been provided.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>DA0840</b>
Feature Name:	Irrigation Reserve Area
Description:	An area of land that falls within an irrigation reserve where irrigation infrastructures have been provided.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Irrigation Scheme Category (IGC), Irrigation Scheme Type (IGT)

Feature Code: **DA0850**  
Feature Name: River Reserve Boundary  
Description: A line gazetted as the limit of a river reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0860**  
Feature Name: River Reserve Area  
Description: An area of land that falls within a river reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DA0870**  
Feature Name: Aborigine Reserve Boundary  
Description: A line gazetted as the limit of an aborigine reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0880**  
Feature Name: Aborigine Reserve Area  
Description: An area of land that falls within an aborigine reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DA0890**  
Feature Name: Royal Reserve Boundary  
Description: A line gazetted as the limit of a royal reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0900**  
Feature Name: Royal Reserve Area  
Description: An area of land that falls within a royal reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DA0910**  
Feature Name: Cemetery Reserve Boundary  
Description: A line gazetted as the limit of a cemetery reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM), Religious Burial Ground Type (RCT)

Feature Code: **DA0920**  
Feature Name: Cemetery Reserve Area  
Description: An area of land that falls within a cemetery reserve boundary.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Religious Burial Ground Type (RCT)

Feature Code: **DA0930**  
Feature Name: Clinic Reserve Boundary  
Description: A line gazetted as the limit of a clinic reserve.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DA0940**  
 Feature Name: Clinic Reserve Area  
 Description: An area of land that falls within a clinic reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Clinic Service Type (SCT)

Feature Code: **DA0950**  
 Feature Name: Hospital Reserve Boundary  
 Description: A line gazetted as the limit of a hospital reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0960**  
 Feature Name: Hospital Reserve Area  
 Description: An area of land that falls within a hospital reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DA0970**  
 Feature Name: School Reserve Boundary  
 Description: A line gazetted as the limit of a school reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA0980**  
 Feature Name: School Reserve Area  
 Description: An area of land that falls within a school reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DA0990**  
 Feature Name: Army Reserve Boundary  
 Description: A line gazetted as the limit of an army reserve.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1000**  
 Feature Name: Army Reserve Area  
 Description: An area of land that falls within an army reserve boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM)

Feature Code: **DA1010**  
 Feature Name: Reserve Land Boundary  
 Description: A line gazetted as the limit of a Sarawak Reserve Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1020**  
 Feature Name: Sarawak Reserve Land Area  
 Description: An area of land that falls within a reserve land boundary in Sarawak.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA1030**  
 Feature Name: Mixed Zone Land Boundary  
 Description: A line gazetted as the limit of a Sarawak Mixed Zone Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1040**  
 Feature Name: Mixed Zone Land Area  
 Description: An area of land that falls within a mixed zone land boundary in Sarawak.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA1050**  
 Feature Name: Native Land Boundary  
 Description: A line gazetted as the limit of a native land in Sarawak, Sabah and Labuan.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1060**  
 Feature Name: Native Land Area  
 Description: An area of land that falls within a native land boundary in Sarawak, Sabah and Labuan.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA1070**  
 Feature Name: Native Customary Land Boundary  
 Description: A line gazetted as the limit of a Sarawak Native Customary Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1080**  
 Feature Name: Native Customary Land Area  
 Description: An area of land that falls within a native customary land boundary in Sarawak.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA1090**  
 Feature Name: Interior Land Boundary  
 Description: A line gazetted as the limit of an Interior Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1100**  
 Feature Name: Interior Land Area  
 Description: An area of land that falls within an interior land boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DA1110**  
 Feature Name: Sarawak Town Land Boundary  
 Description: A line defining the limit of a Sarawak Town Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1120**  
 Feature Name: Sarawak Town Land Area  
 Description: An area of land that falls within a Sarawak Town Land boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA1130**  
 Feature Name: Sarawak Suburban Land Boundary  
 Description: A line defining the limit of a Sarawak Suburban Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1140**  
 Feature Name: Sarawak Suburban Land Area  
 Description: An area of land that falls within a Sarawak Suburban Land boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA1150**  
 Feature Name: Sarawak Country Land Boundary  
 Description: A line defining the limit of a Sarawak Country Land area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1160**  
 Feature Name: Sarawak Country Land Area  
 Description: An area of land that falls within a Sarawak Country Land boundary.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA1170**  
 Feature Name: Native Timber Reserve Boundary  
 Description: A line gazetted as the limit of a native timber reserve under the Sabah state legislation.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DA1180**  
 Feature Name: Native Timber Reserve Area  
 Description: An area of land that falls within a native timber reserve boundary under the Sabah state legislation.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (km<sup>2</sup>) (ARK)

Feature Code: **DA2000**  
 Feature Name: Aquaculture  
 Description: An area where the land is subjected for aquaculture  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH), Aquaculture Type (AQP)

Feature Code: **DA3000**  
 Feature Name: Livestock  
 Description: An area where the land is subjected for Livestock  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH), Animal Type (ANP)

### DB - Maritime

Feature Code: **DB0010**  
 Feature Name: Baseline  
 Description: A line from which the outer limits of a territorial sea and certain other outer limits are measured.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0020**  
 Feature Name: Continental Shelf Boundary  
 Description: A line defining the limit of a continental shelf.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0030**  
 Feature Name: Continental Shelf  
 Description: The continental shelf of a coastal state (country) comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental shelf margin, or to a distance of 200 nautical miles from the baselines where the outer edge of the continental margin does not extend up to that distance.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM)

Feature Code: **DB0040**  
 Feature Name: Exclusive Economic Zone Boundary  
 Description: A line defining the limit of an Exclusive Economic Zone.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0050**  
 Feature Name: Exclusive Economic Zone  
 Description: An area beyond and adjacent to the territorial sea not exceeding 200 nautical miles from the baseline under which a coastal state (country) has certain right and jurisdiction.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM)

Feature Code: **DB0060**  
Feature Name: Contiguous Zone Boundary  
Description: A line defining the limit of a contiguous zone.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DB0070**  
Feature Name: Contiguous Zone  
Description: A zone not exceeding 24 nautical miles from the baseline where the coastal state (country) may exercise certain controls.  
Feature Class: Polygon  
Possible Attribute: Name (NAM)

Feature Code: **DB0080**  
Feature Name: Territorial Water Boundary  
Description: A line defining a territorial water.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DB0090**  
Feature Name: Territorial Water  
Description: A belt of water of a defined breadth but not exceeding 12 nautical miles measured seaward from a territorial sea baseline.  
Feature Class: Polygon  
Possible Attribute: Name (NAM)

Feature Code: **DB0100**  
Feature Name: State Territorial Water Boundary  
Description: A line defining the limit of a state territorial water.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DB0110**  
Feature Name: State Territorial Water  
Description: A belt of water of a defined breadth but not exceeding 3 nautical miles measured seaward from a territorial sea baseline where the adjacent state has exclusive rights.  
Feature Class: Polygon  
Possible Attribute: Name (NAM)

Feature Code: **DB0120**  
Feature Name: Internal Water Boundary  
Description: A line defining the limit of an internal water.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DB0130**  
Feature Name: Internal Water  
Description: Waters on the landward side of the baseline of a territorial sea and landlocked waters within a state.  
Feature Class: Polygon  
Possible Attribute: Name (NAM)

Feature Code: **DB0140**  
 Feature Name: Fishing Zone Boundary  
 Description: A line defining the limit of a fishing zone.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0150**  
 Feature Name: Fishing Zone  
 Description: The offshore zone in which fishing rights and management are held by coastal nation or an area designated for fishing within the EEZ limits, in accordance to the vessel size, power of engine, type of gears, and category of vessel's owner.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DB0160**  
 Feature Name: Maritime Firing Boundary  
 Description: A line defining the limit of a firing area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0170**  
 Feature Name: Maritime Firing Area  
 Description: A water area in which firing exercise is frequently carried out by the armed forces.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **DB0180**  
 Feature Name: Harbour Authority Boundary  
 Description: A line defining the limit of a harbour authority area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0190**  
 Feature Name: Harbour Authority Area  
 Description: An area around a harbour under the authority the harbour.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DB0200**  
 Feature Name: Port Authority Boundary  
 Description: A line defining the limit of a port authority area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0180**  
 Feature Name: Harbour Authority Boundary  
 Description: A line defining the limit of a harbour authority area.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **DB0190**  
Feature Name: Harbour Authority Area  
Description: An area around a harbour under the authority the harbour.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DB0200**  
Feature Name: Port Authority Boundary  
Description: A line defining the limit of a port authority area.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DB0210**  
Feature Name: Port Authority Area  
Description: An area surrounding a port under the authority of the port.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

#### DC - Cadastral

Feature Code: **DC0010**  
Feature Name: State Land Boundary  
Description: A line defining the limit of a state land.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DC0020**  
Feature Name: State Land  
Description: All land in a state, including river bed, foreshore and sea bed as is within the territories of the state or the limits of territorial waters, other than alienated land, reserved land and mining land.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DC0030**  
Feature Name: Land Parcel or Lot Boundary  
Description: A line defining the limit of a parcel or lot.  
Feature Class: Line  
Possible Attribute: Name (NAM), Survey Status (SUS)

Feature Code: **DC0040**  
Feature Name: Land Parcel or Lot  
Description: A piece of land allotted by a state.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Survey Status (SUS)

Feature Code: **DC0050**  
Feature Name: Strata Parcel Boundary  
Description: A line defining the limit of a strata parcel.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DC0060**  
Feature Name: Strata Parcel  
Description: Sub-division of any building having two or more storeys on alienated land held as one lot under Final Title into parcels each to be held under a separate Strata Title.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DC0070**  
Feature Name: **Subterranean** Parcel Boundary  
Description: A line defining the limit of ~~stratum~~ underground parcel.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DC0080**  
Feature Name: **Subterranean** Parcel  
Description: Underground land parcel formerly known as stratum  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DC0090**  
Feature Name: Strata Accessory Parcel Boundary  
Description: A line defining the limit of a strata accessory parcel.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DC0100**  
Feature Name: Strata Accessory Parcel  
Description: Any parcel shown on a strata plan which is used in conjunction with a strata parcel.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **DC0110**  
Feature Name: Common Property Boundary  
Description: A line defining the limit of a common property.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **DC0120**  
Feature Name: Common Property  
Description: Any area not comprised in any strata parcel, including its accessory, or any provisional block as shown in an approved strata plan.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

**DD – Planning Land Use**

Feature Code:	<b>DD1000</b>
Feature Name:	Existing Land Use
Description:	An area of current land use of the site or existing land use which involved activities, or, new development that has obtained the Certificate of Completion and Compliance (CCC) from professional bodies.
Feature Class:	Polygon
Possible Attribute:	Land Use Type (LUT), Area Measured (h) (ARH), Name (NAM)
Feature Code:	<b>DD2000</b>
Feature Name:	Committed Land Use
Description:	An area of approved land use planning application (within the planning permission expiry date) and have yet to commence / carry-out *land work, and have not obtained the Certificate of Completion and Compliance (CCC) from professional bodies.
Feature Class:	Polygon
Possible Attribute:	Land Use Type (LUT), Area Measured (h) (ARH), Approval Date (ADT), Developer (DEV), Year of Approval (YOA)
Feature Code:	<b>DD3000</b>
Feature Name:	Zoning Land Use
Description:	Development zones for the permitted land use for a development based on planning studies and zoning designation proposed, upon publicity of the plan in which will be gazetted
Feature Class:	Polygon
Possible Attribute:	Land Use Type (LUT), Area Measured (h) (ARH), Gazette Reference Number (GNU), Gazette Date (GDT)
Feature Code:	<b>DD4000</b>
Feature Name:	Planning Permission
Description:	An area under planning applications in accordance to legal provisions / current practices and has not been approved
Feature Class:	Polygon
Possible Attribute:	Land Use Type (LUT), Name (NAM), Area Measured (h) (ARH), Submission Date (SDA), Principal Submitted Person (PSP), Principal Submitted Person Contact Number (PSN), Principal Submitted Person Contact Address (PSA), Developer (DEV), Year of Approval (YOA)

## G - GEOLOGY

### GA - Geolithology

Feature Code: **GA1000**  
Feature Name: Surficial deposit  
Description: Unconsolidated deposit occurring on the earth's surface.  
Feature Class: Polygon  
Possible Attribute: Surficial Deposit Type (SDT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Geological Feature Description (GFD),

Feature Code: **GA1100**  
Feature Name: Alluvium  
Description: Detrital materials deposited by running water.  
Feature Class: Polygon  
Possible Attribute: Surficial Deposit Composition Type (SDC), Texture (TEX), Environment of Deposition (END), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: **GA1110**  
Feature Name: Older alluvium (high terrace)  
Description: Unconsolidated or moderately consolidated sedimentary deposited on the higher level.  
Feature Class: Polygon  
Possible Attribute: Surficial Deposit Composition Type (SDC), Texture (TEX), Environment of Deposition (END), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: **GA1120**  
Feature Name: Raised beach  
Description: Ancient beach occurring above the present shore line characterised by unconsolidated or moderately consolidated sedimentary deposited.  
Feature Class: Polygon  
Possible Attribute: Surficial Deposit Composition Type (SDC), Texture (TEX), Environment of Deposition (END), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: **GA1200**  
Feature Name: Peat  
Description: Unconsolidated deposit of semi carbonised plant remains.  
Feature Class: Polygon  
Possible Attribute: Surficial Deposit Composition Type (SDC), Texture (TEX), Environment of Deposition (END), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code:	<b>GA1300</b>
Feature Name:	Surficial Deposit Others
Description:	Other unconsolidated deposit occurring on the earth's surface.
Feature Class:	Polygon
Possible Attribute:	Surficial Deposit Composition Type (SDC), Texture (TEX), Environment of Deposition (END), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD)
Feature Code:	<b>GA2000</b>
Feature Name:	Sedimentary Rock
Description:	Rocks resulting from the consolidation of loose sediments.
Feature Class:	Polygon
Possible Attribute:	Sedimentary Rock Group (SRG), Maximum Geological Age in Period (GAX), Minimum Geological Age in Period (GAM), Geological Feature Description (GFD)
Feature Code:	<b>GA2100</b>
Feature Name:	Argillaceous Rock
Description:	Sedimentary rocks composed of higher proportion of clay minerals.
Feature Class:	Polygon
Possible Attribute:	Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),
Feature Code:	<b>GA2200</b>
Feature Name:	Arenaceous Rock
Description:	Sedimentary rocks composed of higher proportion of sand minerals.
Feature Class:	Polygon
Possible Attribute:	Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),
Feature Code:	<b>GA2300</b>
Feature Name:	Rudaceous Rock
Description:	Sedimentary rocks composed of fragments coarser than sand.
Feature Class:	Polygon
Possible Attribute:	Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),
Feature Code:	<b>GA2400</b>
Feature Name:	Calcareous Rock
Description:	Sedimentary rocks composed of higher proportion of calcium or magnesium carbonates.
Feature Class:	Polygon
Possible Attribute:	Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),
Feature Code:	<b>GA2500</b>
Feature Name:	Siliceous Rock
Description:	Sedimentary rocks composed of higher proportion of silicon dioxide.
Feature Class:	Polygon
Possible Attribute:	Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: GA2600  
Feature Name: Carbonaceous Rock  
Description: Sedimentary rocks composed of higher composition of sedimentary organic matter in various forms.  
Feature Class: Polygon  
Possible Attribute: Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD)

Feature Code: GA2700  
Feature Name: Evaporite Rock  
Description: Sedimentary rocks mostly composed of minerals produced from a saline solution as a result of extensive or total evaporation of the solvent.  
Feature Class: Polygon  
Possible Attribute: Sedimentary Rock Type (SRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Fossils (FOS), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD)

Feature Code: **GA3000**  
Feature Name: Igneous Rocks  
Description: Rocks that solidified from molten or partly molten magma.  
Feature Class: Polygon  
Possible Attribute: Igneous Rock Group (IRG), Igneous Rock Composition Type (IRP), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Geological Feature Description (GFD),

Feature Code: **GA3100**  
Feature Name: Volcanic Acid Rocks  
Description: Rocks ejected by volcanic activity of acidic composition.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Igneous Rock Type (IRT), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX),

Feature Code: **GA3200**  
Feature Name: Volcanic Intermediate Rocks  
Description: Rocks ejected by volcanic activity of intermediate composition.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Igneous Rock Type (IRT), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX),

Feature Code: **GA3300**  
Feature Name: Volcanic Basic Rocks  
Description: Rocks ejected by volcanic activity of basic composition.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Igneous Rock Type (IRT), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX),

Feature Code:	<b>GA3400</b>
Feature Name:	Plutonic Acid Rocks
Description:	Igneous rocks that contain high percentage of silica.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), <a href="#">Igneous Rock Type (IRT)</a> , <a href="#">Geologist(s) (GEO)</a> , <a href="#">Date (DAT)</a> , <a href="#">Geological Feature Description (GFD)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> ,
Feature Code:	<b>GA3500</b>
Feature Name:	Plutonic Intermediate Rocks
Description:	Igneous rocks that contain medium percentage of silica.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), <a href="#">Igneous Rock Type (IRT)</a> , <a href="#">Geologist(s) (GEO)</a> , <a href="#">Date (DAT)</a> , <a href="#">Geological Feature Description (GFD)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> ,
Feature Code:	<b>GA3600</b>
Feature Name:	Plutonic Basic Rocks
Description:	Igneous rocks that contain low percentage of silica.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), <a href="#">Igneous Rock Type (IRT)</a> , <a href="#">Geologist(s) (GEO)</a> , <a href="#">Date (DAT)</a> , <a href="#">Geological Feature Description (GFD)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> ,
Feature Code:	<b>GA3700</b>
Feature Name:	Plutonic Ultrabasic Rocks
Description:	Igneous rocks that contain little or no silica.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), <a href="#">Igneous Rock Type (IRT)</a> , <a href="#">Geologist(s) (GEO)</a> , <a href="#">Date (DAT)</a> , <a href="#">Geological Feature Description (GFD)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> ,
Feature Code:	<b>GA3800</b>
Feature Name:	Volcanic Pyroclastic Rocks
Description:	Rock formed of material from volcanic explosion
Feature Class:	Polygon
Possible Attribute:	Name (NAM), <a href="#">Igneous Rock Type (IRT)</a> , <a href="#">Geologist(s) (GEO)</a> , <a href="#">Date (DAT)</a> , <a href="#">Geological Feature Description (GFD)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> ,
Feature Code:	<b>GA4000</b>
Feature Name:	Metamorphic Rocks
Description:	Rocks formed by changes of temperature, pressure and chemical environment.
Feature Class:	Polygon
Possible Attribute:	<a href="#">Metamorphic Rock Group (MRG)</a> , <a href="#">Geological Feature Description (GFD)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> ,
Feature Code:	<b>GA4100</b>
Feature Name:	Regional
Description:	Sedimentary rock that shows evidence of having been subjected to metamorphism regionally.
Feature Class:	Polygon
Possible Attribute:	<a href="#">Metamorphic Rock Type (MRT)</a> , <a href="#">Minimum Geological Age in Period (GAM)</a> , <a href="#">Maximum Geological Age in Period (GAX)</a> , <a href="#">Name (NAM)</a> , <a href="#">Geologist(s) (GEO)</a> , <a href="#">Date (DAT)</a> , <a href="#">Geological Feature Description (GFD)</a> ,

Feature Code: **GA4200**  
Feature Name: Contact  
Description: Sedimentary rock that shows evidence of having been subjected to metamorphism by contact.  
Feature Class: Polygon  
Possible Attribute: Metamorphic Rock Type (MRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: **GA4300**  
Feature Name: Dynamic  
Description: Sedimentary rock that shows evidence of having been subjected to metamorphism by dynamic.  
Feature Class: Polygon  
Possible Attribute: Metamorphic Rock Type (MRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: **GA4400**  
Feature Name: Impact Metamorphic Rocks  
Description: Sedimentary rock that shows evidence of having been subjected to metamorphism by meteorite impact.  
Feature Class: Polygon  
Possible Attribute: Metamorphic Rock Type (MRT), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Name (NAM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

Feature Code: **GA5000**  
Feature Name: Meteorites  
Description: Solid mass in the form of rock, metal or mixture of both that come from space and reached the earth.  
Feature Class: Point  
Possible Attribute: Outer space material type (OSM), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),

## GB – Mineral

Feature Code: **GB1000**  
Feature Name: Minerals  
Description: Location of a concentration of mineral that is considered to be valuable.  
Feature Class: Point, polygon  
Possible Attribute: Mineral Group (MIG), Mineral Category (MIC)

Feature Code: **GB1100**  
Feature Name: Metallic Minerals  
Description: Location of metallic mineral mineralisation. Metallic minerals are minerals normally with a high specific gravity and metallic lustre.  
Feature Class: Point, Polygon  
Possible Attribute: Metallic Minerals Type (MTY), Mineral Category (MIC),

Feature Code:	<b>GB1110</b>
Feature Name:	Precious Metals
Description:	Location of precious metals mineralisation.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1120</b>
Feature Name:	Base Metals
Description:	Location of base metals mineralisation, commonly refer to a group of metals that include copper, lead and zinc.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1130</b>
Feature Name:	Light Metals
Description:	Location of light metals mineralisation.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1140</b>
Feature Name:	Iron & Ferrous Alloy
Description:	Location of iron and ferrous alloy mineralisation.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1150</b>
Feature Name:	Tin & Associated Minerals
Description:	Location of tin & associated minerals mineralisation.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1160</b>
Feature Name:	Rare Metals
Description:	Location of rare metals mineralisation.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1170</b>
Feature Name:	Other Metallic Minerals
Description:	Other Metallic Minerals
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Type (MTP)</a> , Mineral Category (MIC)
Feature Code:	<b>GB1200</b>
Feature Name:	Non-Metallic Minerals
Description:	Location of non-metallic mineralisation.
Feature Class:	Point, Polygon
Possible Attribute:	Mineral Category (MIC), <a href="#">Non-Metallic Mineral Type (NMT)</a>
Feature Code:	<b>GB1210</b>
Feature Name:	Clay-Based Minerals
Description:	Location of potential clay-based minerals.
Feature Class:	Point, Polygon
Possible Attribute:	<a href="#">Mineral Name (MIN)</a> , Mineral Category (MIC)

Feature Code: **GB1220**  
Feature Name: Sand-Based Minerals  
Description: Location of potential sand-based minerals.  
Feature Class: Point, Polygon  
Possible Attribute: [Mineral Name \(MIN\)](#), Mineral Category (MIC)

Feature Code: **GB1230**  
Feature Name: Rock-Based Minerals  
Description: Location of potential rock-based minerals.  
Feature Class: Point, Polygon  
Possible Attribute: [Mineral Name \(MIN\)](#), Mineral Category (MIC)

Feature Code: **GB1240**  
Feature Name: [Other Non-Metallic Minerals](#)  
Description: [Location of other non-metallic mineralisation.](#)  
Feature Class: Point, Polygon  
Possible Attribute: Mineral Category (MIC), [Mineral Type \(MTP\)](#)

Feature Code: **GB1300**  
Feature Name: Energy Minerals  
Description: Location of potential site for energy minerals.  
Feature Class: Point, polygon  
Possible Attribute: [Mineral Name \(MIN\)](#), Mineral Category (MIC)

Feature Code: **GB1400**  
Feature Name: [Fertilizer Minerals](#)  
Description: [Location of potential site for fertilizer minerals.](#)  
Feature Class: [Point, polygon](#)  
Possible Attribute: Mineral Name (MIN), Mineral Category (MIC)

## GC – Fossils

Feature Code: **GC1000**  
Feature Name: Fossil  
Description: Any remains, traces, or imprint of plants or animals that has been preserved.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Fossil Type (FOT), [Age in Period \(APE\)](#), Fossil Habitat (FOH)

Feature Code: **GC1100**  
Feature Name: Fauna  
Description: Preserved animal fossils.  
Feature Class: Point  
Possible Attribute: Name (NAM), Field Number (FNO), Registered Number (RNO), [Age in Period \(APE\)](#), Fossil Habitat (FOH)

Feature Code: **GC1200**  
Feature Name: Flora  
Description: Preserved plant fossils.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), [Age in Period \(APE\)](#), Fossil Habitat (FOH)

Feature Code: **GC1300**  
Feature Name: Trace  
Description: Preserved fossil imprints.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), [Age in Period \(APE\)](#), Fossil Habitat (FOH)

### GD- Mining

Feature Code: **GD1000**  
Feature Name: [Mining and Quarrying Area](#)  
Description: An area authorised for mining or mining tenement.  
Feature Class: Point, Polygon  
Possible Attribute: [Field Number \(FNO\)](#), [Mines Type \(MNT\)](#), [Quarry Type \(QUT\)](#), [Date Start \(DAS\)](#), [Date End \(DAE\)](#),

Feature Code: **GD2000**  
Feature Name: Mines  
Description: An authorised area where minerals are worked.  
Feature Class: Point, Polygon  
Possible Attribute: [Field Number \(FNO\)](#), [Registered Number \(RNO\)](#), [Name \(NAM\)](#), [Authority \(AUT\)](#), [Custodian \(CUS\)](#), [Mines Type \(MNT\)](#), [Mineral Group \(MIG\)](#), [Mineral Type \(MTP\)](#), [Date Start \(DAS\)](#), [Date End \(DAE\)](#), [Operational Status \(OPS\)](#)

Feature Code: **GD2100**  
Feature Name: Mine Pit  
Description: Actual excavation for mineral extraction site on the surface.  
Feature Class: Point, Polygon  
Possible Attribute: [Mine Pit Type \(MPT\)](#)

Feature Code: **GD2200**  
Feature Name: Mine Tailings Area  
Description: The storage area for gangue and other refused material resulting from the washing, concentration or treatment of ground ore.  
Feature Class: Point, Polygon  
Possible Attribute: [Mining Tail Area Type \(MTT\)](#)

Feature Code: **GD3000**  
Feature Name: Quarry Site  
Description: Area designated for quarry operations.  
Feature Class: Point, Polygon  
Possible Attribute: [Field Number \(FNO\)](#), [Registered Number \(RNO\)](#), [Name \(NAM\)](#), [Custodian \(CUS\)](#), [Authority \(AUT\)](#), [Date Start \(DAS\)](#), [Date End \(DAE\)](#), [Quarry Use \(QUU\)](#), [Quarry Type \(QUT\)](#), [Rock Type \(RKT\)](#), [Operational Status \(OPS\)](#), [Quarry Authorised Type \(QAT\)](#)

Feature Code: **GD3100**  
Feature Name: Quarry Pit  
Description: Area within the quarry site where the rocks are actually extracted.  
Feature Class: Point, Polygon  
Possible Attribute: [Quarry Type \(QUT\)](#)

Feature Code: **GD4000**  
Feature Name: Extraction Permit Area  
Description: Area authorised for clay and sand extraction.  
Feature Class: Point, Polygon  
Possible Attribute: Registered Number (RNO), Earth Material Type (EMT), Custodian (CUS), Authority (AUT), Date Start (DAS), Date End (DAE),

Feature Code: **GD5000**  
Feature Name: Stockpile  
Description: A designated area for storing broken ore or material accumulated in a heap on the surface, pending treatment or shipment.  
Feature Class: Polygon  
Possible Attribute: Stockpile Type (STY)

Feature Code: **GD6000**  
Feature Name: Rehabilitational Area  
Description: An area where the land is subjected for rehabilitation after mining activities ceased.  
Feature Class: Point, Polygon  
Possible Attribute: Mines Type (MNT), Name (NAM), Custodian (CUS), Authority (AUT), Quarry Type (QUT), Reclaimed Land Purpose (RLP)

### GE – Exploration

Feature Code: **GE1000**  
Feature Name: Mineral and Geoscience Exploration Block  
Description: An area designated for mineral exploration.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Custodian (CUS), Mineral Exploration Block Type (MET), Date Start (DAS), Date End (DAE), Authority (AUT),

Feature Code: **GE1100**  
Feature Name: Geological Mapping Area  
Description: An area where various rock types and geological features are mapped.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GE1200**  
Feature Name: Geochemical Survey Area  
Description: An area where geochemical investigation is carried out to search for minerals or environmental studies.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GE1210**  
Feature Name: Geochemical Sample Point  
Description: Sites where samples are taken for chemical analysis.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Geochemical Sample Point Type (GPT), [Geochemical Survey Area Purpose \(GEP\)](#),

Feature Code: **GE1211**  
Feature Name: Sample Point Rock  
Description: Rock sampling location.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Collector (COL), Date Start (DAS), Date End (DAE)

Feature Code: **GE1212**  
Feature Name: Sample Point Soil  
Description: Soil sampling location.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Collector (COL), Date Start (DAS), Date End (DAE)

Feature Code: **GE1213**  
Feature Name: Sample Point Silt  
Description: Silt sampling location.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Collector (COL), Date Start (DAS), Date End (DAE)

Feature Code: **GE1214**  
Feature Name: Sample Point Stream Concentrate  
Description: Stream concentrate sampling location.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Collector (COL), Date Start (DAS), Date End (DAE)

Feature Code: **GE1215**  
Feature Name: Sample Point Stream Water  
Description: Stream water sampling location.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Collector (COL), Date Start (DAS), Date End (DAE)

Feature Code: **GE1300**  
Feature Name: Geophysical Survey Area  
Description: An area where the search for minerals, groundwater and geological features is done using geophysical method.  
Feature Class: Polygon  
Possible Attribute: [Field Number \(FNO\)](#), [Registered Number \(RNO\)](#), [Name \(NAM\)](#), [Authority \(AUT\)](#), [Custodian \(CUS\)](#), [Geologist\(s\) \(GEO\)](#), [Date Start \(DAS\)](#), [Date End \(DAE\)](#), [Work Status \(WOS\)](#), [Report Status \(RES\)](#), [Coverage Percentage \(PCC\)](#), [Survey Phase \(SVP\)](#),

Feature Code: **GE1310**  
Feature Name: Geophysical Survey Line  
Description: A line where the geophysical measurements are made.  
Feature Class: Line  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Person (PER), Date Start (DAS), Date End (DAE), Geophysical Method (GPM),

Feature Code: **GE1320**  
Feature Name: Geophysical Survey Station  
Description: A point where the geophysical measurement is made.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GE1400**  
Feature Name: Exploration Hole  
Description: Location of holes made for downhole logging and sample collection.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Collector (COL), Survey Phase (SVP), Mineral Type (MTP), Drill Method (DRM), Depth (DPT), Record Number (REC), Exploration Holes Purpose (EHP)

Feature Code: **GE1500**  
Feature Name: Anomaly Area  
Description: Areas where anomalies are identified.  
Feature Class: Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GE1510**  
Feature Name: Mineral Anomaly  
Description: Areas interpreted to have a potential for mineralisation.  
Feature Class: Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GE2000**  
Feature Name: Geological Remote Sensing Area  
Description: An area where remote sensing is carried out for geological mapping and mineral exploration.  
Feature Class: Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GE3000**  
Feature Name: Environmental Geology Survey Area  
Description: An area where environmental geology studies are conducted.  
Feature Class: Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

### GF - Geological Features

Feature Code: **GF1100**  
Feature Name: Faulting  
Description: Large fracture in rock where movement has taken place.  
Feature Class: Line  
Possible Attribute: Faulting (FTY), Geological Accuracy (GAC), Strike (STR), Dip (DIP)

Feature Code: **GF1200**  
Feature Name: Folding  
Description: The formation of fold in rocks.  
Feature Class: Line  
Possible Attribute: Folding Type (FLT), Geological Accuracy (GAC), Fold Direction (FOD), Fold Axis Direction (FOX), Fold Plunging Angle (FOP)

Feature Code: **GF1300**  
Feature Name: Bedding  
Description: The arrangement of a sedimentary rock in beds or layers of varying thickness and character.  
Feature Class: Point, Line  
Possible Attribute: Bedding and Jointing Type (BJT), Strike (STR), Dip (DIP)

Feature Code: **GF1400**  
Feature Name: Jointing  
Description: Fracture in rock where no movement has taken place.  
Feature Class: Point, Line  
Possible Attribute: Bedding and Jointing Type (BJT), Strike (STR), Dip (DIP)

Feature Code: **GF1500**  
Feature Name: Lineament  
Description: A linear topographic feature reflecting the crustal structure line.  
Feature Class: Line  
Possible Attribute: Lineament Type (LTY), Strike (STR), Dip (DIP), Lineament Dip Inclination (LIP)

Feature Code: **GF2000**  
Feature Name: Intrusive Structure  
Description: A ridgelike or moundlike structure, layered or massive.  
Feature Class: Point, Line, Polygon  
Possible Attribute: Intrusive Structure Type (IST), Intrusive Structure Composition (ISC)

Feature Code:	<b>GF3000</b>
Feature Name:	Other Geological Structure
Description:	Distinctive structures contributing to the geological properties.
Feature Class:	Point, Line, Polygon
Possible Attribute:	<a href="#">Geological Structure Category (GSC)</a>
Feature Code:	<b>GF4000</b>
Feature Name:	Geological Boundary
Description:	A line demarcating rock units of different properties.
Feature Class:	Line
Possible Attribute:	Geological Accuracy (GAC)
Feature Code:	<b>GF4100</b>
Feature Name:	Rock Outcrop
Description:	Area of rock outcrop occurrence.
Feature Class:	Polygon
Possible Attribute:	Rock Outcrop Type (ROT)
Feature Code:	<b>GF4200</b>
Feature Name:	Rock Boulders
Description:	Area of rock boulder occurrence.
Feature Class:	Polygon
Possible Attribute:	Rock Boulders Type (RBT)
Feature Code:	<b>GF5000</b>
Feature Name:	Geological <a href="#">Lithostratigraphic Unit</a>
Description:	Area of geological rock units classified according to principal stratigraphic categories; which generally conforms to the Law of Superposition and commonly is stratified and tabular in form.
Feature Class:	Polygon
Possible Attribute:	Geological Lithostratigraphic / Lithodemic Name (GLN), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Geological Lithostratigraphic / Lithodemic Rank (GLR), Geological Lithostratigraphic / Lithodemic Type (GLS), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),
Feature Code:	<b>GF6000</b>
Feature Name:	Geological Lithodemic Unit
Description:	Area of geological rock units classified according to principal stratigraphic categories; which generally conforms to the Law of Superposition and commonly is stratified and tabular in form.
Feature Class:	Polygon
Possible Attribute:	Geological Lithostratigraphic / Lithodemic Name (GLN), Minimum Geological Age in Period (GAM), Maximum Geological Age in Period (GAX), Geological Lithostratigraphic / Lithodemic Rank (GLR), Geological Lithostratigraphic / Lithodemic Type (GLS), Geologist(s) (GEO), Date (DAT), Geological Feature Description (GFD),
Feature Code:	<b>GF7000</b>
Feature Name:	Profile Line
Description:	Indicative line where 2D information is available.
Feature Class:	Line
Possible Attribute:	Profile Type (PTY)

## GG - Geoscience

Feature Code: **GG1000**  
Feature Name: Hydrogeological Survey Area  
Description: An area where hydrogeological studies are conducted.  
Feature Class: Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GG1100**  
Feature Name: Groundwater Potential Area  
Description: An area identified capable of producing significant quantity of groundwater.  
Feature Class: Polygon  
Possible Attribute: Host Rock (HOR), Groundwater Potential Class (GWP)

Feature Code: **GG1110**  
Feature Name: Aquifer Alluvial  
Description: A water bearing formation composed of loose, unsorted earthen materials, or particles such as clay, silt, sand, gravel, or stones.  
Feature Class: Polygon  
Possible Attribute: Aquifer Material (AQM), Aquifer Type (AQT), Aquifer Depth (AQD), Discharge (DIS)

Feature Code: **GG1120**  
Feature Name: Aquifer Peat  
Description: A water bearing formation composed of peat  
Feature Class: Polygon  
Possible Attribute: Aquifer Material (AQM), Aquifer Type (AQT), Aquifer Depth (AQD), Discharge (DIS)

Feature Code: **GG1130**  
Feature Name: Aquifer Hardrock  
Description: A water bearing formation in hardrock.  
Feature Class: Polygon  
Possible Attribute: Host Rock (HOR), Aquifer Depth (AQD), Aquifer Type (AQT), Discharge (DIS),

Feature Code: **GG1200**  
Feature Name: Groundwater Monitoring Station  
Description: A monitoring station to measure the level and effects of groundwater discharge and groundwater quality.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Groundwater Station Type (GST)

Feature Code: **GG1300**  
Feature Name: Groundwater Well  
Description: A hole drilled into the earth for the extraction of groundwater.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Authority (AUT), Custodian (CUS), Well Type (WTY), Tube Well Use (WTU), Discharge (DIS), Aquifer Depth (AQD), Groundwater Quality (GWQ), Total Dissolved Solid (TDS), Operational Status (OPS)

Feature Code: **GG1400**  
Feature Name: Groundwater Limit  
Description: An isoline defining the limit of an area with similar groundwater characteristics.  
Feature Class: Line  
Possible Attribute: Groundwater Limit Type (GLT)

Feature Code: **GG1410**  
Feature Name: Groundwater Flow  
Description: A line indicating the direction of groundwater movement.  
Feature Class: Line  
Possible Attribute: -

Feature Code: **GG1500**  
Feature Name: Hydrogeological Zone  
Description: An area delineated for groundwater extraction, source or protection.  
Feature Class: Polygon  
Possible Attribute: Hydrogeological Zone Type (HZZ)

Feature Code: **GG1600**  
Feature Name: Hydrogeological Natural Features  
Description: Groundwater natural discharges point.  
Feature Class: Point  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Hydrogeological Natural Features Type (HNT), [Discharge \(DIS\)](#)

Feature Code: **GG2000**  
Feature Name: Engineering Geology Survey Area  
Description: An area where engineering geology studies are conducted.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), Authority (AUT), Custodian (CUS), Geologist(s) (GEO), Date Start (DAS), Date End (DAE), Work Status (WOS), Report Status (RES), Coverage Percentage (PCC), Survey Phase (SVP),

Feature Code: **GG2100**  
Feature Name: Geohazard Site  
Description: A site of naturally occurring or man-made geologic condition that presents a risk or is a potential danger to life and property.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Name (NAM), [Geohazard Type \(GHT\)](#), Geohazard Status (GHS)

Feature Code: **GG2110**  
Feature Name: Landslide Site  
Description: A site of mass movement of landforms, and processes involving the downslope transport under gravitational influence.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Landslide Type (LST), Rock Type (RKT), Date (DAT)

Feature Code: **GG2120**  
Feature Name: Rockfall Site  
Description: A site of the relatively free falling of rock of any size from a cliff or other very steep slope.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Rockfall Type (RFT), Rock Type (RKT), Date (DAT)

Feature Code: **GG2130**  
Feature Name: Erosion Site  
Description: A site whereby the soil are loosened, dissolved or worn away, simultaneously moved from one place to another; usually by water.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Erosion Type (EST),

Feature Code: **GG2140**  
Feature Name: Sinkhole Site  
Description: A site of sinkhole or, a relatively small spot of land subsidence.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Sinkhole Type (SKH), Rock Type (RKT), Date (DAT)

Feature Code: **GG2150**  
Feature Name: Land Subsidence Site  
Description: A site where a downward settling of material with little horizontal motion occurred.  
Feature Class: Point, Polygon  
Possible Attribute: Field Number (FNO), Registered Number (RNO), Land Subsidence Site Type (GSS), Rock Type (RKT), Date (DAT)

Feature Code: **GG2200**  
Feature Name: Construction Suitability  
Description: An area indicating the suitability of land to be developed in terms of free from one or more of any geological hazard.  
Feature Class: Polygon  
Possible Attribute: Construction Suitability Class Type (CST)

## H - HYDROGRAPHY

### HA - Coastal Hydrography

Feature Code:	<b>HA0010</b>
Feature Name:	Shore Line
Description:	The high water mark of ordinary spring tides.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>HA0020</b>
Feature Name:	Coast
Description:	The edge margin of land next to the sea.
Feature Class:	Line
Possible Attribute:	Name (NAM), Coast Type (COT), Coastal Erosion Status (CES)
Feature Code:	<b>HA0030</b>
Feature Name:	Shore
Description:	The narrow strip of land in immediate contact with the sea, including the zone between the high and low water lines.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Shore Type (SHT)
Feature Code:	<b>HA0040</b>
Feature Name:	Bay
Description:	A recess in the shore or an inlet of a sea between two capes or headlands.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0050</b>
Feature Name:	Lagoon
Description:	A shallow body of water, like a pond or lake, usually connected to the sea.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0060</b>
Feature Name:	Headland
Description:	A high, steep-faced promontory extending into the sea.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0070</b>
Feature Name:	Delta
Description:	An alluvial deposit formed at a river mouth.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0080</b>
Feature Name:	Bar
Description:	A submerged or emerged embankment of sand, gravel, or other unconsolidated material built on the sea floor in shallow water by waves or currents.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

Feature Code:	<b>HA0090</b>
Feature Name:	Spit
Description:	A small point of land or a narrow shoal projecting into a body of water from the shore.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0100</b>
Feature Name:	Reef
Description:	An offshore consolidated rock hazard to navigation with a depth of about 20 m or less.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Reef Category (RFC)
Feature Code:	<b>HA0110</b>
Feature Name:	Atoll
Description:	A ring-shaped coral reef, often carrying low sand islands, enclosing a lagoon.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0120</b>
Feature Name:	Beach
Description:	The zone of unconsolidated material that extends landward from the low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Beach Type (BET)
Feature Code:	<b>HA0130</b>
Feature Name:	Intertidal Flat
Description:	Marshy or muddy land areas which are covered and uncovered by the Mean High Water (MHW) and Mean Low Water (MLW).
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0140</b>
Feature Name:	Saline Flat
Description:	Marshy or muddy land areas which are influenced by seawater.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HA0150</b>
Feature Name:	Water Mark
Description:	<a href="#">The limit where the sea water encroach into a river.</a>
Feature Class:	Line, <b>Point</b>
Possible Attribute:	Name (NAM), Water Level Mark (WAM)
Feature Code:	<b>HA0160</b>
Feature Name:	Mean Sea Level
Description:	The average level of the sea over a long period of time.
Feature Class:	Line
Possible Attribute:	Name (NAM)

Feature Code: **HA0170**  
Feature Name: Coastal Flood Plain  
Description: An area along the coast which is submerged when sea water level reaches a specified level.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HA0180**  
Feature Name: Cape  
Description: A piece of land projecting into a body of water.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM)

Feature Code: **HA0190**  
Feature Name: Cay  
Description: A small insular feature usually with scant vegetation; usually of sand or coral. Often applied to smaller coral shoals.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM)

Feature Code: **HA0200**  
Feature Name: Islet  
Description: A small island.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM)

## HB - Shoreline Structure

Feature Code: **HB0010**  
Feature Name: Breakwater  
Description: A structure protecting a shore area, harbour, anchorage, or basin from waves.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Breakwater Type (BWT), Armour Type (AMT)

Feature Code: **HB0020**  
Feature Name: Groyne  
Description: A shore-protection structure built to trap littoral drift or retard erosion of the shore.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HB0030**  
Feature Name: Reclaimed Land  
Description: An area formerly submerged under water which has been filled up and whose ground level is above high water line.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Reclaimed Land Purpose (RLP)

Feature Code:	<b>HB0040</b>
Feature Name:	Revetment
Description:	A facing of stone, concrete or other material, built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HB0050</b>
Feature Name:	Sea Wall
Description:	A structure separating land and water areas, primarily designed to prevent erosion and other damage due to wave action.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HB0060</b>
Feature Name:	Bund
Description:	A wall or mould built around a low-lying area to prevent flooding.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HB0070</b>
Feature Name:	Outfall
Description:	A structure extending into a body of water for the purpose of discharging sewage, storm runoff, or cooling water.
Feature Class:	Point, Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HB0080 (additional from PHN)</b>
Feature Name:	Steps
Description:	steps at the shoreline as the connection between land and water on different levels.
Feature Class:	Point, Polygon, Line
Possible Attribute:	Nature of Construction (NOC); Status (STA)
Feature Code:	<b>HB0090</b>
Feature Name:	Pile
Description:	A long heavy timber or section of steel, wood, concrete, etc.forced into the earth which may serve as a support, as for a pier, or a free standing pole within a marine environment.
Feature Class:	Point,
Possible Attribute:	Category of Pile (COP); Name (NAM)
Feature Code:	<b>HB0100</b>
Feature Name:	Hulkes
Description:	A permanently moored ship.
Feature Class:	Point, Polygon,
Possible Attribute:	Category of Hulkes (COH); Name (NAM)
Feature Code:	<b>HB0110</b>
Feature Name:	Canal
Description:	An artificial waterway with no flow, or a controlled flow, used for navigation, or for draining or irrigating land (ditch).
Feature Class:	Line, Polygon,
Possible Attribute:	Canal Type (CAT), Name (NAM)

## HC - Fishing Facilities

Feature Code:	<b>HC0010</b>
Feature Name:	Sea Recreational Area
Description:	An area of sea water used for recreation or sports.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HC0020</b>
Feature Name:	Fishing Haven
Description:	Areas established to stimulate and attract fish.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HC0030</b>
Feature Name:	Marine Farm
Description:	An assemblage of cages, nets, rafts and floats where fish including shellfish are artificially cultivated.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HC0040</b>
Feature Name:	Fishing Gate
Description:	A structure that may be swung, drawn or lowered to block an entrance or passageway.
Feature Class:	Point, Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>HC0050</b>
Feature Name:	Fishing Trap
Description:	A structure (usually portable) for catching fish.
Feature Class:	Point
Possible Attribute:	Name (NAM), Fishing Trap Type (FTT)
Feature Code:	<b>HC0060</b>
Feature Name:	Fishing Platform
Description:	A permanent offshore structure used for fishing.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HC0070</b>
Feature Name:	Artificial Reef
Description:	An artificial structure made for fish breeding.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM)

## HD - Ports and Harbours

Feature Code:	<b>HD0010</b>
Feature Name:	Harbour
Description:	A protected inlet of a body of water where ships can anchor.
Feature Class:	Polygon
Possible Attribute:	Name (NAM)

Feature Code: **HD0020**  
Feature Name: Port  
Description: A place provided with terminal and transfer facilities for loading and discharging cargo or passengers usually located in a harbour.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), **Number of Berth (NOB)**

Feature Code: **HD0030**  
Feature Name: Lock Basin  
Description: A wet dock in a waterway permitting ship to move from one level to another.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0040**  
Feature Name: Jetty/Pier  
Description: A long, narrow structure extending into the water to afford a berthing place for vessels, to serve as a promenade, etc.  
Feature Class: Point, Line, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0045**  
Feature Name: Wharf/Quay  
Description: A structure serving as a berthing place for vessels consisting of a solid or open wall of concrete, masonry, wood etc.  
Feature Class: Point, Line, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0050**  
Feature Name: Slipway  
Description: Reinforced inclined surface on which keel and bilge-blocks are laid for supporting vessel under construction.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **HD0060**  
Feature Name: Dockyard  
Description: An artificially enclosed area within which ships undergo repair or construction.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0070**  
Feature Name: Pontoon  
Description: A floating structure usually rectangular in shape which serves as landing, pier head or bridge support.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM)

Feature Code: **HD0080**  
Feature Name: Dry Dock  
Description: An artificial basin fitted with a gate or caisson, into which vessel can be floated.  
Feature Class: Point, Line, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0090**  
Feature Name: Marina  
Description: A harbour facility for small boats and yachts where supplies repairs and various services are available.  
Feature Class: Point, Line, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0100**  
Feature Name: Floating Dock  
Description: A dock consisting of a floating structure of one or more sections that can control flooding to receive a vessel and pumping out the water to expose vessel's bottom.  
Feature Class: Point, Line, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0110**  
Feature Name: Dolphin  
Description: A post or group of posts used for mooring or warping a vessel, or as an aid to navigation.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **HD0120**  
Feature Name: Mooring Facilities  
Description: The equipment or structure use to secure a vessel.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **HD0130**  
Feature Name: Anchorage Area  
Description: An area in which vessels are allowed to anchor.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0140**  
Feature Name: Anchorage Prohibited  
Description: An area in which vessels are prohibited to anchor.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HD0150**  
Feature Name: Pilot Boarding Place  
Description: The meeting place to which the pilot comes out.  
Feature Class: Point, Polygon,  
Possible Attribute: Name (NAM)

## HE - Navigation Aids

Feature Code:	<b>HE0010</b>
Feature Name:	Beacon
Description:	A prominent specially constructed object forming a conspicuous mark as fixed aid to navigation.
Feature Class:	Point
Possible Attribute:	Name (NAM), <b>Top Mark (TOP)</b>
Feature Code:	<b>HE0020</b>
Feature Name:	Light House
Description:	A tower or structure containing a beacon light to warn or guide ships.
Feature Class:	Point
Possible Attribute:	Name (NAM), Light Characteristic Category (LCC)
Feature Code:	<b>HE0030</b>
Feature Name:	Transit Mark
Description:	Two distant fixed objects which provide position line.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HE0040</b>
Feature Name:	Navigation Pole
Description:	An elongated wood or metal embedded in the bottom of the sea to provide navigation.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HE0050</b>
Feature Name:	Buoy
Description:	A floating object moored to the seabed in a charted place as a navigation aid or for other specific purpose.
Feature Class:	Point
Possible Attribute:	Name (NAM), Buoy Type (BUT)
Feature Code:	<b>HE0060</b>
Feature Name:	Dredge Area
Description:	An area at the bottom of a body of water which has been deepened.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HE0070</b>
Feature Name:	Turning Basin
Description:	An area of water or enlargement of a channel in a port which is kept clear of buoy to enable vessels to turn.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HE0080</b>
Feature Name:	Traffic Separation Scheme
Description:	Imaginary lines forming an area on water bodies to separate opposing traffics.
Feature Class:	Polygon
Possible Attribute:	Name (NAM)

Feature Code: **HE0090**  
Feature Name: Inshore Traffic Zone  
Description: A routing measure comprising a designated area between the landward boundary of a traffic separation scheme and the adjacent coast, to be used in accordance with the provisions of the International Regulations for Preventing Collision at Sea.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HE0100**  
Feature Name: Recommended Route  
Description: A track, shown on a chart by either a dashed or a continuous line, recommended to all or only certain vessels.  
Feature Class: Line  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HE0110**  
Feature Name: Precautionary Area  
Description: A routing measure comprising an area within defined limits where ships must navigate with particular caution and within which direction of traffic flow may be recommended.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HE0120**  
Feature Name: Marine Round About  
Description: A specific point or zone where traffic moves around in a counter clockwise direction.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HE0130 (additional from PHN)**  
Feature Name: Restricted Area  
Description: A specified area designated by an appropriate authority within which navigation is restricted in accordance with certain specified conditions.  
Feature Class: Polygon,  
Possible Attribute: Name (NAM), Category of Restricted Area (CRA)

Feature Code: **HE0140**  
Feature Name: Military Practice Area  
Description: An area within which naval, military or aerial exercises are carried out. Also called an exercise area.  
Feature Class: Point, Polygon,  
Possible Attribute: Name (NAM)

Feature Code: **HE0150**  
Feature Name: Log Pond  
Description: A maritime area enclosed with connected floating timbers used as a staging area for sawn logs.  
Feature Class: Point, Polygon,  
Possible Attribute: Name (NAM)

## HF - Danger and Hazards

Feature Code:	<b>HF0010</b>
Feature Name:	Obstruction
Description:	Objects that endangers or prevent safe passage of a vessel, e.g. sunken rock, pinnacle etc.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HF0020</b>
Feature Name:	Current
Description:	Lines on charts showing the strength and directions of horizontal movement of water.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>HF0030</b>
Feature Name:	Sandwave
Description:	A large wavelike sediment feature in very shallow water and composed of sand.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HF0040</b>
Feature Name:	Wreck
Description:	The ruined remains of a stranded or sunken vessel.
Feature Class:	Point
Possible Attribute:	Name (NAM), Wreck Category (WKC), Wreck Depth (WKD)
Feature Code:	<b>HF0050</b>
Feature Name:	Spoil Ground
Description:	An area at sea where dredged material is deposited. Also called dumping ground.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HF0060</b>
Feature Name:	Explosive Dumping Ground
Description:	An area at sea where explosives are dumped.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HF0070</b>
Feature Name:	Rocks
Description:	A concreted mass of stony material or coral which dries is awash or is below the water surface.
Feature Class:	Point, Polygon,
Possible Attribute:	Name (NAM), Category of Rock (COR), Category of Water Level (CWL)

## HG - Depth Information

Feature Code:	<b>HG0010</b>
Feature Name:	Unsurveyed Area
Description:	An area where the determination of ocean depth is determined by estimation because survey data does not exist or very poor.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HG0020</b>
Feature Name:	Upright Sounding
Description:	Soundings compiled from smaller scale or unreliable source.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HG0030</b>
Feature Name:	Unsurveyed Depth Contour
Description:	A depth contour that is determined from points with no survey or very poor data.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>HG0040</b>
Feature Name:	Swept Area
Description:	An area swept by a towline or object below the surface to clear to a certain depth for the navigation safety.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HG0050</b>
Feature Name:	Sounding Depth
Description:	Depth obtained through sounding by means of any sounding equipments.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HG0060</b>
Feature Name:	Surveyed Depth Contour
Description:	Line containing point of the same depth with survey data.
Feature Class:	Line
Possible Attribute:	Name (NAM), Contour Line Index (CLI), Contour Line Type (CLT), Contour Line Value (CLV)
Feature Code:	<b>HG0070</b>
Feature Name:	Mud Line
Description:	Delineates an area of mud that covers and uncovers depending on the elevation of the surface above chart datum.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>HG0080</b>
Feature Name:	Sand Line
Description:	Delineates an area of sand that covers and uncovers depending on the elevation of the surface above chart datum.
Feature Class:	Line
Possible Attribute:	Name (NAM)

Feature Code: **HG0090**  
Feature Name: Depth Area  
Description: Water area containing soundings within a defined range of values permanently at or below sounding datum.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

### HH - Inland Water

Feature Code: **HH0000**  
Feature Name: **Water Body**  
Description: An open body of water entirely surrounded by land either naturally formed or man made.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH),

Feature Code: **HH0010**  
Feature Name: Dam  
Description: A barrier, together with appurtenant structures, constructed for the purposes of storage, control and diversion of water. A dam may be constructed across a natural watercourse or on the periphery of a reservoir.  
Feature Class: Point  
Possible Attribute: Name (NAM), Dam Usage (DMU), Dam Type (DMT), Dam Structures (DMS)

Feature Code: **HH0020**  
Feature Name: Lake  
Description: A large inland body of water entirely surrounded by land either naturally formed or man made.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Authority (AUT)

Feature Code: **HH0030**  
Feature Name: Reservoir  
Description: Body of water, either natural or artificial, used for storage regulation and control of water resources.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Custodian (CUS), Authority (AUT)

Feature Code: **HH0040**  
Feature Name: River  
Description: A relatively large natural stream of water.  
Feature Class: Line, Polygon  
Possible Attribute: Name (NAM)

Feature Code: **HH0041**  
Feature Name: River Bank  
Description: The edge of a relatively large natural stream of water  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code	<b>HH0042</b>
Feature Name	River Coverage
Description	An open body of water surrounded by river bank
Feature Class	Polygon
Possible Attribute	Name (NAM), Area Measured (m <sup>2</sup> )(ARM)
Feature Code:	<b>HH0050</b>
Feature Name:	Under Ground River
Description:	Stream that flow under the ground.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM)
Feature Code:	<b>HH0060</b>
Feature Name:	Old River Bed
Description:	An old course of river.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HH0070</b>
Feature Name:	Island
Description:	A body of land completely surrounded by water or marsh.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>HH0080</b>
Feature Name:	Sand Bar
Description:	A mass of sand, gravel and/or other consolidated materials, which rises near, to, or above water level, often near the mouth of a river or at the approach to a harbour.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HH0090</b>
Feature Name:	Salt Lick
Description:	An area where wildlife lick for salt.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HH0100</b>
Feature Name:	Water Hole
Description:	A dip or hole in the surface of the ground in which water collects.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HH0110</b>
Feature Name:	Waterfall
Description:	A sudden, vertical or near vertical descent of water over a step or ledge in the bed of a river.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HH0120</b>
Feature Name:	Rapids
Description:	A fast flowing section of a watercourse generally with exposed rocks or boulders.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM)

Feature Code: **HH0130**  
Feature Name: Natural Spring  
Description: A natural exit of water from the ground.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HH0140**  
Feature Name: Pool  
Description: Small areas of still water especially formed naturally or shallow patch of water or other liquid lying on a surface.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HH0150**  
Feature Name: Artificial Recharge Basin  
Description: A man made circular container used to reload and fill water.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HH0160**  
Feature Name: Tank  
Description: A fixed structure for storing liquids.  
Feature Class: Point  
Possible Attribute: Name (NAM), Tank Type (TAT), Tank Usage (TAU)

Feature Code: **HH0170**  
Feature Name: Drain  
Description: Channel that carry away storm water to control flooding.  
Feature Class: Line  
Possible Attribute: Name (NAM), Drain Conveyance (DRV), Drain Usage (DRU), Drain Category (DRC), Drain Structure (DRS)

Feature Code **HH0171**  
Feature Name Drain Edge  
Description Edge of drains that carry away storm water to control flooding.  
Feature Class Line  
Possible Attribute Name (NAM)

Feature Code **HH0172**  
Feature Name Drain Coverage  
Description Area of the drain that falls within it edges.  
Feature Class Polygon  
Possible Attribute Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **HH0180**  
Feature Name: Irrigation Drain  
Description: Open earth/concrete channel that transport surplus water from the paddy plots to the river.  
Feature Class: Line  
Possible Attribute: Name (NAM), Irrigation Drain Category (IRC)

Feature Code **HH0181**  
Feature Name Irrigation Drain Edge  
Description The edge of open earth/concrete drain that transport surplus water from the paddy plots to the river  
Feature Class Line  
Possible Attribute Name (NAM)

Feature Code	<b>HH0182</b>
Feature Name	Irrigation Drain Coverage
Description	Area of the drains that transport surplus water from the paddy plots to the river.
Feature Class	Polygon
Possible Attribute	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HH0190</b>
Feature Name:	Irrigation Canal
Description:	Open earth/concrete channel that transport irrigation water from the source to other locations transversing topographic features along the way.
Feature Class:	Line
Possible Attribute:	Name (NAM), Irrigation Canal Category (ICC)
Feature Code	<b>HH0191</b>
Feature Name	Irrigation Canal Edge
Description	The edge of open earth/concrete canal that transports irrigation water from the source to other locations transversing topographic features along the way.
Feature Class	Line
Possible Attribute	Name (NAM)
Feature Code	<b>HH0192</b>
Feature Name	Irrigation Canal Coverage
Description	An open body of water surrounded by irrigation Canal Edge.
Feature Class	Polygon
Possible Attribute	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>HH0200</b>
Feature Name:	Agricultural Drainage Drain
Description:	An open earth ditch/channel used to control the ground water table and transport surplus runoff water from an agricultural area to the river/sea.
Feature Class:	Line
Possible Attribute:	Name (NAM), Agricultural Drain Category (ADC), Agricultural Drainage Structures Purpose (ADS)
Feature Code:	<b>HH0210</b>
Feature Name:	Pond
Description:	An open body of water smaller than a lake which is either naturally formed or man made.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Pond Type (POT), Authority (AUT)
Feature Code:	<b>HH0220</b>
Feature Name:	Drain Structures
Description:	Structures constructed along drain alignment to facilitate the removal of excess stormwater in a drain.
Feature Class:	Point
Possible Attribute:	Name (NAM), Drainage Structures (DRS)
Feature Code:	<b>HH0225</b>
Feature Name:	Irrigation Drain Structures
Description:	Structures constructed along drain alignment in an irrigation scheme to regulate and remove excess water for paddy cultivation.
Feature Class:	Point
Possible Attribute:	Name (NAM), Irrigation Drain Structures (IRS)

Feature Code: **HH0230**  
 Feature Name: Irrigation Canal Structures  
 Description: Structures constructed along canal alignment in an irrigation scheme to facilitate application of water for paddy cultivation.  
 Feature Class: Point  
 Possible Attribute: Name (NAM), Irrigation Canal Structure Purpose (ICS)

Feature Code: **HH0240**  
 Feature Name: Agricultural Drainage Structures  
 Description: Wooden or reinforced concrete structures used to control the water in an agricultural area.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Agricultural Drainage Structures Purpose (ADS)

Feature Code: **HH0250**  
 Feature Name: Inland Flood Prone Area  
 Description: An inland areas that are prone to flood in relation to the rainfall intensity and year of occurrence.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code **HH0260**  
 Feature Name **Wetland**  
 Description **An area of land inundated temporarily or permanently with shallow water, usually slow moving or stationary that create growing conditions suitable for both emergent and other aquatic vegetation.**  
 Feature Class **Polygon**  
 Possible Attribute **Name (NAM), Area Measured (m<sup>2</sup>) (ARM)**

### HJ - River Structure

Feature Code: **HJ0010**  
 Feature Name: Water Control Structure  
 Description: A building or structure used to control the flow of water.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **HJ0020**  
 Feature Name: Riverbank Protection  
 Description: Structures built alongside riverbanks to protect bank failure, erosion, etc.  
 Feature Class: Line  
 Possible Attribute: Name (NAM), Riverbank Protection Type (RPT)

Feature Code: **HJ0030**  
 Feature Name: Weir  
 Description: A barrier constructed to control the flow or raise the level of water.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code:	<b>HJ0040</b>
Feature Name:	Fish Ladder
Description:	Structure built alongside river to allow fish to migrate upstream or downstream.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HJ0050</b>
Feature Name:	Riverlock
Description:	A dock in a river waterway permitting boats from one level to another.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HJ0060</b>
Feature Name:	Barrage
Description:	A barrier, provided with a series of gates, across the river to regulate water level upstream and also to control tidal influence.
Feature Class:	Point, <b>Line</b>
Possible Attribute:	Name (NAM)
Feature Code:	<b>HJ0070</b>
Feature Name:	Tidal Gate
Description:	A barrier similar to barrage but smaller in size specifically to control tidal influence.
Feature Class:	Point, <b>Line</b>
Possible Attribute:	Name (NAM)
Feature Code:	<b>HJ0080</b>
Feature Name:	<b>Gross Pollutant Traps</b>
Description:	<b>A devices used to intercept/trap gross litter, hydrocarbons and coarse solids.</b>
Feature Class:	Point
Possible Attribute:	Name (NAM), <b>Grass Pollutant Type (GPT)</b>
Feature Code:	<b>HJ0090</b>
Feature Name:	Culvert
Description:	A transverse drain or waterway structure that crosses beneath a road, railway, canal or through an embankment by means of a pipe or enclosed.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>HJ0100</b>
Feature Name:	River Groyne
Description:	A low artificial waal-like structure extending from the bank of the river in transverse direction to the current.
Feature Class:	Point
Possible Attribute:	River Groyne Type (RYT)
Feature Code	<b>HJ0110</b>
Feature Name	<b>Drainage Gate</b>
Description	<b>Control device at drainage outlet to avoid backflow during high tides/ high flood levels at the receiving water bodies.</b>
Feature Class	<b>Point</b>
Possible Attribute	<b>Name (NAM), Drainage Gate (DRG)</b>

**HK – Offshore**

Feature Code: **HK0010**  
 Feature Name: Offshore Lighting  
 Description: A group of light located on the sea.  
 Feature Class: Point  
 Possible Attribute: Name (NAM), Light Characteristic Category (LCC)

Feature Code: **HK0020**  
 Feature Name: Offshore Platform  
 Description: A flat surface raised above the sea used as a drilling, production or living quarters in offshore oil and gas operations.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM)

Feature Code: **HK0030**  
 Feature Name: Flare Stack  
 Description: A tall structure used for burning off waste oil or gas.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code **HK0040**  
 Feature Name **Sea Coverage**  
 Description **An open body of water surrounded by shore line.**  
 Feature Class **Polygon**  
 Possible Attribute **Name (NAM), Area Measured (m<sup>2</sup>) (ARM)**

Feature Code **HK0050**  
 Feature Name **Offshore Production Area**  
 Description **An area at sea within which there are production facilities.**  
 Feature Class **Polygon**  
 Possible Attribute **Name (NAM), Offshore Production (OFP)**

**HL – Island**

Feature Code: **HL0010**  
 Feature Name: Inland Island  
 Description: A naturally formed area of land, surrounded by inland water, which is above water at high tide.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **HL0020**  
 Feature Name: Coastal Island  
 Description: A naturally formed area of land, surrounded by seawater within 3 nautical miles from the coastline, which is above water at high tide.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **HL0030**  
Feature Name: Offshore Island  
Description: A naturally formed area of land, surrounded by seawater beyond the State Territorial Water Boundary, which is above water at high tide.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

### HM – Miscellaneous

Feature Code: **HM0010**  
Feature Name: Hydrological Station  
Description: A hydrological station is a geographical location at which observations and measurements of hydrological parameters such as rainfall, evaporation, water level, stream flow, suspended sediment and water quality are made either manually by an observer, automatically recorded by a recorder or logged by a data logger. In addition, the station can be equipped with a telemetric system using telecommunication where data are collected, transmitted, recorded and displayed at the base station for flood forecasting and warning as well as drought monitoring purposes.  
Feature Class: Point  
Possible Attribute: Name (NAM), Hydrological Station Type (HST)

Feature Code **HM0020**  
Feature Name Swamp  
Description Land that is always wet or covered with water  
Feature Class Polygon  
Possible Attribute Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Swamp Type (SWT)

Feature Code **HM0030**  
Feature Name Water Flow  
Description Direction which the water flows  
Feature Class Point  
Possible Attribute Name (NAM)

**R - HYP SOGRAPHY****RA - Relief Portrayal**

Feature Code: **RA0010**  
 Feature Name: Contour Line  
 Description: An imaginary line formed by connecting points on earth surface having the same elevations.  
 Feature Class: Line  
 Possible Attribute: Name (NAM), Contour Line Type (CLT), Contour Line Index (CLI), Contour Line Value (CLV)

Feature Code: **RA0020**  
 Feature Name: Valley Bottom Line  
 Description: A line representation of the lowest part of a valley.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **RA0030**  
 Feature Name: Breakline  
 Description: A line representing the demarcation of a sudden and significant change in the gradient of the terrain relief.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **RA0040**  
 Feature Name: Inland Water Elevation  
 Description: A location with a generalised elevation value relative to a vertical datum associated with an inland, usually confined, water body.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **RA0050**  
 Feature Name: Pinnacle  
 Description: A small turret or spire usually ending in a pyramid or cone, crowning a buttress.  
 Feature Class: Point, Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **RA0060**  
 Feature Name: Cliff Precipitous  
 Description: A high, steep face of rock.  
 Feature Class: Line, Polygon  
 Possible Attribute: Name (NAM), Portion Class (RPS)

Feature Code: **RA0061**  
 Feature Name: Cliff Area  
 Description:  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **RA0070**  
Feature Name: Cutting  
Description: An excavated channel through high ground.  
Feature Class: Line, Polygon  
Possible Attribute: Name (NAM), **Portion Class (RPS)**

Feature Code: **RA0071**  
Feature Name: **Cutting Area**  
Description:  
Feature Class: **Polygon**  
Possible Attribute: **Name (NAM), Area Measured (m<sup>2</sup>) (ARM)**

Feature Code: **RA0080**  
Feature Name: Embankment  
Description: An earth or concrete bank for keeping back water, or for carrying a road or railway or for protecting adjacent land from inundation by flood water.  
Feature Class: Line, Polygon  
Possible Attribute: Name (NAM), Embankment Purpose (EMP), **Portion Class (RPS)**

Feature Code: **RA0081**  
Feature Name: **Embankment Area**  
Description:  
Feature Class: **Polygon**  
Possible Attribute: **Name (NAM), Area Measured (m<sup>2</sup>) (ARM)**

Feature Code: **RA0090**  
Feature Name: Ridge  
Description: A long narrow hilltop, mountain range or watershed.  
Feature Class: Line  
Possible Attribute: Name (NAM), Ridge Type (RIT)

Feature Code: **RA0100**  
Feature Name: Spot Height  
Description: Locations where height has been determined with respect to a vertical datum.  
Feature Class: Point  
Possible Attribute: Name (NAM), Spot Height Value (SHV)

Feature Code: ~~XA0010~~ **RA0110**  
Feature Name: Disturbed Soil  
Description: An area that has been so disturbed by human activity that no single soil type can be accurately identified. These areas may include built-up areas, strip mines, landfills, railroad yards, etc.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

**Feature Code:** ~~XA0020~~ RA0120  
**Feature Name:** Slope Polygon  
**Description:** An area enclosing a group of slope values falling within a set range.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Route Number (RTN), Length (LEN), Slope Designation (SLD), Type of Berm (TBE), Nos of Berm (NBE)

**Feature Code:** ~~XA0030~~ RA0130  
**Feature Name:** Aspect Polygon  
**Description:** An area enclosing a group of aspect values falling within a set range.  
**Feature Class:** Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

## S - SOIL

Feature Code: **S00000**  
Feature Name: SOIL  
Description: Soil is a natural body consisting of layers (soil horizons) comprised of solids (minerals and organic matter), liquid, and gases which differ from their parent materials in their texture, structure, consistency, color, chemical, biological and other characteristics. It is the unconsolidated or loose covering of fine rock particles that covers the surface of the earth. Soil is the end product of the influence of the climate (temperature, precipitation), relief (slope), organisms (flora and fauna), parent materials (original minerals), and time.  
Feature Class: Polygon  
Possible Attribute: Area Measured in Hectares (ARH)

### SA - Histosols

Feature Code: **SA0000**  
Feature Name: HISTOSOL  
Description: Soils that are organic in (a) more than half the thickness of the upper 81 cm or (b) at least in two-thirds of the soil depth to lithic or paralithic contact  
Feature Class: Polygon  
Possible Attribute: Label(LBL), Area Measured in Hectares(ARH)

Feature Code: **SA1001**  
Feature Name: BAKRI series  
Description: Soil derived from organic deposit (swamp peat),shallow, dominantly hemic material overlying sulfidic marine clay, very poorly drained  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: **SA1002**  
Feature Name: BAYAS series  
Description: Soil derived from organic deposit (swamp peat), deep, dominantly hemic material overlying fibric/woody material, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of

Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SA1003  
**Feature Name:** CANGKAT LOBAK series  
**Description:** Soil derived from organic deposit (swamp peat), shallow, dominantly fibric/woody material overlying riverine clay, very poorly drained.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares (ARH)

**Feature Code:** SA1004  
**Feature Name:** GALI series  
**Description:** Soil derived from organic deposit (swamp peat), shallow, dominantly hemic material overlying riverine clay, very poorly drained.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SA1005  
**Feature Name:** GONDANG series  
**Description:** Soil derived from organic deposit (swamp peat), deep, dominantly hemic material overlying riverine clay, very poorly drained.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1006  
Feature Name: LINGGI series  
Description: Soil derived from organic deposit (swamp peat), shallow, dominantly sapric material overlying non sulfidic clay, very poorly drained  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1007  
Feature Name: NIPIS series  
Description: Soil derived from organic deposit (swamp peat), shallow, dominantly sapric material overlying non sulfidic clay, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1008  
Feature Name: PAK BONG series  
Description: Soil derived from organic deposit (swamp peat), shallow, dominantly hemic material overlying riverine sandy, very poorly drained  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1009  
 Feature Name: PENOR series  
 Description: Soil derived from organic deposit (swamp peat), shallow, dominantly hemic material overlying riverine sandy, very poorly drained.  
 Feature Class: Polygon,  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1010  
 Feature Name: SALLEH series  
 Description: Soil derived from organic deposit (swamp peat), deep, dominantly fibric/woody material overlying riverine clay, very poorly drained  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1011  
 Feature Name: TASIK series  
 Description: Soil derived from organic deposit (swamp peat),moderately to deep, dominantly hemic material overlying riverine clay, very poorly drained  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA1012  
 Feature Name: TELOK BULOH series  
 Description: Soil derived from organic deposit (swamp peat), moderately deep, dominantly sapric material overlying non sulfidic marine clay, very poorly drained

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2000  
Feature Name: KAPOR series  
Description: Soil derived from organic deposit (peat forest), shallow, dominantly sapric material (low ash content) overlying limestone, well drained.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2001  
Feature Name: MELINAU series  
Description: Soil derived from organic deposit (peat forest), shallow, dominantly sapric material (high ash content) overlying limestone, well drained

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2010  
Feature Name: MULU series  
Description: Soil derived from organic deposit ( mossy-montane forest), shallow,dominantly hemic/sapric material (low ash) overlying limestone, well drained (unsaturated).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS),

Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2020  
Feature Name: BAREO series  
Description: Soil derived from organic deposit (highland peat forest), moderately deep,dominantly hemic/sapric material (low ash) overlying clay, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2021  
Feature Name: UMOR series  
Description: Soil derived from organic deposit (woody montane forest), shallow,dominantly hemic/sapric material (low ash content), very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2030  
Feature Name: IGAN series  
Description: Soil derived from organic deposit, shallow, dominantly hemic/sapric material (low ash content) overlying non sulfidic marine sand, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile

Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2040  
Feature Name: MUKAH series  
Description: Soil derived from in-situ organic deposit, shallow, dominantly hemic material (low ash content) overlying non sulfidic marine clay , very poorly drained,  
coastal and inland swamps

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2041  
Feature Name: EPAI series  
Description: Soil derived from in-situ organic deposit, shallow, dominantly hemic/sapric material (high ash content) overlying non sulfidic marine clay , very poorly drained.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2060  
Feature Name: MERAPOK series  
Description: Soil derived from organic deposit, shallow, dominantly hemic/sapric material (high ash content) overlying sulfidic marine clay, very poorly drained, coastal peat swamp.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC),

Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2061  
Feature Name: PATOK series  
Description: Soil derived from organic deposit, shallow, dominantly hemic/sapric material (low ash content) overlying sulfidic marine clay, very poorly drained, coastal peat swamp  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2062  
Feature Name: MAHAT series  
Description: Soil derived from transported organic deposit, shallow, dominantly hemic/sapric material overlying sulfidic marine clay, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2080  
Feature Name: ANDERSON series  
Description: Soil derived from insitu organic deposit (peat swamp forest), deep, dominantly fibric/hemic (low ash content) material overlying non sulfidic clay/sand, very poorly drained, inland or coastal peat.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil

Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2081  
Feature Name: GADONG series  
Description: Soil derived from organic deposit (peat swamp forest), deep, dominantly fibric/hemic (high ash content) material overlying non sulfidic clay/sand , very poorly drained  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA2082  
Feature Name: LUK series  
Description: Soil derived from transported organic deposit, deep, dominantly fibric/hemic material overlying any type of stratum,very poorly drained  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA3000  
Feature Name: KLIAS series  
Description: A very deep peat soil, dominantly fibric/woody material overlying marine clay, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of

Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA3010  
Feature Name: MENGALUM series  
Description: Soil derived from organic deposit (swamp peat),moderately deep, dominantly fibric material overlying marine sand, high base saturation, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA3020  
Feature Name: ARANG series  
Description: Soil derived from organic deposit (swamp peat), moderately deep, dominantly hemic material overlying marine sulfidic clay, very poorly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SA3030  
Feature Name: KIANTANO series  
Description: Soil derived from organic deposit (swamp peat), moderately deep, dominantly sapric material overlying acid igneous rock, imperfectly drained.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil

Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## **SB – SPODOSOLS**

Feature Code: SB0000  
Feature Name: SPODOSOLS  
Description: Mineral soils without a plaggen, argillic or kandic horizon but with an illuvial spodic horizon within 2 meters of the soil surface.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Area Measured in Hectares (ARH)

Feature Code: SB1001  
Feature Name: CHERATING series  
Description: Soil developed on beach ridges, sandy, with wavy fragmented spodic horizon, somewhat excessively drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB1002  
Feature Name: JAMBU series  
Description: Soil developed on beach ridges, sandy, with albic horizon, excessively drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB1003  
Feature Name: RHU TAPAI series  
Description: Soil developed on beach ridges, sandy, with strongly cemented spodic horizon, moderately well drained, shallow profile.

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB1004  
Feature Name: RU DUA series  
Description: Soil developed on beach ridges, sandy, with strongly cemented spodic horizon, somewhat excessively drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB1005  
Feature Name: RUSILA series  
Description: Soil developed on beach ridges, sandy to clayey, grayish in colour, very poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB1006  
Feature Name: TANAH RATA series  
Description: Soil derived from granite rock, with histic epipedon (sapric) and a thin, brownish in colour, weakly cemented spodic horizon, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS),

Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2000  
Feature Name: GRANG series  
Description: Soil developed on waterlogged terraces, presence of thin histic layer, spodic horizon, sandy texture, poorly drained, found in lowland area.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2001  
Feature Name: PENIAN series  
Description: Soil developed on waterlogged terraces, spodic horizon, sandy texture, poorly drained, found in lowland area.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2010  
Feature Name: JERIJEH series  
Description: Soil developed on terraces, strongly cemented spodic horizon (iron rich),well drained, found at low to moderately high land area.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil

Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2011  
Feature Name: STOH series  
Description: Soil developed on terraces, sandy, presence of weakly cemented spodic horizon (iron rich),well drained, found at moderately highland area  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2020  
Feature Name: BUSO series  
Description: Soil developed on terraces, sandy, presence of weakly cemented spodic horizon (humus rich), well drained, found at low to moderately highland area  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2021  
Feature Name: SILANTEK series  
Description: Residual soil, sandy, soil, presence of weakly cemented spodic horizon (humus rich), well drained, found at low to moderately highland area  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil

Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2030  
Feature Name: MIRI series  
Description: Soil developed on terraces, sandy, presence of strongly cemented spodic horizon (humus rich), well drained, found at low to moderately highland area  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB2031  
Feature Name: BAKO series  
Description: Residual soil, sandy textured, presence of strongly cemented spodic horizon (humus rich), well drained, present at low to moderately highland area  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB3000  
Feature Name: SIBUGA series  
Description: Soil derived from sandstone, grayish in colour, sandy, non-indurated spodic horizon, well to excessively drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base

saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB3010  
Feature Name: SILIMPOPON series  
Description: Soil formed on terrace alluvium, grayish in colour, sandy, strongly cemented spodic horizon, well to excessively drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB3020  
Feature Name: KARAMATOI series  
Description: Soil formed on beach ridges, grayish in colour, sandy, weakly cemented spodic horizon, moderately well to excessively drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB3030  
Feature Name: BAIAYO series  
Description: Soil formed on terrace alluvium, red-yellow in colour, sandy, strongly cemented spodic horizon, imperfectly drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB3040  
Feature Name: PA SIA series  
Description: Soil derived from sandstone and mudstone, grayish in colour, sandy, non-indurated spodic horizon, somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SB3050  
Feature Name: MESILAU series  
Description: Soil derived from granodiorite, grayish in colour, fine clayey, thin iron pan in or above spodic horizon, moderately well drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## SC – ANDISOLS

Feature Code: SC0000  
Feature Name: ANDISOLS  
Description: Other soils that have andic soil properties in 60 percent or more of the soil from the surface to 60cm or lithic or paralithic contact, formed from mostly volcanic ejecta with bulk densitied below 0.90Mg/m<sup>3</sup>  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Area Measured in Hectares (ARH)

Feature Code: SC2001  
Feature Name: LINAU series  
Description: Residual soilfrom volcanic ash, andic soil properties,over lithic or paralithic contact, bulk density less 0.90Mg/m<sup>3</sup>  
Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## **SD – OXISOLS**

Feature Code: SD0000  
Feature Name: OXISOLS  
Description: Other soils with (a) an oxic horizon top within 150cm or (b) 40 percent or more clay within 18 cm and a kandic horizon with weatherable mineral properties of an oxic horizon, with upper boundary within 100 cm of soil surface  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Area Measured in Hectares (ARH)

Feature Code: SD1001  
Feature Name: BESERAH series  
Description: Soil derived from granite rock, brownish in colour, clayey skeletal, somewhat excessively drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1002  
Feature Name: GADING series  
Description: Soil derived from granite rock, brownish in colour, fine loamy, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of

Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1003  
Feature Name: GOH series  
Description: Soil derived from basalt rock, brownish in colour, clayey, somewhat excessively drained, moderately deep profile..  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1004  
Feature Name: JABOR series  
Description: Soil derived from basalt rock, brownish in colour, clayey, somewhat excessively drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1005  
Feature Name: JERANGAU series  
Description: Soil derived from granodiorite rock, brownish in colour, clayey, somewhat excessively drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1006  
Feature Name: KAMPONG KOLAM series  
Description: Soil derived from granodiorite rock, reddish in colour, clayey, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1007  
Feature Name: KATONG series  
Description: Soil derived from andesite rock, brownish in colour, clayey, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1008  
Feature Name: KAWAH series  
Description: Soil derived from reworked materials, reddish in colour, clayey, abundant mixed gravels, somewhat excessively drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SD1009  
**Feature Name:** KODIANG series  
**Description:** Soil derived from limestone and calcareous materials, reddish in colour, very fine clay, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SD1010  
**Feature Name:** KUANTAN series  
**Description:** Soil derived from basalt rock, brownish in colour, very fine clay, somewhat excessively drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SD1011  
**Feature Name:** MELAKA series  
**Description:** Soil derived from reworked materials, reddish in colour, clayey, abundant stones and boulders, somewhat excessively drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1012  
Feature Name: MUNCHUNG series  
Description: Soil derived from schist rock, brownish in colour, clayey, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1013  
Feature Name: PATANG series  
Description: Soil derived from hornfels rock, reddish in colour, clayey, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1014  
Feature Name: PRANG series  
Description: Soil derived from schist/shale rock, reddish in colour, clayey, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1015  
Feature Name: SAGU series  
Description: Soil derived from limestone and calcareous materials, reddish in colour, very fine clay, high base saturation, presence of thin manganese nodules, somewhat excessively drained, oxic horizon, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1016  
Feature Name: SEGAMAT series  
Description: Soil derived from andesite rock, reddish in colour, clayey, somewhat excessively drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1017  
Feature Name: SUNGAI MAS series  
Description: Soil derived from serpentinite rock, reddish in colour, clayey, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1018  
Feature Name: TANDAK series  
Description: Soil derived from reworked materials, reddish in colour, clayey, abundant stones and gravels, somewhat excessively drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1019  
Feature Name: TANGGA series  
Description: Soil derived from limestone and calcareous materials, strong brown in colour, very fine clay, somewhat excessively drained, oxic horizon,deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1020  
Feature Name: TERSAT series  
Description: Soil derived from granite rock, brownish in colour, clayey, somewhat excessively drained, ,deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD1021  
Feature Name: TUNGGAL series  
Description: Soil derived from reworked materials, reddish in colour, clayey, abundant mixed gravels, somewhat excessively drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2000  
Feature Name: TARAT series  
Description: Residual soil derived insitu from intermediate to basic igneous rock, very fine clay, dark red coloured soil matrix  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2001  
Feature Name: JEBONG series  
Description: Residual soil derived insitu from intermediate to basic igneous rock,very fine clay, red coloured soil matrix.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2002  
Feature Name: ANTAYAN series  
Description: Residual soil derived insitu from intermediate to basic igneous rock, very fine clay, yellow coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2020  
Feature Name: LINGGA series  
Description: Residual soil derived insitu from acid igneous or sedimentary rock, fine clay, pallid coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2021  
Feature Name: RUKAM series  
Description: Residual soil derived insitu from acid igneous or sedimentary rock, fine clay, yellow-pallid coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2022  
Feature Name: SERIN series  
Description: Residual soil derived insitu from acid igneous or sedimentary rock, fine clay, yellow-pallid coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2023  
Feature Name: JAGOI series  
Description: Residual soil derived insitu from acid igneous to sedimentary rock, fine clay, red coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2024  
Feature Name: NYAROH series  
Description: Residual soil derived insitu from acid igneous or sedimentary rock, very fine clay, yellow coloured soil matrix

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2025  
Feature Name: PIRING series  
Description: Residual soil derived insitu from acid igneous or sedimentary rock.Very fine clay, dark red to red coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2030  
Feature Name: GADING series  
Description: Residual soil derived insitu from acid igneous rock, fine loamy to fine silty, red coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2040  
Feature Name: NIBONG series  
Description: Residual soil derived insitu from acid volcanic rock, very fine clay, yellow coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2041  
Feature Name: MUJAN series  
Description: Residual soil derived insitu from acid volcanic rock, fine clay, yellow coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2042  
Feature Name: UJEK series  
Description: Residual soil derived insitu from acid volcanic rock, fine clay, reddish coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD2043  
Feature Name: SELIO series  
Description: Residual soil derived in situ from acid volcanic rock, very fine clay, pallid coloured soil matrix.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3000  
Feature Name: AMBUN series  
Description: Soil derived from ultrabasic igneous rock, brownish in colour, very fine clayey, well drained, very deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3010  
Feature Name: NOBUSU series  
Description: Soil formed on alluvium derived from ultrabasic igneous rock, reddish in colour, very fine clayey, well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3020  
Feature Name: TABLE series  
Description: Soil derived from basalt, reddish in colour, very fine clayey, well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3030  
Feature Name: PINANAKAN series  
Description: Soil derived from serpentinite rock, reddish brown in colour, very fine clayey, well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3040  
Feature Name: APAS series  
Description: Soil derived from volcanic ash rock, reddish in colour, fine clayey, well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3050  
Feature Name: BENUOU series  
Description: Soil formed on alluvium derived from shale and sandstone, reddish in colour, fine loamy, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3060  
Feature Name: JARANGAN series  
Description: Soil derived from basalt, brownish in colour, very fine clayey, well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SD3070  
Feature Name: TUNGAU series  
Description: Soil formed on alluvium derived from sedimentary rock, yellowish in colour, fine clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## **SE – VERTISOLS**

Feature Code: SE0000  
Feature Name: VERTISOLS  
Description: Other soil that has slickensides or wedge-shaped peds with more than 30 percent clay to the depth of 50 cm or densic, lithic or paralithic contact if shallower and cracks that open and close periodically (usually montmorillonite clays)

Feature Class: Polygon  
Possible Attribute: Label (LBL), Area Measured in Hectares (ARH)

Feature Code: SE1001  
Feature Name: CHENGAI series  
Description: Soil derived from marine alluvium, gray in colour, clayey, dominantly red mottles, presence of gypsum, poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SE1002  
Feature Name: ROTAN series  
Description: Soil derived from marine alluvium, olive gray in colour, clayey, dominantly brown/yellow mottles, presence of slickenside, poorly drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SE1003  
Feature Name: TEBENGAU series  
Description: Soil derived from marine alluvium, greenish gray in colour, clayey, dominantly brown/yellow mottles, presence of slickenside, poorly drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## SF – ULTISOLS

Feature Code: SF0000  
Feature Name: ULTISOLS  
Description: Other soils with an argillic (or kandic) horizon, base saturation < 35 percent, and enough moisture for crops in most years  
Feature Class: Polygon  
Possible Attribute: Label LBL), Area Measured in Hectares (ARH)

Feature Code: SF1001  
Feature Name: ALMA series  
Description: Soil derived from sub recent alluvium, brownish in colour, clayey, imperfectly to somewhat imperfectly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1002  
Feature Name: APEK series  
Description: Soil derived from iron poor sandy shale, yellowish in colour, fine loamy, moderately well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1003  
Feature Name: ASAHAN series  
Description: Soil derived from shale, brownish in colour, common plinthite, clayey with high fine silt, moderately well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC),

Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares (ARH)

Feature Code: SF1004  
Feature Name: AWANG series  
Description: Soil derived from sub recent alluvium, brownish in colour, fine loamy, slightly gravelly, imperfectly to somewhat imperfectly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1005  
Feature Name: BADAK series  
Description: Soil derived from sub recent alluvium, grayish in colour, gravelly, poorly to somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1006  
Feature Name: BALING series  
Description: Soil derived from older alluvium (granite), brownish in colour, clayey, few plinthite, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type

(STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1007  
Feature Name: BATANG MERBAU series  
Description: Soil derived from quartz mica schist, brownish in colour, clayey, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1008  
Feature Name: BATU ANAM series  
Description: Soil derived from iron poor shale, pale brown in colour; clayey with high fine silt, somewhat imperfectly drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1009  
Feature Name: BATU HITAM series  
Description: Soil derived from recent riverine alluvium, grayish in colour, clayey with high silt, somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil

Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1010  
Feature Name: BATU LAPAN series  
Description: Soil derived from laterised shale, brownish in colour; clayey, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1011  
Feature Name: BEDUP series  
Description: Soil derived from shale, brownish in colour; clayey with high fine silt, moderately well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1012  
Feature Name: BELADING series  
Description: Soil derived from sub recent alluvium, brownish in colour, very fine, compact and prismatic structures with high base saturation, imperfectly to somewhat imperfectly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base

saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares (ARH)

Feature Code: SF1013  
Feature Name: BERA series  
Description: Soil derived from reworked materials, brownish in colour, coarse loamy, abundant rounded gravels, somewhat imperfectly drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1014  
Feature Name: BERTAM series  
Description: Soil derived from sub recent alluvium, dull in colour, clayey, less plinthite, somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1015  
Feature Name: BUDU series  
Description: Soil derived from older alluvium, brownish in colour, clayey, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1016  
Feature Name: BUKIT AJIL series  
Description: Soil derived from granodiorite rock, reddish in colour, clayey well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1017  
Feature Name: BUKIT TEMIANG series  
Description: Soil derived granite rock, reddish in colour, clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1018  
Feature Name: BUKIT TUKU series  
Description: Soil derived from sub recent alluvium, brownish in colour, fine loamy, imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1019  
**Feature Name:** BUNGOR series  
**Description:** Soil derived from shale, brownish in colour; clayey, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1020  
**Feature Name:** CHAT series  
**Description:** Soil derived from shale, brownish in colour; clayey, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1021  
**Feature Name:** CHEMPAKA series  
**Description:** Soil derived from recent riverine alluvium, brownish in colour, clayey, moderately well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1022  
Feature Name: CHENIAN series  
Description: Soil derived from quartz porphyry igneous rock, brownish in colour, clayey, high fine silt, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1023  
Feature Name: CHERANG HANGUS series  
Description: Soil derived from sub recent alluvium, grayish in colour, clayey, poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1024  
Feature Name: CHUKAI SERIES  
Description: Soil derived from older alluvium, brownish in colour, fine loamy, few plinthite, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1025  
**Feature Name:** CHANGLOON series  
**Description:** Soil derived from reworked materials, brownish in colour, clayey, abundant rounded gravels, somewhat imperfectly drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1026  
**Feature Name:** CHUPING series  
**Description:** Soil derived from reworked materials, brownish in colour, fine loamy, abundant rounded gravels, somewhat imperfectly drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1027  
**Feature Name:** DAMPAR series  
**Description:** Soil derived from reworked materials, brownish in colour, fine loamy, abundant rounded gravels, moderately well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1028  
Feature Name: DURIAN series  
Description: Soil derived from shale, brownish in colour; clayey with high fine silt, moderately well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1029  
Feature Name: GAJAH MATI series  
Description: Soil derived from reworked materials, brownish in colour, clayey, abundant mixed gravels, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1030  
Feature Name: GOL series  
Description: Soil derived from shale, brownish in colour, clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1031  
Feature Name: GONG CHENAK series  
Description: Soil derived from sub recent alluvium, brownish in colour, clayey, imperfectly to somewhat imperfectly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1032  
Feature Name: HARAD series  
Description: Soil derived from granite rock, reddish in colour, clayey, high fine silt, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1033  
Feature Name: HARIMAU series  
Description: Soil derived from older alluvium (granite), brownish in colour, clayey, few plinthite, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1034  
Feature Name: HOLYROOD series  
Description: Soil derived from sub recent alluvium, brownish in colour, fine loamy, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1035  
Feature Name: HUTAN series  
Description: Soil derived from sub recent alluvium, grayish in colour, clayey, common plinthite, somewhat poorly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1036  
Feature Name: IBOK series  
Description: Soil derived from older alluvium, brownish in colour, coarse loamy, few plinthite, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1037  
Feature Name: JAYA series  
Description: Soil derived from carbonaceous shale, yellowish in colour, clayey, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1038  
Feature Name: JELUTONG series  
Description: Soil derived from sub recent alluvium, gray in colour, very fine, very poorly to somewhat very poorly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1039  
Feature Name: JEMPOL  
Description: Soil derived from tuffaceous materials, reddish in colour; clayey, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1040  
Feature Name: JERAM series  
Description: Soil derived from tuffaceous materials, reddish in colour; clayey, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1041  
Feature Name: JERKOH series  
Description: Ultisols; HGMR & igneous rock (mixed); fine sandy clay loam; yellowish brown; argillic; shallow; well drained; low base saturation

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1042  
Feature Name: JERNEH series  
Description: Soil derived from older alluvium, brownish in colour, fine loamy, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1043  
Feature Name: JITRA series  
Description: Soil derived from reworked materials, reddish in colour, clayey, abundant mixed gravels, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1044  
Feature Name: JUARA series  
Description: Soil derived from sandstone, reddish in colour, fine loamy,high base saturation, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1045  
Feature Name: KABU series  
Description: Soil derived from reworked materials, brownish in colour, clayey, abundant rounded gravels, somewhat imperfectly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1046  
Feature Name: KAMPONG PUSU series  
Description: Soil derived from sub recent alluvium, grayish in colour, clayey, somewhat poorly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1047  
Feature Name: KASAH series  
Description: Soil derived from tuffaceous materials, reddish in colour; clayey, high fine silt, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1048  
Feature Name: KAWANG series  
Description: Soil derived from older alluvium, reddish in colour, clayey, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1049  
Feature Name: KAYA series  
Description: Soil derived from recent riverine alluvium, yellowish in colour, fine loamy, and imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1050  
Feature Name: KECHOR series  
Description: Soil derived from sub recent alluvium, yellowish in colour, clayey, moderately well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1051  
Feature Name: KEDAH series  
Description: Soil derived from conglomerates, brownish in colour, fine loamy, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1052  
**Feature Name:** KEKURA series  
**Description:** Soil derived from sandstone, brownish in colour, fine loamy, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1053  
**Feature Name:** KELAU series  
**Description:** Soil derived from older alluvium (granite), brownish in colour, clayey, few plinthite, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1054  
**Feature Name:** KELEDANG series  
**Description:** Soil derived from conglomerates, brownish in colour, fine loamy, well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1055  
**Feature Name:** KEMAHANG series  
**Description:** Soil derived from conglomerates, brownish in colour, fine loamy, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1056  
**Feature Name:** KEMASUL series  
**Description:** Soil derived from shale, reddish in colour, clayey, abundant plinthite , well drained, deep profile..  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1057  
**Feature Name:** KEMUNING series  
**Description:** Soil derived from carbonaceous shale, brownish in colour, clayey, well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1058  
Feature Name: KENING series  
Description: Soil derived from older alluvium, reddish in colour, clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1059  
Feature Name: KEPAYANG series  
Description: Soil derived from basalt rock, reddish in colour, clayey, somewhat excessively drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1060  
Feature Name: KERAIT series  
Description: Soil derived from iron poor shale, yellowish in colour, clayey, somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1061  
Feature Name: KERAYONG series  
Description: Soil derived from sub recent alluvium, brownish in colour, clayey, moderately well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange

Feature Code: SF1062  
Feature Name: KETAK series  
Description: Soil derived from conglomerates, brownish in colour; clayey , well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1063  
Feature Name: KOMEL series  
Description: Soil derived from tuffaceous material, reddish in colour; clayey, high base saturation, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1064  
Feature Name: KUAH series  
Description: Soil derived from shale, brownish in colour; clayey, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1065  
Feature Name: KUALA BRANG series  
Description: Soil derived from shale, brownish in colour; clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1066  
Feature Name: KULAI series  
Description: Soil derived from rhyolite rock, yellowish in colour; clayey, high fine silt , well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1067  
**Feature Name:** LAKA series  
**Description:** Soil derived from sandstone, reddish in colour, fine loamy, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1068  
**Feature Name:** LALAT series  
**Description:** Soil derived from shale, yellowish in colour; clayey with high fine silt, moderately well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH))

**Feature Code:** SF1069  
**Feature Name:** LALANG series  
**Description:** Soil derived from granite rock, brownish in colour; fine loamy, well drained, shallow profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH))

Feature Code: SF1070  
 Feature Name: LAMBAK series  
 Description: Soil derived from granite rock, reddish in colour; clayey skeletal, well drained, deep profile  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1071  
 Feature Name: LANAS series  
 Description: Soil derived from reworked materials, brownish in colour, fine loamy, abundant mixed gravels, well drained, moderately deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1072  
 Feature Name: LANCHANG series  
 Description: Soil derived from granodiorite rock, brownish in colour; clayey , well drained, deep profile  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1073  
**Feature Name:** LANGKAWI series  
**Description:** Soil derived from limestone and calcareous materials, reddish in colour, very fine clay, somewhat excessively drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1074  
**Feature Name:** LATING series  
**Description:** Soil derived from recent riverine alluvium, brownish in colour, clayey, imperfectly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1075  
**Feature Name:** LINTANG series  
**Description:** Soil derived from sub recent alluvium, brownish in colour, coarse loamy, moderately well to well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1076  
Feature Name: LOK YANG series  
Description: Soil derived from shale, reddish in colour; clayey with high fine silt, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1077  
Feature Name: LUBUK KIAT series  
Description: Soil derived from sub recent alluvium, brownish in colour, clayey, common plinthite, imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1078  
Feature Name: LUNDANG series  
Description: Soil derived from recent riverine alluvium, brownish in colour, clayey with manganese nodules, moderately well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1079  
**Feature Name:** MAI series  
**Description:** Soil derived from tuffaceous material, reddish in colour; clayey, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1080  
**Feature Name:** MALAU series  
**Description:** Soil derived from sandstone, brownish in colour, coarse loamy, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1081  
**Feature Name:** MARANG series  
**Description:** Soil derived from iron poor sandy shale, yellowish in colour, fine loamy, moderately well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1082  
**Feature Name:** MASAI series  
**Description:** Soil derived from laterised parent material, brownish in colour, clayey skeletal, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1083  
**Feature Name:** MEDANG series  
**Description:** Soil derived from recent riverine alluvium, brownish in colour, clayey, somewhat imperfectly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1084  
**Feature Name:** MERANTI series  
**Description:** Soil derived from recent riverine alluvium, brownish in colour, clayey with high silt, somewhat imperfectly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1085  
**Feature Name:** MUKUT series  
**Description:** Soil derived from mixed parent material, reddish in colour, clayey skeletal, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1086  
**Feature Name:** MUSANG series  
**Description:** Soil derived from shale, brownish in colour; clayey with high fine silt, well drained, deep profile..  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1087  
**Feature Name:** NAM HENG series  
**Description:** Soil derived from older alluvium (shale), reddish in colour, clayey, common to many plinthite, well drained, moderately deep profile..  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1088  
**Feature Name:** NAMI series  
**Description:** Soil derived from sandstone, brownish in colour, fine loamy, well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1089  
**Feature Name:** NANGKA series  
**Description:** Soil derived from sub recent alluvium, brownish in colour, coarse loamy, moderately well to well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1090  
**Feature Name:** NAPAI series  
**Description:** Soil derived from reworked materials, reddish in colour, clayey, abundant rounded gravels, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1091  
 Feature Name: NERANG series  
 Description: Soil derived from reworked materials, brownish in colour, fine loamy, abundant mixed gravels, well drained, moderately deep profile  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1092  
 Feature Name: NERING series  
 Description: Soil derived from granite rock, reddish in colour, clayey, well drained, deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1093  
 Feature Name: PADANG BESAR series  
 Description: Soil derived from laterised shale, brownish in colour; clayey, well drained, shallow profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1094  
**Feature Name:** PAGI series  
**Description:** Soil derived from shale having moderately deep profile,reddish coloured,clayey with high fine silt.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1095  
**Feature Name:** PEDU series  
**Description:** Soil derived from reworked materials, brownish in colour, fine loamy, abundant mixed gravels, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1096  
**Feature Name:** PELANDUK series  
**Description:** Soil derived from sub recent alluvium, grayish in colour, clayey, common plinthite, imperfectly to somewhat imperfectly drained, deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1097  
**Feature Name:** PELEPAH series  
**Description:** Soil derived from laterised parent materials, brownish in colour, clayey, well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1098  
**Feature Name:** PENERANG series  
**Description:** Soil derived from schist rock, brownish in colour, clayey skeletal, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1099  
**Feature Name:** PENUBA series  
**Description:** Soil derived from granite rock, reddish in colour, clayey, well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1100  
**Feature Name:** PEYABONG series  
**Description:** Soil derived from rhyolite rock, yellowish in colour, clayey, high fine silt, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1101  
**Feature Name:** POHOI series  
**Description:** Soil derived from carbonaceous shale, yellowish in colour; clayey, moderately well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1102  
**Feature Name:** POKOK SENA series  
**Description:** Soil derived from reworked materials, brownish in colour, clayey, abundant rounded gravels, somewhat imperfectly drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1103  
**Feature Name:** RASAU series  
**Description:** Soil derived from sub recent alluvium, brownish in colour, fine oamy, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1104  
**Feature Name:** RENGAM series  
**Description:** Soil derived from granite rock, brownish in colour, clayey, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1105  
**Feature Name:** RINGLET series  
**Description:** Highland; fine sandy clay loam; yellowish red; argillic; deep; well drained; low base saturation.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1106  
**Feature Name:** SEMBERIN series  
**Description:** Soil derived from reworked materials, brownish in colour, clayey, abundant rounded gravels, imperfectly drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1107  
**Feature Name:** SENAI series  
**Description:** Soil derived from gabbro rock, brownish in colour, clayey, somewhat excessively drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1108  
**Feature Name:** SENGGORA series  
**Description:** Soil derived from tuffaceous material, reddish in colour; clayey, well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1109  
**Feature Name:** SERDANG series  
**Description:** Soil derived from sandstone, brownish in colour, fine loamy, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1110  
**Feature Name:** SEREMBAN series  
**Description:** Soil derived from laterised shale, reddish in colour; clayey, well drained, shallow profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1111  
**Feature Name:** SEROK series  
**Description:** Soil derived from sub recent alluvium, brownish in colour, very fine loamy, imperfectly to somewhat imperfectly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1112  
**Feature Name:** SITIAWAN series  
**Description:** Soil derived from sub recent alluvium, yellowish in colour, very fine, moderately well to well drained, deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1113  
**Feature Name:** SOGOSMANA series  
**Description:** Soil derived from sub recent alluvium, grayish in colour, very fine, poorly to somewhat poorly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF1114  
**Feature Name:** TAI TAK series  
**Description:** Soil derived from granite rock, brownish in colour, clayey, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1115  
Feature Name: TAMPIN series  
Description: Soil derived from granite rock, yellowish in colour, clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1116  
Feature Name: TAMPOI series  
Description: Soil derived from older alluvium, reddish in colour, clayey, few plinthite, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1117  
Feature Name: TAVY series  
Description: Soil derived from reworked materials, brownish in colour, clayey, abundant stones and gravels, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1118  
Feature Name: TAWAR series  
Description: Soil derived from sub recent alluvium, brownish in colour, clayey, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1119  
Feature Name: TEBOK series  
Description: Soil derived from sub recent alluvium, brownish in colour, clayey, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1120  
Feature Name: TELANG series  
Description: Soil derived from sub recent alluvium, yellowish in colour, clayey, imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1121  
Feature Name: TEMBAGA series  
Description: Soil derived from reworked materials, brownish in colour, coarse loamy, abundant rounded gravels, moderately well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1122  
Feature Name: TEMBIL series  
Description: Soil derived from reworked materials, brownish in colour, clayey, abundant rounded gravels, moderately well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1123  
Feature Name: TEMERLOH series  
Description: Soil derived from older alluvium, brownish in colour, clayey, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1124  
Feature Name: TENANG series  
Description: Soil derived from sub recent alluvium, brownish in colour, sandy, imperfectly well to well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1125  
Feature Name: TEPUS series  
Description: Soil derived from recent riverine alluvium, grayish in colour, clayey, somewhat poorly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1126  
Feature Name: TERAP series  
Description: Soil derived from reworked materials, brownish in colour, clayey, abundant mixed gravels, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1127  
Feature Name: TOK YONG series  
Description: Soil derived from recent riverine alluvium, brownish in colour, clayey, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1128  
Feature Name: ULU DONG series  
Description: Soil derived from quartz mica schist, reddish in colour, clayey, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1129  
Feature Name: ULU TIRAM series  
Description: Soil derived from older alluvium, brownish in colour, coarse loamy, well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF1130  
Feature Name: YONG PENG series  
Description: Soil derived from rhyodacite rock, reddish in colour, clayey, high fine silt, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2000  
Feature Name: SARATOK series  
Description: Residual soil derived from sedimentary rock, coarse loamy to coarse silty, non contrasting horizon, pallid coloured soil matrix, absence of mottling

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2001  
Feature Name: PENIPAH series  
Description: Residual soil derived from sedimentary rock, coarse loamy to coarse silty, non contrasting horizon, pallid coloured soil matrix, presence of mottling (>20%).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2002  
Feature Name: TRIBOH series  
Description: Residual soil derived from sedimentary rock, coarse loamy to coarse silty, contrasting horizon, pallid coloured soil matrix, absence of mottling.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2003  
Feature Name: SEMEBA series  
Description: Soil derived on non-accreting alluvium deposit, coarse loamy to coarse silty, non contrasting horizon, pallid coloured soil matrix, absence of mottling

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2010  
Feature Name: BANDANG series  
Description: Residual soil derived from sedimentary rock, fine loamy to fine silty (<15% sand), non contrasting horizon, pallid coloured soil matrix, absence of mottling

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2011  
Feature Name: TIMANG series  
Description: Residual soil derived from sedimentary rock, fine loamy to fine silty (<15% sand), non contrasting horizon, pallid coloured soil matrix, presence of mottling (>20%)

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2012  
Feature Name: MERANG series  
Description: Residual soil derived from sedimentary rock, fine loamy to fine silty (<15% sand), contrasting horizon, pallid coloured soil matrix, absence of mottling

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2013  
Feature Name: DURIN series  
Description: Residual soil derived from sedimentary rock, fine loamy to fine silty (>15% sand), non contrasting horizon, pallid coloured soil matrix, absence of mottling.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2014  
Feature Name: LUBAI series  
Description: Soil developed on non-accreting alluvium deposit, fine loamy to fine silty (>15% sand), non contrasting horizon, pallid coloured soil matrix, absence of mottling.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2020  
Feature Name: KERAIT series  
Description: Residual soil derived from sedimentary rock, clay textured, non contrasting horizon, pallid coloured soil matrix, absence of mottling.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2021  
Feature Name: AJOH series  
Description: Residual soil derived from sedimentary rock, clay textured, non contrasting horizon, pallid coloured soil matrix, presence of mottling (>20%)  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2022  
Feature Name: SERAYAN series  
Description: Residual soil derived from sedimentary rock, clay textured, non contrasting horizon, soil matrix with hue >10YR, absence of mottling  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2030  
Feature Name: NYALAU series  
Description: Residual soil derived from sedimentary rock, coarse loamy or coarse silty, presence of albic horizon, yellowish soil matrix (10YR,2.5Y)  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2031  
Feature Name: MATANG series  
Description: Residual soil derived from sedimentary rock, coarse loamy or coarse silty, yellowish soil matrix (10YR,2.5Y)  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2032  
Feature Name: SEBANGAN series  
Description: Soil developed on non-accreting alluvium deposit, coarse loamy or coarse silty, yellowish soil matrix (10YR,2.5Y)

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2040  
Feature Name: BEKENU series  
Description: Residual soil derived from sedimentary rock, fine loamy to fine silty, yellowish soil matrix (10YR,2.5Y).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2041  
Feature Name: TUKAU series  
Description: Soil developed on non-accreting alluvium, fine loamy to fine silty, yellowish soil matrix (10YR,2.5Y)

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2042  
Feature Name: BIAWAK series  
Description: Residual soil derived from metamorphic rock, fine loamy to fine silty, yellowish soil matrix (10YR,2.5Y).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2043  
Feature Name: SARIKEI series  
Description: Residual soil derived from sedimentary rock, fine loamy to fine silty, reddish soil matrix (7YR,2.5Y).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2060  
Feature Name: ABOK series  
Description: Residual soil derived from granitic rock, fine loamy to fine silty, yellowish soil matrix (10YR,2.5Y), low CEC (<24me/100g clay).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2061  
Feature Name: GUMBANG series  
Description: Residual soil derived from non sedimentary rock, fine loamy to fine silty, yellowish soil matrix (10YR,2.5Y)..

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2062  
Feature Name: ARIP series  
Description: Residual soil derived from non sedimentary rock, fine loamy to fine silty, reddish soil matrix (7.5YR,2.5Y), CEC >24me/100g clay

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2063  
Feature Name: SERIKIN series  
Description: Soil developed on non-accreting alluvium, fine loamy to fine silty, yellowish soil matrix (10YR,2.5Y).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2070  
Feature Name: MERIT series  
Description: Residual soil derived from shale, fine clay, yellowish soil matrix (10YR,2.5Y), CEC (>24me/100g clay).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2071  
Feature Name: LUPAR series  
Description: Soil developed on non-accreting alluvium, fine clay, yellowish soil matrix (10YR,2.5Y)

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2072  
Feature Name: STOM series  
Description: Residual soil derived from shale, fine clay, yellowish soil matrix (10YR,2.5Y), CEC (>24me/100g clay, imperfectly drained).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2073  
Feature Name: BAGUNAN series  
Description: Residual soil derived from shale, fine clay, reddish soil matrix (7.5YR,2.5Y), CEC (<24me/100g clay).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2074  
Feature Name: BEDUP series  
Description: Residual soil derived from shale, fine clay, yellowish soil matrix (10YR,2.5Y), CEC (16-24me/100g clay)  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2075  
Feature Name: JAKAR series  
Description: Residual soil derived from shale, fine clay, reddish soil matrix (7.5YR,2.5Y), CEC (>24me/100g clay).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2090  
Feature Name: SEMONGGOK series  
Description: Residual soil derived from shale, very fine clay, yellowish soil matrix (10YR,2.5Y), presence of faint coloured mottles  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2091  
Feature Name: PADAWAN series  
Description: Residual soil derived from shale, very fine clay, yellowish soil matrix (10YR,2.5Y), CEC (>24me/100g clay), no mottles.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2092  
Feature Name: STASS series  
Description: Residual soil derived from shale, very fine clay, reddish soil matrix (7.5YR,2.5Y), CEC (>24me/100g clay).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2093  
Feature Name: MELUGU series  
Description: Residual soil derived from shale, very fine clay, yellowish soil matrix (10YR,2.5Y), CEC (<24me/100g clay).

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF2100  
Feature Name: TRAGA series  
Description: Residual soil derived from non sedimentary rock, very fine clay, reddish soil matrix (7YR,2.5Y)

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3000  
Feature Name: KATAL series  
Description: Soil formed on alluvium derived from basic and ultrabasic igneous rocks, brownish in colour, fine loamy, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3010  
Feature Name: KINABUTAN series  
Description: Soil derived from basic and intermediate igneous rocks, yellowish brown in colour, clayey, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3020  
Feature Name: KUMANSI series  
Description: Soil derived from mudstone and shale, yellowish brown in colour, clayey, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3030  
Feature Name: LUMISIR series  
Description: Soil derived from sedimentary rocks, reddish in colour, clayey, well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3040  
 Feature Name: KOUNG series  
 Description: Soil derived from tuffaceous rock, red-yellow in colour with grayish colour on the lower horizon, clayey, imperfectly drained, deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3050  
 Feature Name: KAPILIT series  
 Description: Soil derived from sandstone, red-yellow in colour, fine loamy, well drained, deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3060  
 Feature Name: MENSULI series  
 Description: Soil derived from chert, red in colour, clayey, well drained, deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3070  
Feature Name: PALIU series  
Description: Soil on alluvium derived from sedimentary rocks, red-yellow in colour, fine loamy, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3080  
Feature Name: TANJONG LIPAT series  
Description: Soil derived from sandstone and mudstone/shale, yellowish in colour, fine loamy, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3090  
Feature Name: INANAM series  
Description: Soil on alluvium derived from sedimentary rocks, yellowish in colour with gray and red mottles, clayey, imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF3100  
**Feature Name:** KIAU series  
**Description:** Soil derived from sandstone and mudstone/shale, yellowish in colour, fine silty, moderately well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF3110  
**Feature Name:** SIPIT series  
**Description:** Soil derived from sandstone and mudstone/shale, reddish in colour, fine loamy, moderately well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SF3120  
**Feature Name:** BATANG series  
**Description:** Soil derived from mudstone, red-yellow in colour, fine loamy, moderately well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3130  
Feature Name: BERUANG series  
Description: Soil derived from intermediate and basic igneous rock, reddish in colour, clayey, moderately well to well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3140  
Feature Name: MASAUM series  
Description: Soil derived from mudstone/shale, yellowish in colour, clayey, imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3150  
Feature Name: GUNUNG ALAB series  
Description: Soil derived from sandstone and mudstone/shale, yellowish in colour, fine loamy, porly to imperfectly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3160  
Feature Name: DAGAT series  
Description: Soil derived from tuffaceous rock, reddish in colour, clayey, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SF3170  
Feature Name: DAGAT series  
Description: Soil derived from tuffaceous rock, reddish in colour, clayey, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## **SG – MOLLISOLS**

Feature Code: SG0000  
Feature Name: MOLLISOLS  
Description: Other soils that have (a) a mollic horizon and (b) a high base saturation > 50 percent throughout the soil to at least 180 cm or a lithic or paralithic contact, whichever is shallower

Feature Class: Polygon  
Possible Attribute: Label(LBL), Area Measured in Hectares(ARH)

Feature Code: SG1000  
Feature Name:  
Description:  
Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SG2001  
Feature Name: SARAWAK 1

Description:

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SG3001  
Feature Name: SABAH

Description:

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## SH –ALFISOLS

Feature Code: SH0000  
Feature Name: ALFISOLS  
Description: Other soils with (a) an argillic, a kandic, or a natric horizon or (b) a fragipan with clay films > 1 mm thick in some part. Usually enough moisture for crops in most years.  
Feature Class: Polygon  
Possible Attribute: Label(LBL), Area Measured in Hectares(ARH)

Feature Code: SH1001  
Feature Name: BANTAL series  
Description: Soil derived from andesite rock, brownish in colour; clayey,high base saturation, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1002  
Feature Name: BENTA series  
Description: Soil derived from mixed parent materials igneous rock, brownish in colour; clayey,high base saturation, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1003  
Feature Name: BERUIT  
Description: Soil derived from tuffaceous materials, brownish in colour; clayey,high base saturation, well drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile

Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1004  
Feature Name: DAMAK series  
Description: Soil derived from rhyolite, brownish in colour, fine loamy,high base saturation, well drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1005  
Feature Name: HALU series  
Description: Soil derived from sub recent alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1006  
Feature Name: JAN series  
Description: Soil derived from rhyolite, brownish in colour, coarse loamy,high base saturation, well drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil

Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1007  
Feature Name: JERANTUT series  
Description: Soil derived from tuffaceous materials, brownish in colour; clayey, high fine silt,high base saturation, well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1008  
Feature Name: KAKI BUKIT series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, very fine clay, high base saturation, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1009  
Feature Name: KENERING series  
Description: Soil derived from granite rock, brownish in colour, clayey with gravels, high base saturation, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil

Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1010  
Feature Name: KERAK series  
Description: Soil derived from tuffaceous materials reddish in colour; fine loamy,high base saturation, well drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1011  
Feature Name: KIOL series  
Description: Soil derived from tuffaceous materials, reddish in colour; clayey,high base saturation, well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1012  
Feature Name: KUMBANG series  
Description: Soil derived from limestone and calcareous materials, olive brown in colour, clayey, presence of thick manganese band, moderately well to well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base

saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1013  
Feature Name: LAYANG series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, clayey, presence of thick manganese band, moderately well to well drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1014  
Feature Name: LEKOK series  
Description: Soil derived from tuffaceous material, reddish in colour soil with a mollic epipedon, clayey, high base saturation, high fine silt, moderately well to well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1015  
Feature Name: MAT DALING series  
Description: Soil derived from rhyolite, brownish in colour, fine loamy, high base saturation, well drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil

Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1016  
Feature Name: MENTARA series  
Description: Soil derived from limestone and calcareous materials, olive yellow in colour clayey, presence of thick manganese band, imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1017  
Feature Name: MERAPOH series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, very fine clay, high base saturation, moderately well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1018  
Feature Name: MERHAMAH series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, clayey, presence of thick manganese band, moderately well to well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil

Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1019  
Feature Name: NIRAM series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, clayey, presence of thin manganese nodules, moderately well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1020  
Feature Name: RAKIT series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, clayey, moderately well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1021  
Feature Name: RETANG series  
Description: Soil derived from tuffaceous materials, brownish in colour, clayey, high base saturation, and well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base

saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1022  
Feature Name: SALAK series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, clayey, presence of thick manganese band, moderately well to well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1023  
Feature Name: SALANG series  
Description: Soil derived from tuffaceous material, reddish in colour, clayey, high base saturation, well drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1024  
Feature Name: SAT series  
Description: Soil derived from shale, brownish in colour; clayey with high fine silt, high base saturation, well drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH1025  
**Feature Name:** SAWA series  
**Description:** Soil derived from granite, brownish in colour; fine loamy with angular quartz gravels, common red mottle, high base saturation, well drained, deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group (SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features (SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type (SFA), Thickness of Organic layer (STO), Soil Material Type Underlying Peat (SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range (SPH), Soil Salinity (SSL), Area Measured in Hectares (ARH)

**Feature Code:** SH1026  
**Feature Name:** SELIMBER series  
**Description:** Soil derived from tuffaceous materials, yellowish in colour, fine loamy, high base saturation, well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group (SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features (SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type (SFA), Thickness of Organic layer (STO), Soil Material Type Underlying Peat (SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range (SPH), Soil Salinity (SSL), Area Measured in Hectares (ARH)

**Feature Code:** SH1027  
**Feature Name:** SELUT series  
**Description:** Soil derived from limestone and calcareous materials, brownish in colour, clayey, presence of thick manganese band, moderately well to well drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group (SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features (SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type (SFA), Thickness of Organic layer (STO), Soil Material Type Underlying Peat (SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range (SPH), Soil Salinity (SSL), Area Measured in Hectares (ARH)

Feature Code: SH1028  
Feature Name: TABAN series  
Description: Soil derived from limestone and calcareous materials, strong brown in colour, clayey, presence of thick manganese band , moderately well to well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1029  
Feature Name: TADA series  
Description: Soil derived from tuffaceous materials, brownish in colour, clayey , high base saturation ,well drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1030  
Feature Name: TAHAN series  
Description: Soil derived from tuffaceous materials, brownish in colour, clayey , high base saturation ,well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1031  
Feature Name: TAJENG series  
Description: Soil derived from shale, brownish in colour, clayey, high base saturation, well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1032  
Feature Name: TANGGANG series  
Description: Soil derived from limestone and calcareous materials, olive yellow in colour, clayey, presence of thin manganese nodules, moderately well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1033  
Feature Name: EKEK series  
Description: Soil derived from mixed igneous parent materials, brownish in colour, coarse loamy, high base saturation, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1034  
Feature Name: TEMAU series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, clayey, presence of thick manganese band, imperfectly to somewhat imperfectly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1035  
Feature Name: TEMBELING series  
Description: Soil derived from tuffaceous materials, brownish in colour, clayey, high base saturation, and well drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH1036  
Feature Name: TERAH series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, very fine clay, high base saturation presence of thick manganese band, moderately well to well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH2000  
**Feature Name:** KABULOH series  
**Description:** Residual soil derived from calcareous shale, fine clay, yellow coloured soil matrix  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH2001  
**Feature Name:** KARABUNGAN series  
**Description:** Residual soil derived from calcareous shale, fine clay, red coloured soil matrix  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH3000  
**Feature Name:** BEESTON series  
**Description:** Soil derived from basic igneous rock, reddish in colour, clayey, moderately well to well drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH3010  
**Feature Name:** KOBOVAN series  
**Description:** Soil derived from intermediate to basic igneous rock, reddish in colour, fine loamy, well drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH3020  
**Feature Name:** LIBONG series  
**Description:** Soil derived from tuffaceous rock, brownish in colour, fine loamy, moderately well to well drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SH3030  
**Feature Name:** LUMERAU series  
**Description:** Soil derived from mudstone/shale, red-yellow in colour, clayey, well drained, very deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3040  
Feature Name: MALAWALI series  
Description: Soil derived from ultrabasic igneous rock, brownish in colour, fine silty, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3050  
Feature Name: SEMPORNA series  
Description: Soil derived from limestone, yellowish in colour, clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3060  
Feature Name: TERANG series  
Description: Soil derived from calcareous alluvium, red-yellow in colour, fine loamy, moderately well drained, moderately deep profile..

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3070  
Feature Name: TINGKAYU series  
Description: Soil derived from ultrabasic igneous rocks, brownish in colour, clayey, well drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3080  
Feature Name: PANTAGALUANG series  
Description: Soil formed on alluvium derived from basic and ultrabasic igneous rocks, red-yellow in colour, fine loamy, moderately well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3090  
Feature Name: BESAR series  
Description: Soil derived from basic igneous rocks, reddish in colour, fine clayey, well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3100  
Feature Name: BURAN series  
Description: Soil on alluvium derived from sedimentary rock, yellowish in colour, fine clayey, imperfectly well drained, very deep profile..

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3110  
Feature Name: DARAU series  
Description: Soil on alluvium derived from sedimentary rock, brownish in colour, fine silty, moderately well drained, very deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3120  
Feature Name: MANGKAP series  
Description: Soil formed on alluvium derived from basic and ultrabasic igneous rocks, red-yellow in colour, fine clayey, well drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3130  
Feature Name: NANGO series  
Description: Soil formed on alluvium derived from basic and ultrabasic igneous rocks, grayish in colour, fine clayey, poorly drained, very deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3140  
Feature Name: LUNGPATAU series  
Description: Soil derived from calcareous alluvium, grayish in colour, very fine clayey, poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3150  
Feature Name: LUNPARAI series  
Description: Soil derived from mudstone/shale, grayish in colour, fine clayey, poorly drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3160  
Feature Name: NUMATOI series  
Description: Soil formed on alluvium derived from basic and ultrabasic Igneous rocks, red-yellow in colour, fine clayey, moderately well to well drained, very deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3170  
Feature Name: SABOR series  
Description: Soil formed on alluvium derived from mixed of sedimentary and, basic and ultrabasic igneous rocks, reddish in colour, fine clayey, moderately well to well drained, very deep profile..

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3180  
Feature Name: TALID series  
Description: Soil formed derived from tuffaceous rock, yellowish in colour, fine clayey, moderately well to well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3190  
Feature Name: TEGUPI series  
Description: Soil formed derived from limestone, red-yellow in colour, fine clayey, well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SH3200  
Feature Name: LUMPONGON series  
Description: Soil formed derived from mudstone/shale, yellowish in colour, fine clayey, moderately well to well drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## SI –INCEPTISOLS

Feature Code: SI0000  
Feature Name: INCEPTISOLS  
Description: Other soils that have (a) no illuvial clay horizon but do have (i) a cambic horizon or (ii) aquic conditions within 50 cm or (iii) within 150cm the start of a calcic, petrocalcic, gypsic, petrogypsic, placic, duripan, fragipan, or oxic starting within 200cm, or sulfiric horizon within 150 cm, or (b) a histic, mollic, plaggen, or umbric horizon or ESP > 15 percent decreasing below 50 cm.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Area Measured in Hectares (ARH)

Feature Code: SI1001  
Feature Name: BAKONG series  
Description: Soil developed on old beach ridges, yellowish in colour, coarse loamy, moderately well drained, deep profile  
Feature Class: Polygon

**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1002  
**Feature Name:** BANAR series  
**Description:** Soil derived from sub recent alluvium, brownish in colour, coarse loamy, imperfectly to somewhat imperfectly drained, deep profile.

**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1003  
**Feature Name:** BEMBAN series  
**Description:** Soil derived from sub recent alluvium, brownish in colour, fine loamy, imperfectly to somewhat imperfectly drained, deep profile.

**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1004  
**Feature Name:** BEOH series  
**Description:** Soil developed on old beach ridges, grayish in colour, sandy, imperfectly drained, deep profile.

**Feature Class:** Polygon

**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1005  
**Feature Name:** BERIAH series  
**Description:** Soil derived from marine alluvium, grayish in colour, clayey, dominantly yellow mottles, poorly drained, deep profile

**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1006  
**Feature Name:** BERNAM series  
**Description:** Soil derived from marine alluvium, olive gray in colour, clayey, dominantly olive mottles, presence of slickenside,poorly drained, deep profile

**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1007  
**Feature Name:** BINJAI series  
**Description:** Soil derived from recent riverine alluvium, grayish in colour, clayey, very poorly drained, deep profile  
**Feature Class:** Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1008  
Feature Name: BURONG series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, low conductivity, poorly drained, shallow profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1009  
Feature Name: CAREY series  
Description: Soil derived from marine alluvium, grayish in colour, loamy, presence of jarosite material, poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1010  
Feature Name: CHENAAM series  
Description: Soil derived from marine alluvium, olive gray in colour, clayey, dominantly brown/yellow mottles,high conductivity, poorly drained, moderately deep profile  
Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1011  
Feature Name: CHENERING series  
Description: Soil derived from marine alluvium, grayish in colour, clayey,gravelly, having buried horizon,very poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1012  
Feature Name: CERMIN series  
Description: Soil derived from sub recent alluvium, brownish in colour, fine loamy, imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1013  
Feature Name: GUGUT series  
Description: Soil derived from recent riverine alluvium, yellowish in colour, clayey with high silt, imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS),

Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1014  
Feature Name: IBAI series  
Description: Soil derived from marine alluvium, grayish in colour, loamy,presence of weakly cemented spodic horizon ,imperfectly drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1015  
Feature Name: IDRIS series  
Description: Soil derived from marine alluvium, gray in colour, clayey, dominantly red mottles, presence of plinthite, poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1016  
Feature Name: JABIL series  
Description: Soil derived from recent riverine alluvium, grayish in colour, clayey, poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC),

Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1017  
Feature Name: JAWA series  
Description: Soil derived from marine alluvium, brownish in colour, clay to heavy clay, presence of jarosite material, poorly drained, moderately deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1018  
Feature Name: JENJARUM series  
Description: Soil derived from brackish water deposits, brownish in colour, clayey, presence of sulfiric material, very poorly drained, moderately to deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1019  
Feature Name: JONG series  
Description: Soil derived from sub recent alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil

Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1020  
Feature Name: KAMPONG PERLIS series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, dominantly brown/yellow mottles, poorly drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1021  
Feature Name: KANGAR series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, dominantly red mottles, presence of gypsum, poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1022  
Feature Name: KAYAN series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, low conductivity, poorly drained, moderately deep A, BC, C profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base

Saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1023  
Feature Name: KECHAI series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, dominantly brown/yellow mottles, poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1024  
Feature Name: KEMANG series  
Description: Soil derived from marine alluvium, brownish in colour, clayey to heavy clay, presence of sulfuric material, poorly drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1025  
Feature Name: KERPAH series  
Description: Soil derived from marine alluvium, brownish in colour, sandy, imperfectly drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1026  
Feature Name: KERPAL series  
Description: Soil derived from recent riverine alluvium, grayish in colour, clayey with high silt, very poorly drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1027  
Feature Name: KILAN series  
Description: Soil derived from sub recent alluvium, grayish in colour, clayey, common plinthite, somewhat poorly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1028  
Feature Name: KILIM series  
Description: Soil derived from sub recent alluvium, brownish in colour, fine loamy, well drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1029  
Feature Name: KOH series  
Description: Soil derived from recent riverine alluvium, grayish in colour, fine loamy, and imperfectly to somewhat imperfectly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1030  
Feature Name: KUAU series  
Description: Soil derived from sub recent alluvium, brownish in colour, fine loamy, moderately well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1031  
Feature Name: LALOH series  
Description: Soil derived from limestone and calcareous materials, grayish in colour, clayey, presence of thin manganese nodules,poorly to somewhat poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1032  
**Feature Name:** LEKIR series  
**Description:** Soil derived from recent riverine alluvium, grayish in colour, fine loamy, and imperfectly to somewhat imperfectly drained, deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1033  
**Feature Name:** LUBOK ITEK series  
**Description:** Soil derived from recent riverine alluvium, yellowish in colour, clayey with buried horizon, very poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1034  
**Feature Name:** LUBUK SENDONG series  
**Description:** Soil derived from recent riverine alluvium, grayish in colour, clayey, somewhat very poorly drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1035  
Feature Name: LUNAS series  
Description: Soil derived from sub recent alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, deep profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1036  
Feature Name: MANIK series  
Description: Soil derived from sub recent alluvium, grayish in colour, gravelly, poorly to somewhat poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1037  
Feature Name: MAROH series  
Description: Soil derived from recent riverine alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1038  
Feature Name: MELAWI series  
Description: Soil derived from marine alluvium, brownish in colour, sandy, somewhat imperfectly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1039  
Feature Name: NERUS series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, having buried horizon, somewhat poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1040  
Feature Name: NIBONG series  
Description: Soil derived from marine alluvium, grayish in colour, loamy, having buried horizon, very poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1041  
Feature Name: PACHITAN series  
Description: Soil derived from marine alluvium, brownish in colour, clayey, dominantly brown/yellow mottles, poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1042  
Feature Name: PARIT BOTAK series  
Description: Soil derived from marine alluvium, grayish in colour, clay to heavy clay, presence of jarosite material, poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1043  
Feature Name: PASIR PUTEH series  
Description: Soil derived from recent riverine alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1044  
Feature Name: PENAGA series  
Description: Soil derived from marine alluvium, grayish in colour, clayey, enriched with illuviated humus, having buried horizon, imperfectly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group (SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features (SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type (SFA), Thickness of Organic layer (STO), Soil Material Type Underlying Peat (SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range (SPH), Soil Salinity (SSL), Area Measured in Hectares (ARH)

Feature Code: SI1045  
Feature Name: PENAMBANG series  
Description: Soil derived from recent riverine alluvium, brownish in colour, fine loamy, and moderately well to well drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group (SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features (SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type (SFA), Thickness of Organic layer (STO), Soil Material Type Underlying Peat (SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range (SPH), Soil Salinity (SSL), Area Measured in Hectares (ARH)

Feature Code: SI1046  
Feature Name: PEREPAT series  
Description: Soil derived from marine alluvium, brownish gray in colour, clayey, dominantly brown/yellow mottles, poorly drained, shallow to moderately profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group (SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features (SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type (SFA), Thickness of Organic layer (STO), Soil Material Type Underlying Peat (SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range (SPH), Soil Salinity (SSL), Area Measured in Hectares (ARH)

Feature Code: SI1047  
Feature Name: PERMATANG series  
Description: Soil derived from marine alluvium, brownish gray in colour, loamy, imperfectly drained, deep profile  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1048  
Feature Name: PERSIT series  
Description: Soil derived from limestone and calcareous materials, brownish in colour, very fine clay, presence of thick manganese band, poorly to somewhat poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1049  
Feature Name: RESAM series  
Description: Soil developed on old beach ridges, yellowish in colour, loamy, somewhat imperfectly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1050  
**Feature Name:** SABRANG series  
**Description:** Soil derived from marine alluvium, brownish in colour, clayey, dominantly brown/yellow mottles, poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1051  
**Feature Name:** SABRANG A series  
**Description:** Soil derived from brackish water deposits, brownish in colour, clayey, presence of sulfuric material, poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1052  
**Feature Name:** SEDU series  
**Description:** oil derived from marine alluvium, brownish in colour, clayey, presence of jarosite material, poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1053  
Feature Name: SEGARI series  
Description: Soil derived from sub recent alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1054  
Feature Name: SEJACOB series  
Description: Soil derived from recent riverine alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1055  
Feature Name: SELANGOR series  
Description: Soil derived from marine alluvium, brownish in colour, clayey, dominantly brown/yellow mottles, poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1056  
Feature Name: SELINGKAT series  
Description: Soil derived from recent riverine alluvium, grayish in colour, clayey with high silt, somewhat very poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1057  
Feature Name: SENENG series  
Description: A deep, moderately well drained, fine loamy beach ridges soil.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1058  
Feature Name: SEPAYANG series  
Description: Inceptisols; recent riverine alluvium; silty clay; gray; somewhat poorly drained low base saturation

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1059  
Feature Name: SERKAT series  
Description: Soil derived from marine alluvium, brownish in colour, clayey, dominantly brown/yellow mottles, poorly drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1060  
Feature Name: SERKAT A series  
Description: Soil derived from brackish water deposits, brownish in colour, clayey, presence of sulfuric material, very poorly drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1061  
Feature Name: SERONG series  
Description: Soil derived from marine alluvium, greenish gray in colour, clayey, dominantly brown/yellow mottles, poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1062  
Feature Name: SETOL series  
Description: Soil derived from recent riverine alluvium, grayish in colour, clayey with high silt, poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1063  
Feature Name: SIMPAH series  
Description: Soil derived from sub recent alluvium, grayish in colour, clayey, poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1064  
Feature Name: SUBANG series  
Description: Soil derived from sub recent alluvium, brownish in colour, sandy, poorly to somewhat poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1065  
Feature Name: SUNGAI AMIN series  
Description: Soil derived from recent riverine alluvium, grayish in colour, fine loamy, poorly to somewhat poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1066  
Feature Name: TAMBUN series  
Description: Soil derived from marine alluvium, brownish in colour, coarse sandy clay loam, presence of sulfuric material, poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1067  
Feature Name: TEBUAN series  
Description: Soil derived from marine alluvium, brownish in colour, coarse sandy and loamy sand, presence of sulfuric material, poorly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1068  
Feature Name: TELEMONG series  
Description: Inceptisols; recent riverine alluvium; fine sandy loam; yellowish brown; somewhat excessively drained;. low base saturation.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1069  
Feature Name: TELOK series  
Description: Soil derived from marine alluvium, grayish in colour, clay to heavy clay, presence of jarosite material, poorly drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI1070  
Feature Name: TERAS series  
Description: Soil derived from recent riverine alluvium, yellowish in colour, gravelly, somewhat excessively to excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1071  
**Feature Name:** TIMUN series  
**Description:** Soil derived from brackish water deposits, grayish in colour, coarse sand to loamy sand, presence of sulfuric material, poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1072  
**Feature Name:** TONGKANG series  
**Description:** Soil derived from marine alluvium, grayish in colour, clay to heavy clay, presence of jarosite material, poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1073  
**Feature Name:** TUALANG series  
**Description:** Soil derived from marine alluvium, grayish in colour, clayey, dominantly brown mottles,poorly drained, deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI1074  
**Feature Name:** MaNGKOK series  
**Description:** Soil derived from marine alluvium, grayish in colour, clayey, dominantly brown/yellow mottles, poorly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3000  
**Feature Name:** ANTULAI series  
**Description:** Soil derived from sandstone, yellowish in colour, fine loamy, low base saturation, well drained, somewhat moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3010  
**Feature Name:** DURIKONG series  
**Description:** Soil derived from chert, brownish in colour, fine silty, low base saturation, well drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3020  
Feature Name: KELAWAT series  
Description: Soil derived from recent alluvium, yellowish in colour, fine loamy, low base saturation, moderately well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3030  
Feature Name: LAAB series  
Description: Soil derived from sandstone and mudstone/shale, yellowish in colour, fine loamy, low base saturation, well drained, somewhat moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3040  
Feature Name: LUASONG series  
Description: Soil derived from sandstone and mudstone/shale, reddish in colour, fine loamy, low base saturation, well drained, somewhat moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3050  
Feature Name: MANGKAWAGU series  
Description: Soil formed on older alluvium and terraces, reddish in colour, coarse loamy, low base saturation, somewhat excessively drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3060  
Feature Name: NERELUD series  
Description: Soil derived from intermediate and basic igneous rock, yellowish in colour, fine loamy, low base saturation, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3070  
Feature Name: SADOK series  
Description: Soil derived from acid igneous rock, red-yellow in colour, fine loamy, low base saturation, well drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3080  
Feature Name: SILAD series  
Description: Soil derived from ultrabasic igneous rock, brownish in colour, fine silty, low base saturation, well drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3090  
Feature Name: TENGGARA series  
Description: Soil derived from tuffaceous rock, yellowish in colour, fine loamy, low base saturation, well drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3100  
Feature Name: MALIAU series  
Description: Soil derived from ultrabasic igneous rock, yellowish in colour, coarse loamy, low base saturation, well drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3110  
Feature Name: KENINIPIR series  
Description: Soil derived from acid igneous rock, yellowish in colour, coarse loamy, low base saturation, well drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3120  
Feature Name: MANTAKI series  
Description: Soil derived from granidiorite rock, brownish in colour, coarse loamy, low base saturation, well drained, somewhat moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3130  
Feature Name: KINABALU series  
Description: Soil derived from acid igneous rock, yellowish in colour, coarse loamy, low base saturation, well drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3140  
Feature Name: LUBA series  
Description: Soil derived from recent alluvium, yellowish in colour, coarse loamy, low base saturation, imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3150  
Feature Name: BULANAT series  
Description: Soil derived from recent alluvium, yellowish in colour, coarse loamy, high base saturation, well drained, very deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3160  
Feature Name: KAWA series  
Description: Soil derived from intermediate and basic igneous rock, brownish in colour, fine loamy, high base saturation, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3170  
Feature Name: QUARRY series  
Description: Soil derived from acid igneous rock, brownish in colour, fine loamy, high base saturation, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3180  
Feature Name: BINUANG series  
Description: Soil derived from ultrabasic rock, brownish in colour, fine loamy, high base saturation, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3190  
Feature Name: BOMBALAI series  
Description: Soil derived from intermediate and basic igneous rock, brownish in colour, fine loamy, high base saturation, well drained, moderately deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3200  
**Feature Name:** HATTON series  
**Description:** Soil derived from tuffaceous rock, yellowish in colour, fine loamy, high base saturation, well drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3210  
**Feature Name:** JUAK series  
**Description:** Soil derived from chert, reddish in colour, fine silty, high base saturation, well drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3220  
**Feature Name:** SINSULOD series  
**Description:** Soil formed on alluvium derived from ultrabasic and basic rock, brownish in colour, fine silty, high base saturation, imperfectly drained, moderately deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3230  
**Feature Name:** MADAI series  
**Description:** Soil derived from limestone, brownish in colour, fine clayey, high base saturation, well drained, shallow profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3240  
**Feature Name:** LOC SAMBUANG series  
**Description:** Soil derived from limestone, brownish in colour, fine loamy, high base saturation, well drained, shallow profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SI3250  
**Feature Name:** BENGAWAT series  
**Description:** Soil derived from recent alluvium deposits, grayish in colour, fine loamy, high base saturation, very poorly drained, very deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3260  
Feature Name: METAH series  
Description: Soil derived from sulphidic alluvium, grayish in colour, fine loamy, sulphidic horizon, low base saturation, somewhat poorly drained, shallow profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3270  
Feature Name: KOYAH series  
Description: Soil derived from recent alluvium deposits, grayish in colour, fine clayey, low base saturation, very poorly drained, very deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3280  
Feature Name: LARI series  
Description: Soil derived from calcareous alluvium, grayish in colour, fine loamy, saline soil, high base saturation, very poorly drained, deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SI3290  
Feature Name: RASANG series  
Description: Soil derived from mudflow, grayish in colour, fine loamy, high base saturation, very poorly drained, shallow profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

## SK – ENTISOLS

Feature Code: SK0000  
Feature Name: ENTISOLS  
Description: Other soils with weak or no diagnostic horizons.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Area Measured in Hectares(ARH)

Feature Code: SK1001  
Feature Name: ALOR SEMAT series  
Description: Soil derived from marine alluvium, dark gray in colour, clayey, low conductivity, poorly drained, shallow to moderately deep A, BC, C profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)Feature Code: SK1001

Feature Code: SK1002  
Feature Name: BAGING series  
Description: Soil derived from marine alluvium, yellowish in colour, sandy, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1003  
Feature Name: BAKAU series  
Description: Soil derived from marine alluvium, greenish gray in colour, clayey, low conductivity, poorly drained, shallow A, C profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1004  
Feature Name: BALIK PULAU series  
Description: Soil derived from marine alluvium, greenish gray in colour, clayey, low conductivity, poorly drained, shallow A, C profile..

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK1005  
**Feature Name:** BANGGOL series  
**Description:** Soil derived from recent riverine alluvium, yellowish in colour, gravelly, and imperfectly to somewhat imperfectly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK1006  
**Feature Name:** BANJAR series  
**Description:** Soil derived from marine alluvium, greenish gray in colour, clayey, high conductivity, poorly drained, shallow A, BC, C profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK1007  
**Feature Name:** FIKRI series  
**Description:** Soil derived from marine alluvium, brownish in colour, sandy, imperfectly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK1008  
**Feature Name:** GUAR series  
**Description:** Soil derived from marine alluvium, brownish in colour, clay to heavy clay, presence of jarosite material, poorly drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK1009  
**Feature Name:** JURU series  
**Description:** Soil derived from marine alluvium, brownish in colour, clayey, presence of jarosite material, poorly drained, moderately deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK1010  
**Feature Name:** KANGKONG series  
**Description:** Soil derived from marine alluvium, olive gray in colour, clayey, dominantly olive mottles,poorly drained, deep profile.  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH) Feature Code: SK1009

Feature Code: SK1011  
Feature Name: KERANJI series  
Description: Soil derived from marine alluvium, grayish in colour, clayey to heavy clay, presence of sulfidic material, very poorly drained, shallow A, C profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)Feature Code: SK1004

Feature Code: SK1012  
Feature Name: KUALA KEDAH series  
Description: Soil derived from marine alluvium, greenish gray in colour, clayey, low conductivity, poorly drained, shallow A, C profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1013  
Feature Name: KUALA PERLIS series  
Description: Soil derived from marine alluvium, grayish in colour, clay to heavy clay, presence of jarosite material, poorly drained, shallow profile.  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1014  
Feature Name: KUNDOR series  
Description: Soil derived from marine alluvium, dark gray in colour, clayey, dominantly brown/yellow mottles, poorly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1015  
Feature Name: LINAU series  
Description: Soil derived from marine alluvium, brownish in colour, clayey to heavy clay, presence of sulfidic material, low conductivity, very poorly drained, shallow to moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1016  
Feature Name: MERBOK series  
Description: Soil derived from marine alluvium, grayish in colour, clayey to heavy clay, presence of sulfidic material, very poorly drained, moderately deep A, C profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1017  
Feature Name: MERCHANG series  
Description: Soil derived from marine alluvium, brownish in colour, sandy, enriched with illuviated humus, imperfectly drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1018  
Feature Name: PAUH series  
Description: Soil developed on old beach ridges, brownish in colour, sandy, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1019  
Feature Name: PERMATANG TIMBUL series  
Description: Soil developed on old beach ridges, brownish in colour, sandy, somewhat excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1020  
 Feature Name: ROMPIN series  
 Description: Soil derived from marine alluvium with riverine influence, brownish in colour, sandy, somewhat excessively drained, deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1021  
 Feature Name: SEDAKA series  
 Description: Soil derived from marine alluvium, brownish in colour, clayey, dominantly olive mottles,presence of manganese concretions, poorly drained, moderately deep profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)Feature Code: SK1022

Feature Code: SK1022  
 Feature Name: SERKAM series  
 Description: Soil derived from marine alluvium, grayish in colour, clayey, poorly drained, shallow A, BC,C profile.  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1023  
Feature Name: SUNGAI BULOH series  
Description: Soil derived from sub recent alluvium, grayish in colour, sandy, somewhat excessively to excessively drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1024  
Feature Name: TELAGA series  
Description: Soil derived from recent riverine alluvium, yellowish in colour, coarse loamy, and imperfectly to somewhat imperfectly drained, deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK1025  
Feature Name: ULAR series  
Description: Soil derived from marine alluvium, brownish in colour, sandy, enriched with illuviated humus, somewhat excessively drained, moderately deep profile.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2000  
Feature Name: SEMILAJAU series  
Description: Alluvial soil, coarse loamy, alluvium derived from acid volcanic rock, well drain, deep soil profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2001  
Feature Name: JULAN series  
Description: Alluvial soil, coarse loamy, alluvium derived from non-calcareous sedimentary, somewhat well drain, deep soil profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2002  
Feature Name: SEBAKO series  
Description: Alluvial soil, coarse loamy, alluvium derived from acid igneous rock, well drain, deep soil profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2010  
Feature Name: BEMANG series  
Description: Alluvial soil, fine loamy-fine silty, alluvium derived from non-calcareous sedimentary rock, well drain, deep soil profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2011  
Feature Name: DAPOI series  
Description: Alluvial soil, fine loamy to fine silty, alluvium derived from mixture of acid igneous and sedimenray rock, well drain, deep soil profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2012  
Feature Name: SEBAT series  
Description: Alluvial soil, fine loamy to fine silty, alluvium derived from acid igneous rock, well drain, deep soil profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2020  
Feature Name: SEDUAU series  
Description: Alluvial soil, yellow coloured, clayey, alluvium derived from non-calcareous sedimentary, well drain, deep soil profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2021  
Feature Name: MALANG series  
Description: Alluvial soil, reddish coloured, clayey, alluvium derived from non-calcareous sedimentary, well drain, deep soil profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: MALANG series  
Feature Name: PAKU series  
Description: Alluvial soil, clayey, alluvium derived from calcareous sedimentary rock, well drain, deep soil profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2023  
Feature Name: SEKATI series  
Description: Alluvial soil, clayey, alluvium derived from acid igneous rock, well drain, deep soil profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2024  
Feature Name: RAMUN series  
Description: Alluvial soil, clayey, derived from intermediate to basic igneous rock,present of rock fragments and gravel within the profile, well drain, deep soil profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2025  
Feature Name: TERBAT series  
Description: Alluvial soil, clayey, alluvium derived from intermediate to basic igneous rock, well drain, normally deep soil profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2030  
Feature Name: TATAU series  
Description: Gley soil derived from marine sand deposit, sand or loamy, greyish coloured soil matrix, poorly drained (waterlogged), non-saline, non acid sulpahte

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2031  
Feature Name: TELOK series  
Description: Gley soil derived from marine sand deposit, sand or loamy, greyish coloured soil matrix, poorly drained (waterlogged), moderately saline, non acid sulpahte.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2032  
Feature Name: NONOK series  
Description: Gley soil derived from marine sand deposit, sand or loamy, greyish coloured soil matrix, poorly drained (waterlogged), strongly saline, non acid sulpahte

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK2033  
**Feature Name:** PLAN series  
**Description:** Gley soil derived from riverine sandy deposit, sand or loamy, greyish coloured soil matrix, poorly drained (waterlogged),non-saline, non acid sulpahte  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK2034  
**Feature Name:** BOKAH series  
**Description:** Gley soil derived from colluvium sandy deposit, sand or loamy, greyish coloured soil matrix, poorly drained (waterlogged),non-saline, non acid sulpahte  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK2040  
**Feature Name:** PAKAN series  
**Description:** Gley soil derived from riverine sandy deposit, loamy textured (>35% clay), grayish coloured soil matrix, poorly drained (waterlogged),non-saline, non acid sulpahte  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2041  
Feature Name: PIASAU series  
Description: Gley soil derived from marine sand deposit, loamy textured (>35% clay), greyish coloured soil matrix, poorly drained (waterlogged), moderately saline, non acid sulpahte

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2042  
Feature Name: SIRIK series  
Description: Gley soil derived from marine sand deposit, loamy textured (>35% clay), greyish coloured soil matrix, poorly drained (waterlogged), strongly saline, non acid sulpahte

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2043  
Feature Name: GONG series  
Description: Gley soil derived from colluvium sandy deposit, loamy textured (>35% clay), greyish coloured soil matrix, poorly drained (waterlogged), non-saline, non acid sulpahte

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2050  
Feature Name: BIJAT series  
Description: Gley soil derived from riverine clay deposit, clayey, grey coloured soil matrix, poorly drained (waterlogged), non acid sulpahte  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2051  
Feature Name: SAMARAHAN series  
Description: Gley soil derived from riverine clay deposit, clayey, greenish grey coloured soil matrix, poorly drained (waterlogged), non acid sulpahte  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2052  
Feature Name: DANAU series  
Description: Gley soil derived from riverine clay deposit, clayey, dark grey coloured soil matrix, poorly drained (waterlogged), non acid sulpahte  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK2053  
**Feature Name:** MUNDAL series  
**Description:** Gley soil derived from calcareous riverine clay deposit, clayey, grey coloured soil matrix, poorly drained (waterlogged), non acid sulphate  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Mineralogy Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK2054  
**Feature Name:** KAKAI series  
**Description:** Gley soil derived from riverine deposit (intermediate to basic igneous), clayey, grey coloured soil matrix, poorly drained (waterlogged)  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Mineralogy Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK2055  
**Feature Name:** JIWAN series  
**Description:** Gley soil derived from riverine deposit (acid igneous), clayey, grey coloured soil matrix, poorly drained (waterlogged)  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Mineralogy Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2056  
 Feature Name: DARO series  
 Description: Gley soil derived from non calcareous marine deposit, clayey, greyish coloured soil matrix, poorly drained (waterlogged), non -saline, non acid sulphaete  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2057  
 Feature Name: PENDAM series  
 Description: Gley soil derived from non calcareous marine deposit, clayey, greyish coloured soil matrix, poorly drained (waterlogged), moderately saline, non acid sulphate  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2058  
 Feature Name: BELIUNG series  
 Description: Gley soil derived from non calcareous marine deposit, clayey, greyish coloured soil matrix, poorly drained (waterlogged), strongly saline, non acid sulphate  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2059  
Feature Name: BUNTAL series  
Description: Gley soil derived from calcareous marine deposit, clayey, greyish coloured soil matrix, poorly drained (waterlogged), strongly saline, non acid sulpahte

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2080  
Feature Name: SEMADOH series  
Description: Gley soil developed on sedimentary rock (residuum), clayey, greyish coloured soil matrix, poorly drained (waterlogged), normally found in the interior valley

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2081  
Feature Name: TUMAU series  
Description: Gley soil derived from colluvium deposit, clayey, greyish coloured soil matrix, poorly drained (waterlogged) normally found in the interior valley

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2082  
Feature Name: EMBANG series  
Description: Gley soil derived from colluvium, clayey, coloured soil matrix, poorly drained (waterlogged).  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2090  
Feature Name: KABONG series  
Description: Soil derived from marine deposit, no diagnostic horizon, sandy texture (>75% sand), yellowish coloured soil, absence of calcareous material  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2091  
Feature Name: CHUPIN series  
Description: Soil derived from marine deposit, no diagnostic horizon, sandy texture (>75% sand), yellowish coloured soil, absence of calcareous material  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2092  
Feature Name: SIRU series  
Description: Soil derived from marine deposit, no diagnostic horizon, sandy texture (>75% sand), yellowish coloured soil, absence of calcareous material, >6% weatherable mineral

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2093  
Feature Name: RAMBUNGAN series  
Description: Soil derived from marine deposit, no diagnostic horizon, sandy texture (>75% sand), red to dark red coloured soil, absence of calcareous material, presence of Mn in upper subsoil

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2094  
Feature Name: SEMATAN series  
Description: Soil derived from marine deposit, no diagnostic horizon, sand texture (>75% sand), red to dark red coloured soil, absence of calcareous material

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2100  
Feature Name: KAYAN series  
Description: Soil derived from riverine deposit, no diagnostic horizon, sand texture (>75% sand), yellowish coloured soil  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2101  
Feature Name: SIAR series  
Description: Soil derived from riverine deposit, no diagnostic horizon, sand texture (>75% sand), red to dark red coloured soil  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2110  
Feature Name: TIKA series  
Description: Residual soil derived from sandstone, sand texture (>75% sand), pallid colour soil  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2111  
Feature Name: KILONG series  
Description: Soil developed from non accreting alluvium, sand texture (>75% sand), pallid colour soil

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2120

Feature Name: PENINJAU series

Description: Residual soil derived from sandstone, sand texture (>75% sand), yellow coloured soil

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2121

Feature Name: SEBAYA series

Description: Soil developed from non accreting alluvium, sand texture (>75% sand), yellowish coloured soil

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2130  
 Feature Name: BELAT series  
 Description: Acid sulphates oil derived from marine deposit, acid sulphate layer within 0-50cm, sandy, grayish coloured soil matrix, poorly drained (waterlogged), strongly saline  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2131  
 Feature Name: PANDAK series  
 Description: Soil derived from marine deposit, acid sulphate layer within 0-50cm, sandy, grayish coloured soil matrix, poorly drained (waterlogged), weakly saline  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2132  
 Feature Name: MERSAN series  
 Description: Soil derived from marine deposit, acid sulphate layer within 0-50cm, sandy, grayish coloured soil matrix, poorly drained (waterlogged), non - saline  
 Feature Class: Polygon  
 Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2140  
Feature Name: PALOH series  
Description: Soil derived from marine deposit, loamy, acid sulphate layer within 0-50cm, grayish coloured soil matrix, poorly drained (waterlogged), strongly saline  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2141  
Feature Name: NAGOR series  
Description: Soil derived from marine deposit, acid sulphate layer within 0-50cm, loamy, grayish coloured soil matrix, poorly drained (waterlogged), weakly saline  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2142  
Feature Name: NANGKA series  
Description: Soil derived from marine deposit, acid sulphate layer within 0-50cm, loamy, grayish coloured soil matrix, poorly drained (waterlogged), non - saline  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2150  
Feature Name: RAJANG series  
Description: Soil derived from marine deposit, clayey, acid sulphate layer within 0-50cm, grayish to greenish gray coloured soil matrix, poorly drained (waterlogged), strongly saline

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2151  
Feature Name: RAMPANGI series  
Description: Soil derived from marine deposit, clayey, acid sulphate layer within 0-50cm, grayish to greenish gray coloured soil matrix, poorly drained (waterlogged), weakly saline

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2152  
Feature Name: PUNDA series  
Description: Soil derived from riverine deposit, clayey, acid sulphate layer within 0-50cm, grayish to greenish gray coloured soil matrix, poorly drained (waterlogged), non- saline

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2160  
Feature Name: KLUANG series  
Description: Soil derived from marine deposit, clayey, acid sulphate layer within 50-100cm, greyish coloured soil matrix, poorly drained (waterlogged), non-saline  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2161  
Feature Name: SEMERA series  
Description: Soil derived from marine deposit, clayey, acid sulphate layer within 50-100cm, greyish coloured soil matrix, poorly drained (waterlogged), strongly saline  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2162  
Feature Name: MOYAN series  
Description: Soil derived from marine deposit, clayey, acid sulphate layer within 50-100cm, greyish coloured soil matrix, poorly drained (waterlogged), weakly saline  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2170  
Feature Name: MELUAN series  
Description: Shallow residual soil (<25 cm deep), clayey, sandy or loamy, derived from any type of igneous or sedimentary rock  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2171  
Feature Name: NGIAN series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived insitu over acid igneous rock  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2172  
Feature Name: MAYANG series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived insitu over intermediate to basic igneous boulders  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2180  
Feature Name: TUTOH series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived from colluvium deposit of non-calcareous sedimentary rock.

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2181  
Feature Name: LUNDU series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived from colluvium deposit of acid igneous rock

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2190  
Feature Name: KAPIT series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived from any type of non-calcareous sedimentary rock

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2191  
Feature Name: BURI series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived insitu over acid igneous rock

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2192  
Feature Name: SEDONG series  
Description: Shallow residual soil (25-50 cm deep), clayey, sandy or loamy, derived insitu over intermediate to basic igneous bedrock

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2200  
Feature Name: BINATANG series  
Description: Shallow soil (25-50 cm deep), clayey, sandy or loamy, alluvial deposit over calcareous sedimentary rock

Feature Class: Polygon

Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2201  
Feature Name: KELUPU series  
Description: Shallow soil (25-50 cm deep), clayey, sandy or loamy, alluvial deposit over non-calcareous sedimentary rock

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK2202  
Feature Name: PADI series  
Description: Shallow soil (25-50 cm deep), clayey, sandy or loamy, alluvial deposit over calcareous sedimentary rock

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3000  
Feature Name: TAMANONG series  
Description: Soil derived from marine alluvium, yellowish in colour, sandy, low base saturation, imperfectly drained, very deep profile

Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3010  
Feature Name: KABILI series  
Description: Soil derived from marine alluvium, yellowish in colour, sandy, low base saturation, imperfectly drained, very deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3020  
Feature Name: TANJONG LITA series  
Description: Soil derived from marine alluvium, yellowish in colour, sandy, high base saturation, imperfectly drained, very deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3030  
Feature Name: TANJONG series  
Description: Soil formed on alluvium derived from ultrabasic igneous rock, yellowish in colour, sandy, high base saturation, imperfectly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK3040  
**Feature Name:** PISAU series  
**Description:** Soil formed on beach ridge, reddish in colour, sandy, low base saturation, well drained, very deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK3050  
**Feature Name:** PANGARANGAN series  
**Description:** Soil derived from sandstone, yellowish in colour, sandy, low base saturation, well drained, very deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK3060  
**Feature Name:** USUKAN series  
**Description:** Soil derived from calcareous marine alluvium, yellowish in colour, sandy, high base saturation, excessively drained, very deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3070  
Feature Name: SERAI series  
Description: Soil formed on beach ridge, grayish in colour, sandy, low base saturation, excessively drained, very deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3080  
Feature Name: BERGOSONG series  
Description: Soil derived from sulphidic alluvium, grayish in colour, fine silty, high base saturation, very poorly drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3090  
Feature Name: WESTON series  
Description: Soil derived from sulphidic alluvium, grayish in colour, coarse loamy, low base saturation, poorly drained, moderately deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK3100  
**Feature Name:** BERHALA series  
**Description:** Soil derived from calcareous marine alluvium, brownish in colour, sandy, high base saturation, very poorly drained, deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK3110  
**Feature Name:** GUAN series  
**Description:** Soil derived from recent alluvium, brownish in colour, fine clayey, low base saturation, very poorly drained, very deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**Feature Code:** SK3120  
**Feature Name:** KALIBONG series  
**Description:** Soil derived from marine alluvium, grayish in colour, fine clayey, high base saturation, poorly drained, very deep profile  
**Feature Class:** Polygon  
**Possible Attribute:** Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3130  
Feature Name: NUNUYAN series  
Description: Soil derived from calcareous marine alluvium, grayish in colour, coarse loamy, high base saturation, somewhat poorly drained, very deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3140  
Feature Name: LIBUR series  
Description: Soil derived from marine alluvium, grayish in colour, very fine clayey, high base saturation, somewhat poorly drained, very deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3150  
Feature Name: PEGALAN series  
Description: Soil derived from recent alluvium, yellowish in colour, coarse loamy, high base saturation, moderately well drained, very deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3160  
Feature Name: TENGHILAN series  
Description: Soil derived from recent alluvium, yellowish in colour, coarse loamy, low base saturation, moderately well to well drained, deep profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

Feature Code: SK3170  
Feature Name: KIDUKAROK series  
Description: Soil derived from sandstone, grayish in colour, fine loamy, low base saturation, poorly drained, shallow profile  
Feature Class: Polygon  
Possible Attribute: Label (LBL), Soil Local Family Name (SLF), FAO-Unesco Legend (FAO), USDA Soil Taxonomy Subgroup (SSG), Soil Particle Size Class (SPS), Soil Minerology Class (SMN), Soil Temperature Regime (STM), Soil Parent Material (SPA), Soil Textural Class (STC), Soil Profile Development (SPD), Soil Colour Group(SCG), Soil Matrix Colour (SMC), Soil Drainage Class (SDC), Soil Depth to Pedological Features(SDP), Soil Pedological Features Type (SPF), Thickness of Pedological features type (STH), Abundance of Pedological features type(SFA), Thickness of Organic layer(STO), Soil Material Type Underlying Peat(SMP), Soil Terrain Class (STT), Soil Cation Exchange Capacity (CEC), Soil Base saturation (SBS), Soil pH-range(SPH), Soil Salinity(SSL), Area Measured in Hectares(ARH)

**T - TRANSPORTATION****TA - Land Transportation**

Feature Code:	<b>TA0010</b>
Feature Name:	Rail Line
Description:	A track on which trains run.
Feature Class:	Line
Possible Attribute:	Name (NAM), Rail Usage (RTU), Rail Tracking (RTR), Rail Track Function (RTF), Rail Track Electrification (RTE), Status (STA), Grade Location (GRL)
Feature Code:	<b>TA0020</b>
Feature Name:	Rail Station
Description:	A place where trains stop to load and unload passengers and goods including its associated buildings and facilities.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Rail Track Category (RTC), Status (STA), Grade Location (GRL), Rail Station Type (RST), Rail Usage (RTU)
Feature Code:	<b>TA0030</b>
Feature Name:	Rail Yard
Description:	A series of railway sidings at a station, terminal or depot where the activities of train formation is concentrated.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>TA0040</b>
Feature Name:	Turntable
Description:	A structure that rotate railway vehicles and machineries.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>TA0050</b>
Feature Name:	Railway Gate
Description:	A gate for train to cross a road at grade level.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Railway Gate Type (RGT)
Feature Code:	<b>TA0060</b>
Feature Name:	Road
Description:	The center line of an established surface on the right of way for exclusive use of vehicles.
Feature Class:	Line
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Toll (TOL), Carriageway Type (CWT), Traffic Flow (RDF), Route Number (RTN), Number of Lane (LAN), Status (STA), Road Pavement Type (RPV), Custodian(CUS), Authority (AUT), Road Category (RDC), Road Service Area (RDS), Pavement Surface Type (PVT), Road Surface Composition (RSC), Road Class (RCS), Road Level Height (RLH), Width of Lane (WLN), Level of Service (LVS), Capacity Value (CPV), Section Number (SEC), International Roughness Index (IRI)

Feature Code:	<b>TA0061</b>
Feature Name:	Road Edge
Description:	The edge of paved road which does not includes paved gutters and drainage ditches.
Feature Class:	Line
Possible Attribute:	Name (NAM), Carriageway Type (CWT), Route Number (RTN), Status (STA), Road Pavement Type (RPV), Road Service Area (RDS), Custodian (CUS), Authority (AUT), Road Category (RDC), <b>Road Surface Composition (RSC), Pavement Surface Type (PVT).</b>
Feature Code	<b>TA0062</b>
Feature Name	Road Surface Physical
Description	An established surface of the road between road edges
Feature Class	Polygon
Possible Attribute	Name (NAM), Area Measured (m <sup>2</sup> )(ARM), Toll (TOL), Carriageway Type (CWT), Traffic Flow (RDF), Route Number (RTN), Number of Lane (LAN), Status (STA), Road Pavement Type (RPV), Custodian (CUS), <b>Date of Maintenance Start (DMS), Date of Maintenance End (DME),</b> Authority (AUT), Road Category (RDC), Road Service Area (RDS), <b>Pavement Surface Type (PVT), Road Surface Composition (RSC), Road Class (RCS),</b> Road Level Height (RLH), Width of Lane (WLN), Level of Service (LVS), Capacity Value (CPV), Section Number (SEC), International Roughness Index (IRI), Mean Sea Level (MSL), Federal Road Category (RCF)
Feature Code	<b>TA0063</b>
Feature Name	Road Line Edge Marking
Description	The white line marking at the edge of the road
Feature Class	Line
Possible Attribute	Name (NAM), Carriageway Type (CWT), Route Number (RTN), Status (STA), Road Pavement Type (RPV), Road Service Area (RDS), Custodian (CUS), Authority (AUT), Road Category (RDC),
Feature Code	<b>TA0064</b>
Feature Name	Road Line Marking
Description	The white line marking which divides the type of lanes.
Feature Class	Line
Possible Attribute	Name (NAM), Carriageway Type (CWT), Route Number (RTN), Status (STA), Road Pavement Type (RPV), Road Service Area (RDS), Custodian (CUS), Authority (AUT), Road Category (RDC),
Feature Code	<b>TA0065</b>
Feature Name	Road Lane
Description	An established surface of the road between road line marking.
Feature Class	Polygon
Possible Attribute	Name (NAM), Carriageway Type (CWT), Route Number (RTN), Status (STA), Road Pavement Type (RPV), Road Service Area (RDS), Custodian (CUS), Authority (AUT), Road Category (RDC), <b>Type of Lane (TLN)</b>
Feature Code	<b>TA 0066</b>
Feature Name	Motorcycle Lane
Description	As a part of road used by the motorcycle.
Feature Class	Polygon
Possible Attribute	Name (NAM), <b>Road Surface Composition (RSC),</b> Authority (AUT), Route Number (RTN), Status (STA), Custodian (CUS), Road Pavement Type (RPV), Road Category (RDC), Road Service Area (RDS), <b>Section Number (SEC), Pavement Surface Type (PVT), Type of Cycle Lane (TCL)</b>

Feature Code	<b>TA 0067</b>
Feature Name	Motorcycle Lane Edge
Description	The edge of motorcycle lane which does not includes paved gutters and drainage ditches
Feature Class	Line
Possible Attribute	Name (NAM), Road Surface Composition (RSC), Custodian (CUS), Status (STA), Authority (AUT), Road Pavement Type (RPV), Route Number (RTN), Road Category (RDC), Road Service Area (RDS), Section Number (SEC), Pavement Surface Type (PVT)
Feature Code	<b>TA 0068</b>
Feature Name	Cycle Lane
Description	As a part of road used by the cyclist.
Feature Class	Polygon
Possible Attribute	Name (NAM), Road Surface Composition (RSC), Authority (AUT), Route Number (RTN), Status (STA), Custodian (CUS), Road Pavement Type (RPV), Road Category (RDC), Road Service Area (RDS), Route Number (RTN), Section Number (SEC), Pavement Surface Type (PVT),
Feature Code	<b>TA 0069</b>
Feature Name	Cycle Lane Edge
Description	The edge of cycle lane which does not includes paved gutters and drainage ditches
Feature Class	Line
Possible Attribute	Name (NAM), Road Surface Composition (RSC), Custodian (CUS), Status (STA), Authority (AUT), Road Pavement Type (RPV), Route Number (RTN), Road Category (RDC), Road Service Area (RDS), Pavement Surface Type (PVT),
Feature Code	<b>TA0070</b>
Feature Name	Scupper Drain
Description	Water controlling beyond the roadway, including water coming from the roadway surface and out subsurface drains.
Feature Class	Point
Possible Attribute	Identification Number (IDN), Status (STA), Authority (AUT), Route Number (RTN), Project or Company Name (PRJ), Section Number (SEC),
Feature Code	<b>TA 0071</b>
Feature Name	Motorcycle Shelter
Description	A place at the side of the road designed for motorcyclist take shelter.
Feature Class	Point
Possible Attribute	Name (NAM), Authority (AUT), Route Number (RTN), Custodian (CUS), Status (STA), Date (DAT), Direction (DIR), Motorcycle Shelter Structure (MSS)
Feature Code:	<b>TA0080</b>
Feature Name:	Slip Road
Definition:	A short one-way road at junction connecting adjacent road to ease traffic flow.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Direction (DIR), Number of Lane (LAN), Status (STA), Road Surface Composition (RSC), Authority (AUT), Road Class (RCS), Pavement Surface Type (PVT), Road Level Height (RLH), Width of Lane (WLN). Road Surface Composition (RSC)

Feature Code:	<b>TA0090</b>
Feature Name:	Road Junction
Definition:	A point where two or more roads cross or meet.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Signalisation (SIG), Number of Direction (NOD), Identification Number (IDN), Route Number (RTN), Carriageway Type (CWT), Status (STA), Road Pavement Type (RPV), Custodian (CUS), Road Service Area (RDS), Authority (AUT), Road Category (RDC), Type of Road Junction (TJC), Section Number (SEC), Road Surface Composition (RSC), Pavement Surface Type (PVT).
Feature Code:	<b>TA0100</b>
Feature Name:	Round-about
Definition:	A road junction designed for movement of traffic in one direction around a central island.
Feature Class:	Polygon, Point
Possible Attribute:	Name (NAM), Identification Number (IDN), Signalisation (SIG), Number of Lane (LAN), Status (STA), Road Surface Composition (RSC), Authority (AUT), Route Number (RTN), Road Category (RDC), Carriageway Type (CWT), Traffic Flow (RDF), Custodian (CUS), Road Pavement Type (RPV), Road Service Area (RDS), Road Surface Composition (RSC), Section Number (SEC), Road Class (RCS), Pavement Surface Type (PVT), Width of Lane (WLN).
Feature Code:	<b>TA0110</b>
Feature Name:	Track
Description:	The path of travels other than roads.
Feature Class:	Line
Possible Attribute:	Name (NAM), Track Type (TCT), Track Category (TCC), Route Number (RTN), Pavement Surface Type (PVT),
Feature Code:	<b>TA0111</b>
Feature Name:	Track Edge
Description:	The edge of Track
Feature Class:	Line
Possible Attribute:	Track Type (TCT), Track Category(TCC)
Feature Code:	<b>TA0120</b>
Feature Name:	Interchange
Description:	A road crossing with a structure that is built to provide dispersion of traffic.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Interchange Type (ITT), Vertical Clearance (VTC), Route Number (RTN), Section Number (SEC), Road Level Height (RLH)
Feature Code:	<b>TA0130</b>
Feature Name:	Lay-by
Description:	A recession along the road for vehicles to pull over or along the highway for stops on 24/7 basis with basic facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Lay-by Usage (LAU), Route Number (RTN), Direction (DIR), Section Number (SEC)

Feature Code: **TA0140**  
Feature Name: Overhead Crossing  
Description: A bridge that offers pedestrians and cyclists the safest means of crossing a road.  
Feature Class: Point, Line  
Possible Attribute: Name (NAM), Passage Usage (PAU), Vertical Clearance (VTC), Identification Number (IDN)

Feature Code: **TA0150**  
Feature Name: Toll Plaza  
Description: A structure along highways where toll charges are collected.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Electronic Toll Collection (TEC), Toll Operating System (TOS)

Feature Code **TA 0151**  
Feature Name Toll Plaza Complex  
Description An area comprising more than one building specifically built to be used for toll administrative office, prayer room, toilets and other needs  
Feature Class Polygon  
Possible Attribute Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Authority (AUT), Status (STA), Date (DAT), Direction (DIR)

Feature Code **TA 0155**  
Feature Name Rest and Service Area  
Description A facility along the highway where users can refresh, take a rest and refill fuel on 24/7 basis.  
Feature Class Polygon  
Possible Attribute Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Authority (AUT), Status (STA), Date (DAT), Route Number (RTN), Direction (DIR), Information Kiosk (KSK)

Feature Code: **TA0160**  
Feature Name: Subway  
Description: A passage below the surface of the road that offers pedestrians and cyclists the safest means of crossing a road.  
Feature Class: Point, Line  
Possible Attribute: Name (NAM), Passage Usage (PAU), Length (LEN), Width (WID), Vertical Clearance (VTC)

Feature Code: **TA0170**  
Feature Name: Traffic Sign  
Description: A device mounted on a fixed or portable support whereby a specific message is conveyed by means of word or symbols.  
Feature Class: Point  
Possible Attribute: Name (NAM), Traffic Sign Type (TRA), Route Number (RTN), Section Number (SEC), Road Regulatory Sign (RGS), Road Warning Sign (RWN), Road Guide Sign (RGU)

Feature Code **TA 0175**  
Feature Name Variable Message Sign  
Description Location of LED (Light Emitting Diode) display board often used to display traffic related information.  
Feature Class Point  
Possible Attribute Name (NAM), Authority (AUT), Date (DAT), Status (STA), Route Number (RTN), Section Number (SEC), Type of VMS Structure (VMS), Type of Display Board (DBT), Direction (DIR)

Feature Code:	<b>TA0180</b>
Feature Name:	Kilometer Post
Description:	A post consists of information of destination and the distance to the destination installed at every kilometer spacing along a road.
Feature Class:	Point
Possible Attribute:	Name (NAM), Identification Number (IDN), Kilometer Post Type (KMT), Kilometer Post Type (KMT), Route Number (RTN), Kilometer Post Usage (KMU), Primary Destination_1 (PD1), Distance_1 (DS1), Secondary Distance_2 (SD2), Distance_2 (DS2)
Feature Code:	<b>TA0190</b>
Feature Name:	Traffic Light
Description:	A device electrically operated by which traffic is alternately directed to stop and permitted to proceed at road intersections.
Feature Class:	Point
Possible Attribute:	Name (NAM), Identification Number (IDN), Height (HEI), Length (LEN), Route Number (RTN), Traffic Light Pole Type (TLP), Traffic Light Cable Type (TLC), Quantity of Traffic Light Pole (TLQ), Type of Traffic Light Aspect (TLA)
Feature Code:	<b>TA0200</b>
Feature Name:	Pedestrian Crossing
Description:	A zone, usually painted in stripes, designed for pedestrian to cross a road.
Feature Class:	Point, Line
Possible Attribute:	Name (NAM), Signalisation (SIG), Identification Number (IDN), Route Number (RTN)
Feature Code:	<b>TA0210</b>
Feature Name:	Cable Car Route
Description:	A specific thoroughfare reserved for the use and operation of cable cars.
Feature Class:	Line
Possible Attribute:	Name (NAM), Authority (AUT), Cable Car Type (CCT), Route Number (RTN)
Feature Code:	<b>TA0220</b>
Feature Name:	Cable Car Station
Description:	A building at the end of a cable car route used for the administration and operation of cable cars.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>TA0230</b>
Feature Name:	Tunnel
Description:	An enclosed passage constructed at grade, underground or underwater, open at both ends, usually contains a road or railway or for flood mitigation or for multimode (flood and road).
Feature Class:	Point, Line
Possible Attribute:	Name (NAM), Tunnel Usage (TNU), Length (LEN), Width (WID), Vertical Clearance (VTC), Custodian (CUS), Authority (AUT), Air Quality Monitoring Tunnel (TQM)

Feature Code:	<b>TA0240</b>
Feature Name:	Bridge
Description:	A structure erected over a depression or an obstruction such as river, road or railway and having a passageway which allows traffic to cross from one side to the other.
Feature Class:	Point, Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Identification Number (IDN), Bridge Construction Material Type (BMT), Bridge Structural System Type (BST), <b>Bridge Deck Type (BKT)</b> , Bridge Abutment Type (BAT), Bridge Swingability (BRS), Number of Bridge Span (NBS), Length (LEN), Width (WID), Vertical Clearance (VTC), <b>Bridge Usage (BRU)</b>
Feature Code:	<b>TA0250</b>
Feature Name:	Bridge Pier
Definition:	An intermediate support for bridge deck structures.
Feature Class:	Point
Possible Attribute:	Name (NAM), Identification Number (IDN), Height (HEI)
Feature Code:	<b>TA0260</b>
Feature Name:	Causeway
Description:	A raised road or rail track across wet or marshy ground, or water.
Feature Class:	Line, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Length (LEN), <b>Route Number (RTN)</b>
Feature Code:	<b>TA0270</b>
Feature Name:	Inland Port
Description:	A place located inland and equipped with facilities for loading and unloading of international cargo.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code	<b>TA0280</b>
Feature Name	<b>Road Slope Protection</b>
Description	<b>A built up feature to stabilize slopes along the road</b>
Feature Class	<b>Line, polygon</b>
Possible Attribute	<b>Name (NAM), Authority (AUT), Date (DAT), Status (STA), Route Number (RTN), <b>ection Number (SEC), Type of Slope Protection (TYP)</b></b>
Feature Code	<b>TA0281</b>
Feature Name	<b>Road Slope Drain</b>
Description	<b>A drain which carries disperse water from top to lower in order to maintain the stability of slope along the road.</b>
Feature Class	<b>Line</b>
Possible Attribute	<b>Name (NAM), Authority (AUT), Date (DAT), Status (STA), Drain Conveyance (DRV), Drain Usage (DRU), Drain Category (DRC), Drain Structure (DRS), <b>Slope Drain Category (DSC)</b></b>
Feature Code	<b>TA 0290</b>
Feature Name	<b>Kerb</b>
Description	<b>A concrete border or row of joined stone forming parts of a gutter along the edge of the road.</b>
Feature Class	<b>Line</b>
Possible Attribute	<b>Name (NAM), Authority (AUT), Date (DAT), Status (STA), Route Number (RTN), Identification Name (IDN), <b>Project Name (PRJ) , Section Number (SEC)</b></b>

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Feature Code	<b>TA 0300</b>
Feature Name	Road Median
Description	A dividing area either paved or landscape between opposing lanes of traffic on certain roads.
Feature Class	Line
Possible Attribute	Identification Name (IDN), Authority (AUT), Date (DAT), Status (STA), Route Number (RTN), Section Number (SEC), Type of Road Median (MED)
Feature Code	<b>TA0310</b>
Feature Name	Road Traffic Safety Barrier
Description	A safety feature built as a barrier to prevent vehicle from colliding with dangerous obstacle area such as height, drains, ditches, ravines and opposing carriage way
Feature Class	Line
Possible Attribute	Name (NAM), Length (LEN), Route Number (RTN), Custodian (CUS), Date (DAT), Status (STA), Section Number (SEC), Type of Traffic Safety Barrier (TSB)
Feature Code	<b>TA0311</b>
Feature Name	Road Noise Barrier
Description	A solid feature built between the highway and buildings to protect from noise pollution.
Feature Class	Line,
Possible Attribute	Name (NAM), Length (LEN), Route Number (RTN), Custodian (CUS), Date (DAT), Status (STA), Section_Number (SEC), Direction (DIR), Type of Road Noise Barrier (NBT), Road Noise Barrier Structure (NBR)
Feature Code	<b>TA 0312</b>
Feature Name	Road Traffic Safety Device
Description	A safety device built along the road or attached to the road surface as a guide to road users.
Feature Class	Point
Possible Attribute	Name (NAM), Date (DAT), Authority (AUT), Status (STA), Route Number (RTN), Section Number (SEC), Road Traffic Safety Devices Type (TSD)
Feature Code	<b>TA0313</b>
Feature Name	Road Pavement Marking
Description	Marking paint on the road pavement used to guide traffic movement and to provide visual information to the road users.
Feature Class	Point
Possible Attribute	Name (NAM), Route Number (RTN), Section Number (SEC), Location of Road Marking (RML), Road Marking Type (RMT)
Feature Code	<b>TA 0314</b>
Feature Name	Road Brake Failure Area
Description	An area at the side of the road designed to stop the vehicles with brake failure for safety proposes.
Feature Class	Polygon
Possible Attribute	Name (NAM), ARM, Date (DAT), Authority (AUT), Status (STA), Route Number (RTN), Section Number (SEC)

Feature Code	<b>TA 0320</b>
Feature Name	Weighting Station Complex
Description	A weigh station is a checkpoint along a highway to inspect vehicular weights
Feature Class	Polygon
Possible Attribute	Name (NAM), Date (DAT), Authority (AUT), ARM, Status (STA), Route Number (RTN), <b>Section Number (SEC)</b>

**TB - Water Transportation**

Feature Code:	<b>TB0010</b>
Feature Name:	Water Route
Description:	A route in a designated area within a define limits which have been accurately surveyed for clearance of sea bottom and submerged obstacle to a minimum indicated depth of water for safe passage of ships.
Feature Class:	Line
Possible Attribute:	Name (NAM), Water Route Usage (WRU)

## U - UTILITY

### UA - Electricity

Feature Code:	<b>UA0010</b>
Feature Name:	Power Line
Description:	Cables that carry electricity power.
Feature Class:	Line
Possible Attribute:	Name (NAM), Grade Location (GRL) Power Line Characteristics (PLC), Power Line Type (PLT), Voltage (VLT), Custodian (CUS), Number (NUM)
Feature Code:	<b>UA0011</b>
Feature Name:	Electricity Cable Depth
Description:	Point along electricity cable showing depth obtained through direct measurement or detection of any measuring or detecting equipment
Feature Class:	Point
Possible Attribute:	Name (NAM), Depth (DPT)
Feature Code:	<b>UA0012</b>
Feature Name:	Electricity Cable Marker
Description:	A marker attached to permanent structure or located on the ground that described the underground power cable route
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UA0020</b>
Feature Name:	Street Light
Description:	Structures that provide lighting to streets.
Feature Class:	Point
Possible Attribute:	Name (NAM), Street Light Category (SLC), Custodian (CUS), Number (NUM), Type of Street Light (TSL)
Feature Code	<b>UA0021</b>
Feature Name	Lamp Pole
Description	Structures that provide lighting to public places excluding street light
Feature Class	Point
Possible Attribute	Name (NAM) ,Custodian (CUS), Status (STA), Date (DAT), Lamp Pole Usage (LPU), Lamp Pole Type (LPT)
Feature Code	<b>UA 0022</b>
Feature Name	Highmast
Description	A lighting system for large areas in which masts giving a mounting height of 18m or more, normally carry cluster of luminaries.
Feature Class	Point
Possible Attribute	Name (NAM), Authority (AUT), Status (STA), Date (DAT), Height (HEI), Route Number (RTN), Road Location (RDL), Section Number (SEC), Highmast Usage (HMU), Aviation Light (AVL)
Feature Code	<b>UA 0023</b>
Feature Name	Underpass Lighting
Description	A lighting system which is installed at underpasses or tunnels for good visibility.
Feature Class	Point
Possible Attribute	Name (NAM), Custodian (CUS), Status (STA), Date (DAT), Route Number (RTN), Road Location (RDL), Section Number (SEC)

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Feature Code: **UA0030**  
Feature Name: Power Station  
Description: Installations that generate electricity power.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), [Power Station Type \(PST\)](#)

Feature Code: **UA0040**  
Feature Name: [Substation & Switching Station](#)  
Description: Installations that [distribute](#) or transform electric voltage from one level to another.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), [Substation Category \(SSC\)](#), [Custodian \(CUS\)](#), [Number \(NUM\)](#), [Substation Type \(SST\)](#)

Feature Code: **UA0050**  
Feature Name: Pole  
Description: Structure made of wood/~~iron~~ [steel](#)/concrete to support overhead cables.  
Feature Class: Point  
Possible Attribute: Name (NAM), Pole Usage (POU), [Custodian \(CUS\)](#), [Number \(NUM\)](#)

Feature Code: **UA0060**  
Feature Name: Feeder Pillar  
Description: Equipments that branches low voltage underground cables single or dual to a multiple.  
Feature Class: Point  
Possible Attribute: Name (NAM), [Custodian \(CUS\)](#), [Number \(NUM\)](#)

Feature Code: **UA0070**  
Feature Name: Pylon  
Description: Structure made of iron or concrete to support cables for electric power transmission and movement of cable cars.  
Feature Class: Point  
Possible Attribute: Name (NAM), Pylon Usage (PYU), [Custodian \(CUS\)](#), [Number \(NUM\)](#)

Feature Code: **UA0080**  
Feature Name: Meter  
Description: A gadget used to record electricity flow and usage.  
Feature Class: Point  
Possible Attribute: Name (NAM), [Custodian \(CUS\)](#), [Number \(NUM\)](#)

Feature Code: **UA0090**  
Feature Name: [Electricity Manhole](#)  
Description: [End of the duct path where the underground power cable is interconnected.](#)  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **UA0100**  
Feature Name: [Electricity Traffic Light Sensor Cable](#)  
Description: [Wire embedded in the road's Surface used to sense traffic](#)  
Feature Class: Point  
Possible Attribute: Name (NAM), [Custodian \(CUS\)](#)

**Feature Code**                    **UA 0110**  
**Feature Name**                Closed Circuit Television  
**Description**                    Camera system installed at the roadside or public places and use either for surveillance or observe traffic condition and collecting traffic data.  
**Feature Class**                 Point  
**Possible Attribute**         Identification Number (IDN), Name (NAM), Custodian (CUS), Status (STA), Date (DAT), Route Number (RTN), Road Location (RDL), Section Number (SEC), Direction (DIR), Closed Circuit Television Type (CTV), Closed Circuit Television Usage (CTU), Closed Circuit Television Support (CTS), Camera Type (CTM)

### **UB – Telecommunication**

**Feature Code:**                 **UB0010**  
**Feature Name:**               Telephone Exchange / Switch  
**Description:**                 Telephone Exchange Switch for remote area  
**Feature Class:**               Point  
**Possible Attribute:**        Name (NAM)

**Feature Code:**                 **UB0020**  
**Feature Name:**               Telecommunication Manhole  
**Description:**                 End of the duct path where the underground cable is interconnected.  
**Feature Class:**               Point  
**Possible Attribute:**        Name (NAM)

**Feature Code:**                 **UB0030**  
**Feature Name:**               Pier Crossing  
**Description:**                 A structure crossing a small river or monsoon drain to support cable duct.  
**Feature Class:**               Line  
**Possible Attribute:**        Name (NAM)

**Feature Code:**                 **UB0040**  
**Feature Name:**               Telecommunication Tunnel  
**Description:**                 Replacement of the duct ways to cater for the high number of cables (more than 48 cables).  
**Feature Class:**               Line  
**Possible Attribute:**        Name (NAM)

**Feature Code:**                 **UB0050**  
**Feature Name:**               Duct Way  
**Description:**                 A cylindrical conduit provided between two manholes to pull cables and prevent from mechanical damage.  
**Feature Class:**               Line  
**Possible Attribute:**        Name (NAM)

**Feature Code:**                 **UB0060**  
**Feature Name:**               Cabinet  
**Description:**                 A passive cross connection point of main cables and distribution cables and installed, mostly, at road junctions.  
**Feature Class:**               Point  
**Possible Attribute:**        Name (NAM)

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Feature Code:	<b>UB0070</b>
Feature Name:	Distribution Point
Description:	Distribution cables that start from Cabinet and end at the Distribution Point.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0080</b>
Feature Name:	Main Distribution Frame
Description:	Cable distribution frame installed at Exchange where copper cable starts and terminates at cabinet
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0090</b>
Feature Name:	Fibre Distribution Frame
Description:	Installed in the telephone exchanger or subscriber premises to interconnect external cable.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0100</b>
Feature Name:	Tap Block
Description:	Cable connecting exchange to exchange, cabinet to cabinet, or Distribution Point to Distribution Point.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0110</b>
Feature Name:	Fibre Optic Cable
Description:	Cable that carries the light signal.
Feature Class:	Line
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0120</b>
Feature Name:	Remote Terminal
Description:	Place to terminate the fibre optic cable where the light signal is converted to current on individual channel.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0130</b>
Feature Name:	Station / VSAT Station
Description:	Fixed satellite station / VSAT Station, which accommodates the parabolic antenna to receive/transmit signal from space satellite.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

Feature Code:	<b>UB0150</b>
Feature Name:	Cellular Radio Base Station
Description:	Radio Base Station which accommodates the telecommunication tower and base station
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UB0160</b>
Feature Name:	Exchange Building
Description:	Building that accommodates the switching equipment and cables.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UB0170</b>
Feature Name:	Hill Station
Description:	Hill Station that accommodates a tower station for transmitting and receiving radio signals.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UB0180</b>
Feature Name:	Telecommunication Tower
Description:	Tower station where radio signal is transmitted / received
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0200</b>
Feature Name:	Transmitter / Receiver
Description:	Transmission / Receiving Equipment.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0220</b>
Feature Name:	Repeater
Description:	Repeater Equipment.
Feature Class:	Point
Possible Attribute:	Name (NAM)
Feature Code:	<b>UB0250</b>
Feature Name:	Telecom Cable
Description:	Telecommunication cable belonging to telecommunication operators.
Feature Class:	Line
Possible Attribute:	Name (NAM), Telecommunication Operators (TCO)
Feature Code:	<b>UB0251</b>
Feature Name:	Telecom Cable Depth
Description:	Point along telecommunication cable showing depth obtained through direct measurement or detection of any measuring or detecting equipment.
Feature Class:	Point
Possible Attribute:	Name (NAM), Depth (DPT)

Feature Code: **UB0300**  
Feature Name: Phone Booth  
Description: A small structure that is partly or completely enclosed, containing telephone for public use  
Feature Class: Point  
Possible Attribute: Name (NAM), Telecommunication Operators (TCO)

Feature Code: **UB0310**  
Feature Name: Radio Antenna  
Description: Antenna for point to point radio communication where signal is transmitted /received  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code **UB 0320**  
Feature Name Emergency Telephone  
Description A device for transmitting information between pre-established point located along the highway and the Traffic Control and Surveillance System (TCSS) room using a two way communication system.  
Feature Class Point  
Possible Attribute Name (NAM) , Custodian (CUS), Date (DAT), Status (STA), Route Number (RTN), Section Number (SEC), Direction (DIR), Emergency Telephone Structure (ETS), Emergency Telephone Network (ETN)

#### UC - Water Supply

Feature Code: **UC0010**  
Feature Name: Bunded Storage  
Description: Storage facilities for storing water resources.  
Feature Class: Polygon, Point  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UC0020**  
Feature Name: Water Treatment Plant  
Description: An engineering structure built for treatment of raw water.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UC0030**  
Feature Name: Water Intakes  
Description: An engineering structure built for river water extraction.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **UC0040**  
Feature Name: River Gate  
Description: An engineering structure built across a river to raise the water level for river water extraction.  
Feature Class: Point  
Possible Attribute: Name (NAM)

**U - UTILITY****UC - Water Supply**

Feature Code:	<b>UC0060</b>
Feature Name:	Reservoir
Description:	A structure used for storage and regulation of water
Feature Class:	Polygon, Point
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Reservoir Type (RVT), Custodian (CUS), Authority (AUT), Reservoir Usase (RVU), Reservoir/Water Tank Category (RWC)
Feature Code:	<b>UC0070</b>
Feature Name:	Water Pump
Description:	Equipment for pumping water.
Feature Class:	Point, Line
Possible Attribute:	Name (NAM), Water Pump Category (WPC), Water Pump Type (WPT)
Feature Code:	<b>UC0080</b>
Feature Name:	Pump House
Description:	Building constructed to house water pumps and its mechanical and electrical facilities.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Pump House Usage (PHU)
Feature Code:	<b>UC0100</b>
Feature Name:	Water Tank
Description:	Storage structure for storing water to be pumped.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Tank Type (TAT), Reservoir/Water Tank Category (RWC)
Feature Code:	<b>UC0110</b>
Feature Name:	Water Pipe
Description:	A string of-pipes use for the transporting raw or treated water.
Feature Class:	Line
Possible Attribute:	Name (NAM), Water Pipe Type (WIT), Grade Location (GRL), Water Pipe Material (WPM)
Feature Code:	<b>UC0111</b>
Feature Name:	Water Pipeline Depth
Description:	Point along water pipeline showing depth obtained through direct measurement or detection of any measuring or detecting equipment.
Feature Class:	Point
Possible Attribute:	Name (NAM), Depth (DPT)
Feature Code:	<b>UC0120</b>
Feature Name:	Water Valve
Description:	Water facilities for controlling water flow, air and pressure.
Feature Class:	Point
Possible Attribute:	Name (NAM), Water Valve Type (WVT)

Feature Code: **UC0130**  
 Feature Name: Fire Hydrant  
 Description: Water facilities along **main pipes used for fighting fires**  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **UC0140**  
 Feature Name: Water Meter  
 Description: Meter used to record water flow and usage.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **UC0150**  
 Feature Name: Remote Terminal Unit  
 Description: Communication facilities for receiving and transmitting signals.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **UC0160**  
 Feature Name: Water Quality Monitoring System  
 Description: Facilities to monitor water quality.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **UC0170**  
 Feature Name: Chlorine Booster Station  
 Description: Facilities for boosting chlorine level.  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

Feature Code: **UC0180**  
 Feature Name: Water Tunnel  
 Description: Underground aqueduct for raw water transmission.  
 Feature Class: Line  
 Possible Attribute: Name (NAM)

Feature Code: **UC0190**  
 Feature Name: Supply Zone  
 Description: Supply area of a service reservoir or a distribution main.  
 Feature Class: Polygon  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Supply Zone Type (SZT)

Feature Code: **UC0200**  
 Feature Name: Non-Revenue Water Control Zone  
 Description: A definite supply area where non-revenue water control measure is imposed.  
 Feature Class: Polygon, **Point**  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UC0210**  
 Feature Name: Metering Zone  
 Description: An area representing a group of water meters.  
 Feature Class: Polygon, **Point**  
 Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UC0220**  
Feature Name: Water Supply Manhole  
Description: Chamber containing valve or flowmeter at various locations along water supply lines used for maintenance purposes.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM)

**UD - Oil and Gas**

Feature Code: **UD0010**  
Feature Name: Processing Plant  
Description: A complex where raw oil/gas is processed.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Processing Plant Type (PRT)

Feature Code: **UD0020**  
Feature Name: City Gate Station  
Description: A regulating and metering stn located just after a tee valve off the PGU pipeline owned by Petronas which links up to GMSB's gas pipeline distribution system where the gas pressure of 500 - 800 psi is reduced to 260 psi. It also acts as a Custody Transfer Point for natural gas, between PGB and GMSB.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UD0030**  
Feature Name: Odoriser Station  
Description: An odorant dispensing facility located immediately after the City Gate Station where odorant is injected into the gas to odorise it so as to meet safety requirements before supplying to customers.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UD0040**  
Feature Name: District Station  
Description: A regulating station where the feeder pipeline gas pressure is reduced from 260 psi to 60 psi before it enters GMSB's distribution pipeline.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UD0050**  
Feature Name: Regulating Station  
Description: A regulating station where GMSB's distribution pipeline gas pressure of 60 psi is reduced to 4.3 psi before supply to the commercial customers.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UD0060**  
Feature Name: Area Station  
Description: A regulating station where GMSB's distribution pipeline gas pressure of 60 psi is reduced to 0.43 psi before supply to residential customers.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UD0070**  
Feature Name: Service Station  
Description: A station with gas measurement and pressure regulating facilities where gas is received directly from the gas pipeline distribution system and which thereafter delivers the gas through the customer owned internal piping to the gas appliances.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM)

Feature Code: **UD0071**  
Feature Name: Gas Meter  
Description: A gadget to record gas flow and usage  
Feature Class: Point,  
Possible Attribute: Name (NAM),

Feature Code: **UD0080**  
Feature Name: Oil Pipeline  
Description: A pipeline for transporting oil.  
Feature Class: Line  
Possible Attribute: Name (NAM), Grade Location (GRL)

Feature Code: **UD0081**  
Feature Name: Oil Pipeline Depth  
Description: Point along oil pipeline showing depth obtained through direct measurement or detection of any measuring or detecting equipment.  
Feature Class: Point,  
Possible Attribute: Name (NAM), Depth (DPT)

Feature Code: **UD0082**  
Feature Name: Oil Valve  
Description: Valve along oil pipelines for controlling oil flow  
Feature Class: Point,  
Possible Attribute: Name (NAM),

Feature Code: **UD0083**  
Feature Name: Oil Tank  
Description: A large container use for storing oil  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Tank Type (TAT)

Feature Code: **UD0084**  
Feature Name: Oil Pipe Marker  
Description: A marker attached to permanent structure or located on the ground that described the underground oil pipe route.  
Feature Class: Point,  
Possible Attribute: Name (NAM),

**Feature Code:** **UD0085**  
**Feature Name:** Oil Derrick  
**Description:** A large container on ground or tower used for storing of water.  
**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM)

**Feature Code:** **UD0090**  
**Feature Name:** Gas Pipeline  
**Description:** A Pipeline for transporting gas  
**Feature Class:** Line  
**Possible Attribute:** Name (NAM), Grade Location (GRL), Gas Pipeline Type (GET)

**Feature Code:** **UD0091**  
**Feature Name:** Gas Pipeline Depth  
**Description:** Point along gas pipeline showing depth obtained through direct measurement or detection of any measuring or detecting equipment.  
**Feature Class:** Point,  
**Possible Attribute:** Name (NAM), Depth (DPT)

**Feature Code:** **UD0092**  
**Feature Name:** Gas Valve  
**Description:** Valve along gas pipelines for controlling gas flow  
**Feature Class:** Point,  
**Possible Attribute:** Name (NAM), Valve Material Type (VMT)

**Feature Code:** **UD0093**  
**Feature Name:** Gas Tank  
**Description:** A large container use for storing gas.  
**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Tank Type (TAT)

**Feature Code:** **UD0094**  
**Feature Name:** Gas Pipe Marker  
**Description:** A stone marker attached to permanent structure or located on the ground that marks the underground gas pipe route.  
**Feature Class:** Point,  
**Possible Attribute:** Name (NAM), Gas Marker Type (GMT)

**Feature Code:** **UD0095**  
**Feature Name:** Gas Warning Signboard  
**Description:** Signboard showing the location of an underground gas pipeline within the vicinity.  
**Feature Class:** Point, Polygon  
**Possible Attribute:** Name (NAM),

**UE - Broadcasting**

Feature Code:	<b>UE0010</b>
Feature Name:	Radio Station
Description:	A complex where signals for radio broadcasting is managed.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UE0020</b>
Feature Name:	Television Station
Description:	A complex where signals for television broadcasting is managed.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UE0030</b>
Feature Name:	Transmission Station
Description:	A complex where signals for radio or television broadcasting is transmitted.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UE0040</b>
Feature Name:	Monitoring Station
Description:	Facility where off air signals are intercepted and processed to monitor its contents and quality.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>UE0050</b>
Feature Name:	Broadcasting Coverage Area
Description:	An area of coverage of certain band of signal.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

**UF - Sewerage**

Feature Code:	<b>UF0010</b>
Feature Name:	Sewerage Treatment Plant
Description:	Site that contains facilities for treating sewage.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Sewerage Treatment Plant Type (STT), Sewerage Treatment Plant Category (STP)
Feature Code:	<b>UF0020</b>
Feature Name:	Sewerage Pump Station
Description:	Site that contains facilities for pumping sewage to the sewerage treatment plant.
Feature Class:	Point, Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

Feature Code: **UF0030**  
Feature Name: Sewerage Manhole  
Description: Opening at various locations along sewerage lines for maintenance purposes.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **UF0040**  
Feature Name: Sewerage Pipe  
Description: Pipes that transport sewage.  
Feature Class: Line  
Possible Attribute: Name (NAM), Sewerage Pipe Diameter (SPD), [Sewerage Pipe Material \(SPM\)](#), [Sewerage Pipe Type \(SPT\)](#), Grade Location (GRL)

Feature Code: **UF0041**  
Feature Name: Sewerage Pipeline Depth  
Description: Point along sewerage pipeline showing depth obtained through direct measurement or detection of any measuring or detecting equipment..  
Feature Class: Point,  
Possible Attribute: Name (NAM), Depth (DPT)

Feature Code: **UF0050**  
Feature Name: Sewerage Transition Device  
Description: Device for joining pipe end or fittings  
Feature Class: Point,  
Possible Attribute: Name (NAM),

### **UG - Waste Management**

Feature Code: **UG0010**  
Feature Name: Transportation Route  
Description: A route taken to by transportation vehicles to transfer solid waste to its final disposal sites.  
Feature Class: Line  
Possible Attribute: Name (NAM), Waste Type (WAT)

Feature Code: **UG0020**  
Feature Name: Waste Treatment Plant  
Description: An installation for processing of waste.  
Feature Class: Point  
Possible Attribute: Name (NAM), Waste Type (WAT)

Feature Code: **UG0030**  
Feature Name: Transfer Station  
Description: A facility where waste is taken from smaller collection vehicles and placed in larger vehicles for transport, including truck trailers, railroad cars or barges to final disposal sites.  
Feature Class: Point  
Possible Attribute: Name (NAM), Waste Type (WAT)

Feature Code: **UG0040**  
Feature Name: Incineration Plant  
Description: A facility in which solid waste is combusted.  
Feature Class: Point  
Possible Attribute: Name (NAM), Waste Type (WAT)

Feature Code: **UG0050**  
Feature Name: Secured Landfill  
Description: A disposal facility, designed to permanently isolate wastes from the environment. This entails burial of the wastes in a landfill that includes clay and/or synthetic liners, leachate collection, gas collection (in cases where gas is generated), and an impermeable cover.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM), Waste Type (WAT)

Feature Code: **UG0060**  
Feature Name: Collection Route  
Description: A path regularly followed by a collection vehicle to collect solid waste.  
Feature Class: Line  
Possible Attribute: Name (NAM)

Feature Code: **UG0070**  
Feature Name: Bin House  
Description: A place where storage containers are placed for collection services of solid waste.  
Feature Class: Point, Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>) (ARM),

Feature Code: **UG0080**  
Feature Name: Recycling Centers  
Description: A facility to which individuals bring their recyclable items to be recycled.  
Feature Class: Point  
Possible Attribute: Name (NAM)

Feature Code: **UG0090**  
Feature Name: Transfer Haulage Network  
Description: Supplemental transportation systems employed to reduce hauling costs by using semi - trailers, railroad cars, or barges to haul from a central point(s) within a jurisdiction to one or more distant solid waste management facilities. The act of transfer includes unloading collection vehicles at the transfer station, loading solid waste from the transfer station to the transfer vehicles, and hauling the solid waste to distant solid waste management facilities.  
Feature Class: Line  
Possible Attribute: Name (NAM)

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### UH – Meteorological

Feature Code: **UH0010**  
Feature Name: ~~Meteorological Station~~ Principal Station (41 stations)  
Description: Weather station that observe weather elements at surface level for 24 hours a day  
Feature Class: Point  
Possible Attribute: Name (NAM), Meteorological Station Category Type (MSC), Station Identification Number – WMO (IDN)

Feature Code: **UH0011**  
Feature Name: Automated Station (141 stations)  
Description: An automated weather station that observe 24 hours of weathetr elements.  
Feature Class: Point  
Possible Attribute: Name (NAM), Meteorological Station Category Type (MSC), Station Identification Number – WMO (IDN), ISO Meteorological Amount Measured (IAM)

Feature Code: **UH0012**  
Feature Name: Climatological Station (40 stations)  
Description: An Auxiliary Meteorological station that observe certain meteorological elements.  
Feature Class: Point  
Possible Attribute: Name (NAM), Meteorological Station Category Type (MSC), Station Identification Number – WMO (IDN), ISO Meteorological Amount Measured (IAM)

Feature Code: **UH0013**  
Feature Name: Rainfall Station (153 stations)  
Description: An Auxiliary Meteorological station that observe rainfall.  
Feature Class: Point  
Possible Attribute: Name (NAM), Meteorological Station Category Type (MSC), Station Identification Number – WMO (IDN), ISO Meteorological Amount Measured (IAM)

## V - VEGETATION

### VA – Agriculture

Feature Code:	<b>VA0000</b>
Feature Name:	Agriculture
Description:	The science, art, practice and business of cultivating the soil, growing and harvesting crops, raising livestock, biofuel and other products used to sustain human life.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>VA1000</b>
Feature Name:	Perennials Crops
Description:	Land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest").
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>VA1010</b>
Feature Name:	Mix Traditional Farming
Description:	An area covered with mixture of fruit trees and other perennial crops inclusive of farmers settlement
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1020</b>
Feature Name:	Cocoa
Description:	An area planted primarily with cocoa which produce chocolate for industries. Cocoa is a tropical rain-forest tree cultivated for its beans which are contained in large numbers in ovoid pods growing directly on the trunk and on the large branches.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1030</b>
Feature Name:	Coconut
Description:	An area planted primarily with coconuts. Coconuts are classified as a fibrous one-seeded drupe. A drupe is a fruit with a hard stony covering enclosing the seed (like a peach or olive) and comes from the word drupa meaning overripe olive. At an immature stage, the fruit (water coconut) contains mainly water and a little jelly-like meat instead of the hard white flesh (meat - endosperm) found in mature coconuts
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code:	<b>VA1040</b>
Feature Name:	Rubber ( <i>Hevea brasiliensis</i> )
Description:	An area primarily planted with rubber trees. Rubber tree is a tree in the family Euphorbiaceae and the most important member of the genus Hevea. The tree is economically important as the outcome as latex can be collected and is the primary source of rubber.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1050</b>
Feature Name:	Coffee ( <i>Coffea spp.</i> )
Description:	An area planted primarily with coffee. Coffea is a genus of flowering plants whose seeds, called coffee beans, are used to make coffee. It is a member of the Rubiaceae family. They are shrubs or small trees native to tropical and southern Africa and tropical Asia. Coffee ranks as one of the world's most valuable and widely traded commodity crops and is an important export product of several countries..
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1060</b>
Feature Name:	Oil Palm ( <i>Elaeis guinensis</i> )
Description:	An area planted primarily with oil palm. It is the principal source of palm oil and main crop in Malaysia at present. Oil is extracted from both the pulp of the fruit (palm oil, edible oil) and the kernel (palm kernel oil, used in foods and for soap manufacture)
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1070</b>
Feature Name:	Tea ( <i>Camellia sinensis</i> )
Description:	An area planted primarily with tea. Tea is an evergreen plant of the Camellia genus. The tea plant has thick leaves, dark green in color, and a strong thick stem. The tea leaves are processed that gives us the different teas and their specific taste, color and scent.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1080</b>
Feature Name:	Mangosteen ( <i>Garcinia mangostana</i> )
Description:	An area planted primarily with mangosteen tree which is typical seasonal fruit trees common in rural areas. The <u>fruit</u> of the mangosteen is sweet and tangy, juicy, and somewhat fibrous, with an inedible, deep reddish-purple colored rind ( <u>exocarp</u> ) when <u>ripe</u>
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code:	<b>VA1090</b>
Feature Name:	Starfruit ( <i>Averrhoa carambola</i> )
Description:	An area planted primarily with starfruit tree which is a typical fruit trees for commercial farming. The fruit has distinctive ridges running down its sides (usually five, but can sometimes vary); in cross-section, it resembles a star, hence its name. The entire fruit is edible and is usually eaten out of hand.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1100</b>
Feature Name:	Longan ( <i>Dimocarpus longan</i> )
Description:	An area planted primarily with longan tree. The commercial longan is a highly esteemed arilloid fruit species in Asia and belongs to the family of Sapindaceae. The longan resembles the lychee ( <i>Litchi chinensis</i> ) in that the tree is grown for its fleshy, translucent, white aril which surrounds a red brown to black seed from which it separates easily. Fruit can be eaten fresh, frozen, canned or dried.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1110</b>
Feature Name:	Durian ( <i>Durio zibethinus</i> )
Description:	An area planted primarily with durian. Regarded by many people in southeast Asia as the "king of fruits". The fruit pulp is eaten fresh, cooked as a vegetable or in soups, made into a sauce, or processed into various products. It can be frozen, dried, fermented, salted or dried and boild with sugar.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1120</b>
Feature Name:	Rose Apple ( <i>Syzygium aqueum</i> )
Description:	An area planted primarily with Rose Apple (water apple) tree. The rose apple is the least of the small group of somewhat similar fruits of the genus <i>Syzygium</i> (family Myrtaceae). This species, also known as watery rose apple. Grown mainly for the fruit, which is eaten fresh, used in salads or sometimes pickled or stewed..
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1130</b>
Feature Name:	Pitaya ( <i>Hylocereus sp</i> )
Description:	An area planted primarily with pitaya tree. A pitaya or pitahaya is the fruit of several cactus species. "Pitaya" usually refers to fruit of the genus <i>Stenocereus</i> , while "Pitahaya" or "Dragonfruit" always refers to fruit of the genus <i>Hylocereus</i> . The fruit are more sour and refreshing, with juicier flesh and a stronger taste. This is the most commonly seen "dragon fruit".
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code:	<b>VA1140</b>
Feature Name:	Guava ( <i>Psidium guajava</i> )
Description:	An area planted primarily with guava tree which produce fruit that can be eaten fresh or used for preserves, jam, jelly or juice. Leaves can be used for dyeing and tanning and in traditional medicine (against diarrhea)
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1150</b>
Feature Name:	Soursop ( <i>Annona muricata</i> )
Description:	An area planted primarily with soursop tree. Which produce fruit, immature fruits can be eaten as vegetable, mature fruits fresh or made into juice, preserve, jam or jelly. Leaves and roots used for traditional medicinal purposes.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1160</b>
Feature Name:	Jackfruit ( <i>Artocarpus heterophyllus</i> )
Description:	An area planted primarily with jackfruit tree. An Immature fruits can be eaten as vegetable, ripe fruit can be eaten fresh or made into various sweet dishes. Seeds can be eaten after boiling, roasting or drying. Young leaves can be used as livestock fodder while Tannin from bark and Dyes from wood particles.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1170</b>
Feature Name:	Pomelo ( <i>Citrus maxima</i> )
Description:	An area planted primarily with pomelo trees which produce fruit. Mainly grown for the fruit, this can be eaten fresh or in salads or made into juice. Leaves, flowers, fruit and seeds are used for various medicinal purposes (including against coughs, fevers and stomach disorders)
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1180</b>
Feature Name:	Mandarin
Description:	An area planted primarily with Mandarin trees. The fruit can be eaten fresh or process to fruit juice.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code:	<b>VA1190</b>
Feature Name:	Mango ( <i>Mangifera indica</i> L.)
Description:	An area planted primarily with mango trees. The fruit can, depending on the cultivar, be eaten unripe green, ripe or processed into pickles, chutney, dried slices, juice or canned in syrup.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1200</b>
Feature Name:	Lime (Limau Nipis/Kasturi)
Description:	An area planted primarily with limau Nipis/Kasturi tree which produce fruit and popular for traditional medication. The fruits can also be used to add flavours of foods and beverages.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1210</b>
Feature Name:	Cempedak ( <i>Artocarpus integer</i> )
Description:	An area planted primarily with cempedak trees. The fruit flesh surrounding the seeds are eaten fresh or cooked. The seeds can be eaten after roasting or boiling
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1220</b>
Feature Name:	Pulasan ( <i>Nephelium mutabile</i> Blume)
Description:	An area planted primarily with pulasan trees. Pulasan is a tropical fruit closely allied to rambutan. While very similar to rambutan, the fruit lacks the hairy spines. The flesh is very sweet and juicy, and separates easily from the seed.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1230</b>
Feature Name:	Rambutan ( <i>Nephelium lappaceum</i> )
Description:	An area planted primarily with rambutan trees. Sweet fruits are eaten fresh, can also be canned or made into jam
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code:	<b>VA1240</b>
Feature Name:	Salak ( <i>Salacca zalacca</i> )
Description:	An area planted primarily with salak trees. Salak is a species of palm tree (family Arecaceae) native to Indonesia, Brunei and Malaysia. The fruit grows in clusters at the base of the palm, and are also known as snake fruit due to the reddish-brown scaly skin. They are about the size and shape of a ripe fig, with a distinct tip. The pulp is edible. The fruit inside consists of three lobes with the largest of the three containing a large inedible seed. The taste is usually sweet and acidic.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1250</b>
Feature Name:	Duku/Langsat/Dukung ( <i>Lansium domesticum spp.</i> )
Description:	An area planted primarily with Duku/Langsat/Dokong trees which produce fruit that can be eaten fresh
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1260</b>
Feature Name:	Ciku ( <i>Manilkara zapota</i> )
Description:	An area planted primarily with ciku trees which produce fruit that can be eaten fresh. The fruit has an exceptionally sweet, multi flavor. The unripe fruit is hard and contains high latex.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1270</b>
Feature Name:	Pepper ( <i>Piper nigrum</i> )
Description:	An area planted primarily with pepper vines. Pepper is a flowering vine in the family Piperaceae, cultivated for its fruit, which is usually dried and used as spice and seasoning.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1280</b>
Feature Name:	Areca Palm ( <i>Areca catechu</i> )
Description:	An area planted primarily with areca palms which produce areca nut. The palm is often called the betel tree because its fruit, the areca nut, is often chewed along with the betel leaf, a leaf from a vine of the Piperaceae family. The areca nut is also use for traditional medication.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code:	<b>VA1290</b>
Feature Name:	Rumbia ( <i>Metroxylon sagu</i> )
Description:	An area planted primarily with sago palms. The palm is commonly found in tropical lowland forest and freshwater swamps which produce sago flour.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1300</b>
Feature Name:	Sugarcane ( <i>Saccharum officinarum</i> )
Description:	Sugarcane type yellow (Tebu Kuning) is widely cultivated in Peninsular Malaysia. Mostly Tebu Kuning to be planted for juice production.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1301</b>
Feature Name:	Sugarcane ( <i>Saccharum officinarum</i> L. hybrids)
Description:	Sugarcane for sugar production usually known in Malaysia as <i>Tebu Gula</i> , a major industrial crop, is widely cultivated in tropical and subtropical regions. A few <i>Tebu Gula</i> type is like NCO310 from South Africa, F134 (Taiwan) and Ragnar (Australia) to be planted in plantations such as in Chuping northern Malaysia for sugar production. Sugar cane type NCO310 planted a lot because high yields although the tree easy to fall.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1310</b>
Feature Name:	Mixed Fruit Crops
Description:	An area planted with more than one type of fruit trees (orchard) normally durians, rambutans, mangosteen and duku.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Crop Mix (CRM), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA1320</b>
Feature Name:	Other fruit Crops
Description:	An area planted with other exotic tropical fruit trees.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA2000</b>
Feature Name:	Annual Crops
Description:	An area planted with the type of an annual crop. Crops that live for only one year and they must be planted every year from seed
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)

Feature Code: **VA2010**  
Feature Name: Vegetable  
Description: An area planted primarily with market vegetables  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VA2020**  
Feature Name: Papaya (*Carica papaya*)  
Description: An area planted primarily with papaya. The ripe fruit is eaten fresh or used in salads, drinks, jam, candies. The green fruit can be cooked as a vegetable. Young leaves and flowers are also eaten in some areas. Carpaine, an alkaloid and papaine, an enzyme, are extracted for use in pharmaceutical, beverage and food industries.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VA2030**  
Feature Name: Banana (*Musa spp.*)  
Description: An area planted primarily with banana trees which produce fruit that can be eaten fresh, processed as local cakes and chips . A banana plant belongs to the family Musaceae.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VA2040**  
Feature Name: Watermelon (*Citrullus lanatus*)  
Description: An area planted primarily with watermelon plants. The sweet juicy pulp of the ripe fruit is red and yellow in colour and normally eaten fresh or as juice  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VA2050**  
Feature Name: Pineapple (*Ananas comosus*)  
Description: An area planted primarily with pineapple. The fruit contain about 14% sugar, vitamins A, B, and C, and bromelin. It can be eaten fresh or canned as dessert, cooked in dishes, and used for juice  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (m<sup>2</sup>), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VA2060**  
Feature Name: Paddy (*Oryza sativa*)  
Description: An area planted primarily with paddy under flooded or dry land condition.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Vegetation Water Management (VWM), Vegetation Paddy Type (VPT), Label (LBL),

Feature Code:	<b>VA2070</b>
Feature Name:	Tobacco ( <i>Nicotiana tabacum</i> )
Description:	An area planted primarily with tobaccos. The leaves are cured and dried and used for tobacco cigarettes and cigars, snuff, and as a source of nicotine for insecticides
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA2080</b>
Feature Name:	Tuber Crop
Description:	An area planted primarily with tuber crops. Tubers are various types of modified plant structures that are enlarged to store nutrients such as sweet potatoes, tapioca and potatoes..
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA2090</b>
Feature Name:	Corn/Maize
Description:	An area planted primarily with Corn/Maize. Sugar-rich varieties called sweet corn are usually grown for human consumption, while field corn varieties are used for animal feed and as chemical feed stocks.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA2110</b>
Feature Name:	Mixed Annual Crops
Description:	An area planted with more than one type of annual crops which cannot be separated into individual area.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VA2120</b>
Feature Name:	Other Annual Crops
Description:	An area planted with other annual crops.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

## VB – Forest

Feature Code:	<b>VB0000</b>
Feature Name:	Forest
Description:	An area of land exceeding 0.5 hectares covered by trees with canopy cover of more than 10% of the area, normally having an average tree height of more than 5 meters at maturity except at higher altitudes.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH),
Feature Code:	<b>VB1000</b>
Feature Name:	Dryland Forest
Description:	Forest types consisting of mixed natural vegetation composition found inland from an elevation of 0 meter above sea level.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Dryland Forest Type (FTD)
Feature Code:	<b>VB1010</b>
Feature Name:	Sub Alpine Forest
Description:	Forests occurring over 3500 meters above sea level. Occuring only on Mount Kinabalu in Sabah.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB1020</b>
Feature Name:	Upper Montane Forest
Description:	A forest type normally dominated by tree shrubs of the Ericaceae family and generally occurring from 1,500 meters above sea level. Also known as Montane Ericaceous Forest. Note: In Sabah, this forest type occurs at elevation between 2,500 to 3,500 meters above sea level. The elevation above sea level where this forest changes to montane forest differs from one mountain to another. The recognizable altitudinal zonation in Peninsular Malaysia is obscured in Sabah and Sarawak..
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB1030</b>
Feature Name:	Lower Montane Forest
Description:	A forest type normally dominated by tree shrubs of the Fagaceae, Myrtaceae and Lauraceae families and generally occurring 1,200 to 1,500 meters above sea level. Also known as Montane Oak Forest. Note: In Sabah, this forest type occurs at elevation between 1,000 to 2,500 meters above sea level. The elevation above sea level where this forest changes to montane forest differs from one mountain to another. The recognizable altitudinal zonation in Peninsula Malaysia is obscured in Sabah and Sarawak.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code:	<b>VB1040</b>
Feature Name:	Upper Hill Dipterocarp Forest
Description:	A forest type normally dominated by the indigenous Dipterocarpaceae family of predominant species such as Shorea platyclados (Meranti Bukit) occurring generally between about 800 – 1,300 meters above sea level.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB1050</b>
Feature Name:	Hill Dipterocarp Forest
Description:	A forest type normally dominated by the indigenous Dipterocarpaceae family of predominant species such as Shorea curtisii (Meranti Seraya) occurring generally between about 300 – 800 meter above sea level. Note: In Sabah, it is classified as Upland Dipterocarp Forest occurring at 500 to 1000 meter above sea level.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB1060</b>
Feature Name:	Lowland Dipterocarp Forest
Description:	A forest type normally dominated by the indigenous Dipterocarpaceae family predominant genus/genera such as Dipterocarpus (Keruing) and Shorea (Meranti) occurring generally between about 0 – 300 meter above sea level.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Status (FST), Forest Species Name (FSN),
Feature Code:	<b>VB1070</b>
Feature Name:	Heath Forest (Kerangas)
Description:	A forest type that develops mainly over coarse siliceous deposits which give rise to podzolic soils. It is dominated by dense, small and low canopy pole trees.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB1080</b>
Feature Name:	Limestone Forest
Description:	A forest type, mostly small tree species and scrubs, found on limestone rock, hills and surroundings.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB1090</b>
Feature Name:	Quartz Forest
Description:	A forest type, mostly scrubs found on quartz ridges and surroundings.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code: **VB1100**  
Feature Name: Beach Forest  
Description: A forest type found on coastal sandy plain areas.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code: **VB1110**  
Feature Name: Coastal Hill Forest  
Description: A forest type found on hills and cliffs of seacoast of islands.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code: **VB1120**  
Feature Name: Ultramafic Forest  
Description: A rare forest type found in areas with dark-coloured soil that contains a high level of heavy metal compounds (for example, nickel, chromium, iron and magnesium).The structure of an ultramafic forest depends on its elevation (i.e. height above sea level).In Sabah, protected ultramafic forests can be found on Mt. Kinabalu, Mt. Tawai near Telupid, and Mt. Silam and Mt. Danum near Lahad Datu (on the East Coast).  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code: **VB2000**  
Feature Name: Wetland Forest  
Description: A forest type characterized by the presence of natural vegetation where soil is at least periodically saturated or covered by water.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN),

Feature Code: **VB2010**  
Feature Name: Mangrove Forest  
Description: A forest type that is salt tolerant and found on coastal or estuarine areas with muddy low-oxygen soil.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code: **VB2020**  
Feature Name: Peat Swamp Forest  
Description: A forest type occurring in waterlogged, nutrient poor, anaerobic and acidic peat soils.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)

Feature Code:	<b>VB2030</b>
Feature Name:	Freshwater Swamp Forest
Description:	A forest type occurring along lower reaches of rivers and around freshwater lakes.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Status (FST), Forest Species Name (FSN),
Feature Code:	<b>VB2040</b>
Feature Name:	Riparian Forest
Description:	A forest type found on riverbanks and low-lying areas beyond the banks that are liable to flooding.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Forest Status (FST)
Feature Code:	<b>VB2050</b>
Feature Name:	Nipah
Description:	An area dominated by Nipah ( <i>Nypa fruticans</i> ), normally found along riverbanks, especially in estuarine habitats.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH),
Feature Code:	<b>VB3000</b>
Feature Name:	Planted Forest
Description:	An area planted with <b>exotic or/and indigenous forest</b> tree species and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Planted Forest Type ( <del>PFT</del> ) (FPF)
Feature Code:	<b>VB3010</b>
Feature Name:	Acacia
Description:	An area planted with acacia trees and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Year Planted (VYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3020</b>
Feature Name:	Hevea
Description:	An area planted with rubber trees ( <i>Hevea brasiliensis</i> ) of the timber latex clone and managed as forest plantation..
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (VYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3030</b>
Feature Name:	Teak
Description:	An area planted with teak trees ( <i>Tectona grandis</i> ) and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)

Feature Code:	<b>VB3040</b>
Feature Name:	Sentang
Description:	An area planted with Sentang trees ( <i>Azadirachta excelsa</i> ) and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3050</b>
Feature Name:	Pine
Description:	An area planted with pine trees ( <i>Pinus</i> spp.) and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3060</b>
Feature Name:	Eucalyptus
Description:	An area planted with Eucalyptus ( <i>Eucalyptus</i> spp.) and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3070</b>
Feature Name:	Kelampayan
Description:	An area planted with Kelampayan ( <i>Anthocephalus cadamba</i> ) and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3080</b>
Feature Name:	Karas
Description:	An area planted with Karas ( <i>Aquilaria</i> spp) and managed as forest plantation for its agarwood (gaharu).
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3090</b>
Feature Name:	Mixed
Description:	An area planted with mixed tree species and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)
Feature Code:	<b>VB3100</b>
Feature Name:	Others
Description:	An An area planted with other tree species and managed as forest plantation.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Forest Species Name (FSN), Year Planted (FYP), Forest Year Treated (FYT), Forest Year Harvested (FYH)

## VC – Miscellaneous

Feature Code:	<b>VC0000</b>
Feature Name:	Miscellaneous Vegetation
Description:	Various plant unlisted in agriculture category or forestry
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>VC1010</b>
Feature Name:	Bamboo
Description:	An area dominated by bamboo. Bamboo is a tribe of flowering perennial evergreen plants in the grass family Poaceae, subfamily Bambusoideae, tribe Bambuseae. There are parts of the bamboo plant can be taken for food. Bamboo shoot often taken and in ensiled / orange and made of materials so delicious cuisine. Bamboos are of notable economic and cultural significance in South Asia, Southeast Asia and East Asia, being used for building materials, as a food source, and as a versatile raw product.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>VC1020</b>
Feature Name:	Screw Pine (Mengkuang)
Description:	An area grown with plants of the screw pine. Screw pine is a stilt - rooted woody plant with long 'cane-like' leaves which grows in some coastal areas. The leaves are harvested, boiled green then dried in sun prior to processing. The major products are small square souvenir baskets with cover which are sold to tourist and locals; hats, bags, floor etc
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH)
Feature Code:	<b>VC1030</b>
Feature Name:	Herbs
Description:	An area planted primarily with herbs. Generally, herbs are any plant used for flavoring, food, medicine, or perfume. Herbs have a variety of uses including culinary, medicinal, and in some cases spiritual usage.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VC1040</b>
Feature Name:	Ornamental Plant
Description:	An area planted primarily for flowers, foliage & landscape plant
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),
Feature Code:	<b>VC1050</b>
Feature Name:	Jatropha ( <i>Jatropha curcas</i> )
Description:	An area planted by Jatropha trees (Jarak). The seeds are used for biofuel.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VC1060**  
Name: Kenaf (*Hibiscus cannabinus*)  
Description: An area planted primarily with kenaf plants which is cultivated for its fibre  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VC1070**  
Feature Name: Fibre Crops  
Description: An area planted primarily with fibre crops. Fibre crops are field crops grown for their fibre, which are traditionally used to make paper, cloth, or rope. Fibre crops are generally harvestable after a single growing season.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH), Vegetation Year Planted (VYP), Scientific Name (SCN), Vegetation Variety (VVY), Vegetation Status (VGS), Yield Production (VEP), Label (LBL),

Feature Code: **VC1080**  
Feature Name: Agroforestry  
Description: An area planted with forest trees, agricultural crops and/or with livestock.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH),

Feature Code: **VC1090**  
Feature Name: Scrub/shrub  
Description: An area covered by mixed shrub/scrub vegetation.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **VC1100**  
Feature Name: Riung  
Description: An area covered by Riung (*Saccharum arundinaceum*)..  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **VC1110**  
Feature Name: Grass  
Description: An area dominated by grass either natural (alang, wild grass) or planted (turf grass)  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **VC1120**  
Feature Name: Barren Land  
Description: An area occurring naturally without vegetation or other cover.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

Feature Code: **VC1130**  
Feature Name: Cleared Land  
Description: An area cleared of vegetation.  
Feature Class: Polygon  
Possible Attribute: Name (NAM), Area Measured (h) (ARH)

## X - SPECIAL USE (Dataset-specific)

### XA - Terrain Analysis Dataset (Pinda ke RA – Hypsography)

Feature Code:	<b>XA0010</b>
Feature Name:	Disturbed Soil
Description:	An area that has been so disturbed by human activity that no single soil type can be accurately identified. These areas may include built-up areas, strip mines, landfills, railroad yards, etc.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)
Feature Code:	<b>XA0020</b>
Feature Name:	Slope Polygon
Description:	An area enclosing a group of slope values falling within a set range.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM), Route Number (RTN), Length (LEN), Slope Designation (SLD), Type of Berm (TBE), Nos of Berm (NBE)
Feature Code:	<b>XA0030</b>
Feature Name:	Aspect Polygon
Description:	An area enclosing a group of aspect values falling within a set range.
Feature Class:	Polygon
Possible Attribute:	Name (NAM), Area Measured (m <sup>2</sup> ) (ARM)

### XB - Meteorological Dataset

Feature Code:	<b>XB0010</b>
Feature Name:	<del>Temperature Isoline</del> Isotherm
Description:	<del>A line of the same temperature values.</del> A contour that connect points of equal temperature
Feature Class:	Line
Possible Attribute:	Name (NAM), ISO Meteorological Amount Measured (IAM)
Feature Code:	<b>XB0011</b>
Feature Name:	Max Isotherm
Description:	A contour that connect points of equal maximum temperature
Feature Class:	Line
Possible Attribute:	ISO Meteorological Amount Measured (IAM)
Feature Code:	<b>XB0012</b>
Feature Name:	Min Isotherm
Description:	A contour that connect points of equal minimum temperature
Feature Class:	Line
Possible Attribute:	ISO Meteorological Amount Measured (IAM)
Feature Code:	<b>XB0013</b>
Feature Name:	Mean Isotherm
Description:	A contour that connect points of equal mean temperature
Feature Class:	Line
Possible Attribute:	ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0020**  
Feature Name: ~~Wind Speed Isoline~~ **Isotach**  
Description: ~~A line of the same wind speed values.~~ **A contour that connect points of equal wind speed values.**  
Feature Class: Line  
Possible Attribute: ~~Name (NAM),~~ **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0021**  
Feature Name: **Gust Isotach**  
Description: **A contour that connect points of equal wind gust values.**  
Feature Class: Line  
Possible Attribute: **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0022**  
Feature Name: **Mean Isotach**  
Description: **A contour that connect points of equal mean wind speed values.**  
Feature Class: Line  
Possible Attribute: **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0030**  
Feature Name: **Relative Humidity Isoline**  
Description: ~~A line of the same humidity values.~~ **A contour that connect points of equal mean relative humidity values**  
Feature Class: Line  
Possible Attribute: ~~Name (NAM),~~ **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0031**  
Feature Name: **Mean Relative Humidity Isoline**  
Description: **A contour that connect points of equal mean relative humidity values.**  
Feature Class: Line  
Possible Attribute: **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0040**  
Feature Name: **Evaporation Isoline**  
Description: ~~A line of the same evaporation values.~~ **A contour that connect points of equal evaporation values.**  
Feature Class: Line  
Possible Attribute: ~~Name (NAM),~~ **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0041**  
Feature Name: **Mean Evaporation Isoline**  
Description: **A contour that connect points of equal mean evaporation values..**  
Feature Class: Line  
Possible Attribute: **ISO Meteorological Amount Measured (IAM)**

Feature Code: **XB0050**  
Feature Name: ~~Total Rainfall Isoline~~ Isohyet  
Description: ~~A line of the same total rainfall values.~~ A contour that connect points of equal total rainfall values  
Feature Class: Line  
Possible Attribute: ~~Name (NAM),~~ ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0051**  
Feature Name: Daily Isohyet  
Description: A contour that connect points of equal daily total rainfall values..  
Feature Class: Line  
Possible Attribute: ISO Amount Measured (IAM),

Feature Code: **XB0052**  
Feature Name: Monthly Isohyet  
Description: A contour that connect points of equal monthly total rainfall values..  
Feature Class: Line  
Possible Attribute: ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0060**  
Feature Name: Isobar  
Description: A contour that connect points of equal pressure values..  
Feature Class: Line  
Possible Attribute: ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0061**  
Feature Name: MSLP Isobar  
Description: A contour that connect points of equal MSLP values..  
Feature Class: Line  
Possible Attribute: ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0070**  
Feature Name: Total Global Solar Radiation  
Description: A contour that connect points of equal total global solar radiation values..  
Feature Class: Line  
Possible Attribute: ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0071**  
Feature Name: Total Global Solar Radiation per Hour  
Description: A contour that connect points of equal total global solar radiation per Hour values.  
Feature Class: Line  
Possible Attribute: ISO Meteorological Amount Measured (IAM)

Feature Code: **XB0072**  
Feature Name: Total Global Solar Radiation per Day  
Description: A contour that connect points of equal total global solar radiation per Day values.  
Feature Class: Line  
Possible Attribute: ISO Meteorological Amount Measured (IAM)

## XC - DATASET-MODELING

Feature Code:	<b>XC0010</b>
Feature Name:	Digital Surface Model
Description:	represents the earth's surface and includes all objects on it.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0020</b>
Feature Name:	Digital Terrain Model
Description:	represents the bare ground surface without any objects like plants and buildings.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0030</b>
Feature Name:	Mosaic
Description:	a compilation of two or more individual photographs that provides a complete photograph of the area involved.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0040</b>
Feature Name:	Orthophoto
Description:	An aerial photograph geometrically corrected (orthorectified) such that the scale is uniform: the photo has the same lack of distortion as a map.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0050</b>
Feature Name:	Orthorectified Satellite image
Description:	a satellite image of the earth's surface that has been corrected to remove geometric distortions caused by terrain.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0060</b>
Feature Name:	Orthorectified RADAR image
Description:	A grayscale RADAR image of the earth's surface that has been corrected to remove geometric distortions caused by terrain.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0070</b>
Feature Name:	Aerial Photograph
Description:	An aerial photograph is a picture of the Earth's surface taken with a specialized camera mounted in an airplane.
Feature Class:	
Possible Attribute:	Name (NAM)
Feature Code:	<b>XC0080</b>
Feature Name:	Contours Generated
Description:	Contours line generated by the interpolation of a Digital Terrain Model
Feature Class:	
Possible Attribute:	Name (NAM)

## Z - GENERAL

### ZA - Control Point

Feature Code:	<b>ZA0010</b>
Feature Name:	Global Positioning System (GPS) Station
Description:	Control points established by GPS survey.
Feature Class:	Point
Possible Attribute:	Name (NAM), Global Position System Active Station (GAS), Monument Station (MOS), Global Position Station System Class (GPC), Z Ellipsoidal (ZEL), Z Orthometric (ZOR), Z Global Positioning System (ZGP), Station Identification Number (IDN), <b>Pillar Status (PIL)</b>
Feature Code:	<b>ZA0020</b>
Feature Name:	Survey Point
Description:	Control points established by survey techniques other than GPS.
Feature Class:	Point
Possible Attribute:	Name (NAM), Survey Point Type (SUT), Z Orthometric (ZOR), Z Global Positioning System (ZGP), Station Identification Number (IDN), <b>Pillar Status (PIL)</b>
Feature Code:	<b>ZA0030</b>
Feature Name:	Laplace Station
Description:	Control points established by astronomical observations.
Feature Class:	Point
Possible Attribute:	Name (NAM), Station Identification Number (IDN), <b>Pillar Status (PIL)</b>
Feature Code:	<b>ZA0040</b>
Feature Name:	Trigonometry Station
Description:	Survey stations established through trigonometric observation in the triangulation network.
Feature Class:	Point
Possible Attribute:	Name (NAM), Trigonometry Station Type (TST), Z Orthometric (ZOR), Z Global Positioning System (ZGP), Station Identification Number (IDN), <b>Pillar Status (PIL)</b>
Feature Code:	<b>ZA0050</b>
Feature Name:	Height Point
Description:	Points with height values.
Feature Class:	Point
Possible Attribute:	Name (NAM), Height Point Type (HPT), Z Orthometric (ZOR), Z Global Positioning System (ZGP), Station Identification Number (IDN), <b>Pillar Status (PIL)</b>
Feature Code:	<b>ZA0060</b>
Feature Name:	Gravity Reference Point
Description:	Control points established using gravimeter and tied to IGNS.
Feature Class:	Point
Possible Attribute:	Name (NAM), Gravity Reference Point (GRP), Z Orthometric (ZOR), Z Global Positioning System (ZGP), Station Identification Number (IDN), <b>Pillar Status (PIL)</b>

Feature Code: **ZA0070**  
 Feature Name: Base Point  
 Description: Control points established at the outer most limit of a country for the purpose of defining its maritime boundaries.  
 Feature Class: Point  
 Possible Attribute: Name (NAM), Station Identification Number (IDN), **Pillar Status (PIL)**

Feature Code: **ZA0080**  
 Feature Name: International Boundary Marker  
 Description: Boundary markers established in a joint survey to demarcate the international boundary between the countries concerned.  
 Feature Class: Point  
 Possible Attribute: Name (NAM), Marker Type (MKT), Z Orthometric (ZOR), **Pillar Status (PIL)**

Feature Code: **ZA0090**  
 Feature Name: State Boundary Marker  
 Description: Boundary markers established to demarcate the boundary between states.  
 Feature Class: Point  
 Possible Attribute: Name (NAM), Marker Type (MKT), Z Orthometric (ZOR), **Pillar Status (PIL)**

### **ZB – Label of Geographical Name**

Feature Code: **ZB0010**  
 Feature Name: Label of Settlement  
 Description: A point to label a settlement such as city, town, pekan or village  
 Feature Class: Point  
 Possible Attribute: Name (NAM), Settlement Type (STE), Capital Status (STS)

Feature Code: **ZB0020**  
 Feature Name: Label of feature  
 Description: A point to label a geographical feature such as sea, straits, gulf, river mouth, beach, cape, hill, mountain, abandoned village, harbour/port, swamp, pit, farm and country name  
 Feature Class: Point  
 Possible Attribute: Name (NAM)

### **ZC – Environmental Control**

Feature Code: **ZC0010**  
 Feature Name: EIA Study Area  
 Description: An area where environmental impact assessment study has been carried out including the natural, social, economic aspects etc  
 Feature Class: Point, polygon  
 Possible Attribute: Name (NAM), Date (DAT), Status (STA), Area Measured (m) (ARM), **EIA Index (EIA)**,

Feature Code: **ZC0020**  
 Feature Name: Environmental Complaint  
 Description: A point to provide quality service through comprehensive environmental protection and to enhance our natural surroundings such as air, water and land  
 Feature Class: Point

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## Annex B (normative)

### Attribute Codes

#### AAE Anomaly Area Element

A set of characters which enables an element(s) to be uniquely identified

AAE	0	Actual Value		
Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

#### ADC Agricultural Drainage Category

Tabulates the size of drain

ADC	1	Main/Primary
ADC	2	Secondary
ADC	3	Collector/ Feeder

#### ADS Agricultural Drainage Structures Purpose

Purpose of structures

ADS	1	Drainage Control
ADS	2	Drainage Crossing
ADS	3	Drainage Control cum Crossing
ADS	4	Drainage Protection

#### ADT Approval Date

Approval date for Planning Permission

ADT	0	Actual Value		
Units	Format	Range	Increment	Maximum Character
Date	yyyy /mm/ dd			

#### AEL Anomaly elevation

Anomaly derived from airborne or ground survey

AEL	1	Ground survey
AEL	2	Airborne survey

**AIA    Airspace Identification Attributes**

A set of characters which enables an individual airspace to be uniquely identified

AIA	0	Actual Value		
Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			12 Characters

**ALN    Air Route Segment Length**

Length of an individual air route segment measured in nautical miles

ALN	0	Actual Value		
Units	Format	Range	Increment	Maximum Character
NM	Short Integer			

**AMT    Armour Type**

Type of materials used as a breakwater

AMT	1	Concrete
AMT	2	Rock
AMT	3	Steel
AMT	4	Wood
AMT	5	Mixed

**ANN    Anomaly Number**

Reference number for anomaly identified

AIA	0	Actual Value		
Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			

**ANP    Animal Type**

Type of animal for livestock

ANP	0	Actual Value		
Units	Format	Range	Increment	Maximum Character
Text String	Text			20 Characters



**AQM Aquifer Material**

Identifies the host materials in an aquifer

AQM	1	Sand
AQM	2	Gravel
AQM	3	Pebble
AQM	4	Alluvial
AQM	5	Peat
AQM	6	Hardrock

**AQP AquacultureType**

Type of aquaculture

AQP 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	Text			20 Characters

**AQT Aquifer Type**

Type of an aquifer

AQT	1	Confined
AQT	2	Semi confined
AQT	3	Unconfined
AQT	4	Semi unconfined

**ARH Area Measure (hectares)**

The area within the delineation of a feature, in hectares

ARH 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Hectares	Floating			

**ARK Area Measure (km<sup>2</sup>)**

The area within the delineation of a feature, in sq. kilometers

ARK 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Sq. Kilometers	Floating			

**ARM Area Measure (m<sup>2</sup>)**

The area within the delineation of a feature, in sq. meters

ARM	0	Actual Value			
Units	Format	Range	Increment	Maximum Character	
Sq. meters	Floating				

**ART Arenaceous Rock Type**

Type of an arenaceous rock

ART	1	Sandstone
ART	2	Quartzose Sandstone

**ARU Airspace Route Usage**

A specified route designed for channeling the flow of a traffic as necessary for the provision of air traffic services

ARU	1	Airway
ARU	2	Air Route
ARU	3	Royal Low Level Corridor
ARU	4	Advisory
ARU	5	Direct
ARU	6	Military
ARU	7	Oceanic
ARU	8	Helicopter Route
ARU	9	Area Navigation
ARU	10	Low Flying Route
ARU	11	Royal Helicopter Route

**ASC Air Space Category**

Category of an air space

ASC	1	Controlled
ASC	2	Uncontrolled
ASC	3	Advisory
ASC	4	Flight Information Region (FIR)
ASC	5	Control Zone (CTR)
ASC	6	Terminal Control Area (TMA)
ASC	7	Air Traffic Zone (ATZ)

**AUL    Airspace Use Limitations**

Airspace where activities must be confined because of their nature and/or where limitations may be imposed upon aircraft operations

AUL	1	Danger Area
AUL	2	Prohibited Area
AUL	3	Restricted Area
AUL	4	Alert Area
AUL	5	Warning Area
AUL	6	Defense Area
AUL	7	Controlled Firing Area
AUL	8	Parachute Drop Zone
AUL	9	Hazard to Aircraft
AUL	10	Gas Venting Station
AUL	11	Air Exercise Area
AUL	12	Bird Sanctuary
AUL	14	Bird Hazard Area
AUL	15	Health Resorts/Medical Establishments
AUL	16	Low Flying Avoidances
AUL	17	Military Operating Area
AUL	18	Non-free Flying Area
AUL	19	Caution Area
AUL	20	Flying Training Area

**AUT    Authority**

Identifies the managing authority of a feature such as road, quarry authorized area, quarry permit area, mineral exploration block, geological mapping area, etc.

AUT    0                   Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			

**AVL    Aviation Light**

Availability of Aviation Light

AVL	1	Yes
AVL	2	No

**BA1    Building Name**

The name of a building

BA1    0                   Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**BA2 Building Number**

The number of a building on a street of an address

BA2 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**BA3 Street Name**

The name of a building

BA3 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**BA4 Post Code**

Post code of an address

BA4 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			5 Characters

**BA5 State Name**

The name of a state of an address

BA5 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**BAT Bridge Abutment Type**

Type of end supports of a bridge

BAT	1	Bank Seat
BAT	2	Retaining Wall
BAT	3	Pile Bents
BAT	4	R.E. Walls
BAT	5	Multi-Columns
BAT	6	Hammer Head

**BBS Billboard Structure**

Type of Billboard Structure

BBS	1	Unipole - Maximum area of 223mp, clearance height of pole 8m (minimum)
BBS	2	Twinpole
BBS	3	Minipole
BBS	4	Free Standing – Rectangular in shape (Max. width of 15m x Max. height of 5m)
BBS	5	Parapet – Maximum height of 2m
BBS	6	Container Display
BBS	7	i-Board
BBS	8	Light Box

**BBZ BillBoard Size**

A measuring size of billboard

BBZ 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**BCR Bridge Crossing**

Identifies the feature the bridge crosses

BCR	1	Road
BCR	2	Railway
BCR	3	River

**BDS Boundary Status**

Status of Boundary

BDS	1	Finalised
BDS	2	Unfinalised

**BDT Boundary Type**

Type of a boundary

BDT	1	Land Boundary
BDT	2	Maritime Boundary

**BET Beach Type**

Classification of an unconsolidated material found at a beach

BET	1	Pebbles
BET	2	Sand
BET	3	Mud

**BJT Bedding and Jointing Type**

Type of a bedding or jointing

BJT	1	Inclined
BJT	2	Horizontal
BJT	3	Vertical

**BKT Bridge Deck Type**

Type of slab and beams or girders used to form the flooring system of a bridge

BKT	1	Reinforced Concrete Beam
BKT	2	Pre-cast Reinforced Concrete Beam
BKT	3	Pre-Stressed Concrete Beam
BKT	4	Pre-Stressed Inverted Tee Beam
BKT	5	Reinforced Concrete Slab
BKT	6	Voided Concrete Slab
BKT	7	Concrete Box Girder
BKT	8	Steel Beam and Concrete Slab
BKT	9	Steel Beam Encased and Slab
BKT	10	Steel Buckle Plate
BKT	11	Steel Trough
BKT	12	Timber Deck
BKT	13	Riverbed slab

**BMA Bus Stop Material Type**

Type of the material

BMA	1	Stainless Steel
BMA	2	Glasses
BMA	3	Concrete
BMA	4	Iron
BMA	5	Aluminium
BMA	999	Others

**BMT Bridge Construction Material Type**

Type of construction materials used in the construction of a bridge

BMT	1	Concrete
BMT	2	Steel
BMT	3	Masonry
BMT	4	Timber

**BRS Bridge Swingability**

Identifies whether or not a bridge can be swung in a horizontal or vertical plane for safe passage of tall vessels

BRS	1	Bridge can be swung
BRS	2	Bridge cannot be swung

**BRU Bridge Usage**  
Use of bridge

BRU	1	For railway crossing
BRU	2	For road crossing
BRU	3	For railway and road crossing
BRU	4	Pedestrian bridge

**BST Bridge Structural System Type**

Type of structural system used the construction of a bridge

BST	1	Simply Supported
BST	2	Continuous
BST	3	Cantilever
BST	4	Frame
BST	5	Arches
BST	6	Trusses
BST	7	Suspension
BST	8	Cabled-Stayed
BST	9	Culverts

**BUP Buoy Pattern Category**

The color breakdown of pattern of a buoy

BUP	1	Checkered
BUP	2	Diagonal Bands
BUP	3	Single Color
BUP	4	Horizontal Bands
BUP	5	Vertical Stripes
BUP	6	Squared
BUP	7	Horizontal bands from top to bottom

**BUT Buoy Type**

Type of a buoy

BUT	1	Conical
BUT	2	Can
BUT	3	Spherical
BUT	4	Pillar
BUT	5	Spar

**BWM Breakwater Material**

Type of materials used as a breakwater

BWM	1	Concrete
BWM	2	Rock
BWM	3	Steel
BWM	4	Wood

**BWT Breakwater Type**

Type of a breakwater

BWT	1	Attached
BWT	2	Detached

**CAF Canal Function**

Function of a canal

CAF	1	Conveyance
CAF	2	Regulating
CAF	3	Protective
CAF	4	Water Measuring
CAF	5	Energy Dissipators
CAF	6	Transportation

**CAT Canal Type**

Type of a canal

CAT	1	Earth
CAT	2	Concrete

**CBT Commercial Building Type**

Type of buildings used for commercial related activities

CBT	1	Detached
CBT	2	Semi Detached
CBT	3	Terrace/Link
CBT	4	Multi Storey
CBT	5	Complex
CBT	6	Lock-up

**CBU Commercial Building Usage**

Type of usage of a commercial building

CBU	1	Apartel
CBU	2	Bank
CBU	3	Cineplex
CBU	4	Entertainment Center
CBU	5	Hotel
CBU	6	Market
CBU	7	Office
CBU	8	Restaurant
CBU	9	Retail
CBU	10	Shop House
CBU	11	Shop Office
CBU	12	Stall
CBU	13	Supermarket/Hypermarket
CBU	14	Shopping Arcade/Stall
CBU	15	Petrol Station
CBU	16	Parking

**CCT Cable Car Type**

Type of a cable car

CCT	1	Track
CCT	2	Suspended

**CEC Soil Cation Exchange Capacity**

The cation exchange capacity of a soil is a measure of the quantity of such cations that can be adsorbed or held by a soil. The clay and humus content of a soil determine its exchange capacity, since these are the only two soil components with a negative charge or Cation exchange capacity (CEC) is a measure of the number of adsorption sites in a soil and is an important indicator of the soil's ability to retain and supply cations for plant use.

CEC	1	Very low	(< 5 cmol(+) per kg soil)
CEC	2	Low	(5 -10 cmol(+) per kg soil)
CEC	3	Moderate	(10 – 20 cmol(+) per kg soil)
CEC	4	High	(> 20 cmol(+) per kg soil)

**CES Coastal Erosion Status**

Status of a coastal erosion

CES	1	Requires immediate protection works
CES	2	Requires protection works in 5 to 10 years time
CES	3	No protection works required

**CLI Contour Line Index**

Identifies whether or not a contour line is an index line

CLI	1	Yes
CLI	2	No

**CLT Contour Line Type**

Type of line for a contour line

CLT	1	Firmline
CLT	2	Formline

**CLV Contour Line Value**

Value of a contour line

CLV	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Meters	Short Integer			

**COL Collector**

Name of a sampling collector

COL 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**COR Rock**

Category of Rock

COR	1	Stone
COR	2	Gravel
COR	3	Pebbles
COR	4	Coral
COR	5	Boulder

**COP Category of Pile**

Category of Pile

COP 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**COT Coast Type**

Type of the edge margin of land next to the sea

COT	1	Cliff
COT	2	Steep
COT	3	Flat
COT	4	Rocky

**CPV Capacity Value**

The capacity value of passenger car per unit (PCU) during design stage.

CPV 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Pcu/hr	Real Number			24 Characters

**CRA Restricted Area**

Category of Restricted Area

- CRA 1 Anchoring
- CRA 2 Fishing
- CRA 3 Dredging
- CRA 4 No Entry Area

**CRM Crop Mix**

Identifies the mix of crops in an area

- CRM 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**CST Construction Suitability Class Type**

Type of construction suitability classes

- CST 1 Class I
- CST 2 Class II
- CST 3 Class III
- CST 4 Class IV

**CTM Camera Type**

Type of camera

- CTM 1 Surveillance
- CTM 2 Enforcement

**CTS Closed Circuit Television Support**

Type of Closed Circuit Television Support

- CTS 1 Owned Pole
- CTS 2 Sharing with street light pole
- CTS 3 Sharing with gantry signboard/ VMS

**CTU Closed Circuit Television Usage**

Type of Closed Circuit Television Usage

- CTU 1 Public security/general surveillance
- CTU 2 Traffic Observation
- CTU 3 Traffic Data Collection
- CTU 4 Automatic Number Plate Recognition (ANPR)

**CTV Closed Circuit Television Type**

Type of Closed Circuit Television

- CTV 1 Telephoto Camera
- CTV 2 Dome Camera
- CTV 3 Fixed Camera

**CUS Custodian**

The individual, government or organisation which is the custodian of the structures or facilities.

- CUS 1 Federal Government Department
- CUS 2 State Government Agency
- CUS 3 Local Authority
- CUS 4 Cooperative
- CUS 5 Private

**CUT Commercial and Services Landuse Type**

Type of a commercial and services landuse zone

- CUT 1 Wholesale
- CUT 2 Retail
- CUT 3 Services
- CUT 4 Others

**CWL Water Level**

Category of Water Level

- CWL 1 Partly submerged at high water
- CWL 2 Always dry
- CWL 3 Always Under Water
- CWL 4 Awash

**CWT Carriageway Type**

Type of a carriageway

- CWT 1 Single - without divider
- CWT 2 Dual - with divider

**DAE Date of an event/maintenance End**

Identifies the end date of an event/maintenance

- DAE 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Date	yyyy /mm/ dd			

**DAS**    **Date of an event/maintenance Start**

Identifies the starting date of an event/maintenance

DAS    0    Actual Value

Units	Format	Range	Increment	Maximum Character
Date	yyyy /mm/ dd			

**DAT**    **Date**

Identifies the date of an event

DAT    0    Actual Value

Units	Format	Range	Increment	Maximum Character
Date	yyyy /mm/ dd			

**DBT**    **Display Board**

Type of Display Board

DBT    1    Message Display Board

DBT    2    Message Display Board and Pictogram Display Board

**DEV**    **Developer**

The name of the developer

DEV    0    Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			50 Characters

**DIP**    **Dip**

Angle of slope measured from a horizontal plane

DIP    0    Actual Value

Units	Format	Range	Increment	Maximum Character
Degree	Floating			

**DIR**     **Direction**  
Direction of traffic flow

DIR    1    North  
DIR    2    South  
DIR    3    West  
DIR    4    East

**DIS**     **Discharge**

The release or extraction of water from an aquifer

DIS    I     Actual Value

Units	Format	Range	Increment	Maximum Character
m3/hour	Integer			

**DMS**     **Dam Structures**

The various types of structure constructed within the dam area

DMS    1     Spillway  
DMS    2     Tunnel  
DMS    3     Outlet  
DMS    4     Saddle Dam

**DMT**     **Dam Type**

Main materials used for the construction of a dam

DMT    1     Earth  
DMT    2     Rockfill  
DMT    3     Concrete

**DMU**     **Dam Usage**

Function or usage of a dam

DMU    1     Irrigation  
DMU    2     Water Supply  
DMU    3     Electricity  
DMU    4     Flood Mitigation  
DMU    5     Multi Usage

**DPT**     **Depth**

Vertical distance measured downward

DPT    0     Actual Value

Units	Format	Range	Increment	Maximum Character
Meters	Floating			

**DRC Drain Category**

Category of a drain

DRC	1	Main
DRC	2	Secondary
DRC	3	Tertiary
DRC	4	Roadside

**DRG Drainage Gate**

Category of drainage gate

DRG 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			20 Characters

**DRM Drill Method**

The method of making inclined or vertical holes for logging and sample collection

DRM	1	Augering
DRM	2	Jetting
DRM	3	Drilling

**DRS Drain Structures**

Type of Structures

DRS	1	Outfall
DRS	2	Manhole
DRS	3	Traps/Screens
DRS	4	Culverts
DRS	5	Control Gate

**DRU Drain Usage**

Function of a drain

DRU	1	Flood Mitigation
DRU	2	Solid Waste Disposal
DRU	3	Effluent Quality Control

**DRV Drain Conveyance**

A conduit or channel for conveying surplus water away

DRV	1	Surface
DRV	2	Subsurface

**DS1 Distance\_1**

Distance value display on kilometre post

DS1 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Alphanumeric	1 to 10			24 Characters

**DS2 Distance\_2**

Distance value display on kilometre post

DS2 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Alphanumeric	1 to 10			24 Characters

**DSC Slope Drain Category**

Category of slope drain

DSC	1	Toe Drain
DSC	2	Berm Drain
DSC	3	Inceptor Drain
DSC	4	Bench Drain

**EDB Educational Boarding Facilities**

Identifies whether an educational set up has a full or semi boarding facility

EDB	1	Full Boarding
EDB	2	Semi Boarding

**EDC Educational Category**

Category of an educational institution

EDC	1	Government
EDC	2	Private

**EDL Educational Level**

The level of an educational institution

EDL	1	Pre School
EDL	2	Primary
EDL	3	Secondary
EDL	4	College
EDL	5	University College
EDL	6	University

**EDS Educational Stream**

The stream of an educational institution

EDS	1	Technical
EDS	2	Vocational
EDS	3	Religious
EDS	4	Science
EDS	5	Military College
EDS	6	Special/Spastic
EDS	7	National
EDS	8	Chinese
EDS	9	Tamil
EDS	10	International

**EDT Educational Building Type**

Type of an educational building

EDT	1	Detached
EDT	2	Semi Detached
EDT	3	Terrace/Link
EDT	4	Multi Storey
EDT	5	Complex

**EHP Exploration Hole Purpose**

Identifies the purpose of an exploration hole

EHP	1	Downhole logging
EHP	2	Sampling

**EIA EIA Index**

Number of EIA index

EIA	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String				24 Characters

**EMP Embankment Purpose**

Identifies the purpose of the embankment

EMP	1	Flood
EMP	2	Salt Water Intrusion
EMP	3	Road
EMP	4	Railway

**EMT Earth Material Type**

Type of clay and sand extracted

EMT	100	Clay
EMT	110	Ball clay
EMT	120	Marine clay
EMT	130	Montmorillonite
EMT	140	Kaolin
EMT	200	Shale
EMT	300	Sand
EMT	310	Construction sand
EMT	320	Silica sand
EMT	330	Feldspathic sand

**END Environment of Deposition**

Type of environment of deposition

END	100	Continental
END	101	Alluvial
END	102	Aeolian (Desert)
END	103	Fluvial (River)
END	104	Lacustrine (Lake)
END	105	Glacial
END	200	Transitional
END	201	Deltaic
END	202	Estuarine (Tidal)
END	203	Lagoonal
END	204	Beach
END	300	Marine
END	301	Continental shelf
END	302	Continental slope and rise
END	303	Abyssal plain
END	304	Reef

**EQT Environmental Quality Type**

Type of environmental quality

EQT	1	Air
EQT	2	Water
EQT	3	Land
EQT	4	Industrial
EQT	999	Others

**EST Erosion Type**

Type of an erosion

EST	1	Sheet
EST	2	Rill
EST	3	Gully

**ETC Electronic Toll Collection**

Type of ETC

ETC 1 Touch N Go  
ETC 2 Smart Tag  
ETC 3 Mixed mode  
ETC 999 Others

**ETN Emergency Telephone Network**

Type of emergency telephone network

ETN 1 Fibre Optic  
ETN 2 Wireless (GSM)  
ETN 3 CAT6 Cable

**ETS Emergency Telephone Structure**

Type of Emergency Telephone Structure

ETS 1 Solar Power System  
ETS 2 Electric Power System

**FAO FAO-Unesco Legend**

FAO Unesco Legend

FAO 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text	ASCII			24 Characters

**FEM Fence Material**

FEM 1 Concrete  
FEM 2 Steel  
FEM 3 Rock  
FEM 4 Wood  
FEM 999 Others

**FET Fence Type**

Type of fence used to surround a piece of land

FET 1 Electrified  
FET 2 Non Electrified

**FLT Folding Type**

Type of a folding

FLT	1	Anticline
FLT	2	Syncline
FLT	3	Overtured
FLT	4	Recumbent
FLT	5	Boxfold

**FNO Field Number**

Non unique reference number of a feature, usually assigned to an area or a project

FNO 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**FOH Fossil Habitat**

Reflect the living environment of a fossil

FOH	1	Marine
FOH	2	Brackish water
FOH	3	Fresh water
FOH	4	Continental

**FOP Fold Plunging Angle**

Angle of plunge with respect to horizontal plane

FOP I Actual Value

Units	Format	Range	Increment	Maximum Character
Degree	Integer			

**FOS Fossils**

Assemblage of fossils found in a lithological unit

FOS 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			80 Characters

**FOT Fossil Type**

Type of a fossil

FOT	1	Fauna
FOT	2	Flora
FOT	3	Trace
FOT	4	Fossil mixed

**FOX Fold Axis Direction**

The direction of fold axis with respect to north in clockwise direction

FOS | Actual Value

Units	Format	Range	Increment	Maximum Character
Degree	Floating-Integer			

**FRT Forest Landuse Type**

Type of a forest landuse zone

FRT	1	Permanent Land Forest Reserve
FRT	2	State Land Forest Reserve
FRT	3	Protected Land Forest Area
FRT	4	Permanent <i>Bencah</i> Forest Reserve
FRT	5	State <i>Bencah</i> Forest Reserve
FRT	6	Protected <i>Bencah</i> Forest Area
FRT	7	Cleared Forest

**FSN Forest Species Name**

Name of the species

FSN 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Text			24 Characters

**FST Forest Status**

Human or natural intervention status of the forested area

FST	1	Virgin and undisturbed
FST	2	Primary, logged $\geq 30$ years
FST	3	Secondary, logged $< 30$ years
FST	4	Poor due to activities other than logging.

**FTD Dryland Forest Type**

Type of dryland forest

FTD 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Text			24 Characters

**FTT Fishing Trap Type**

A fence or enclosure set in water to catch fish

- FTT 1 Kelong
- FTT 2 Stackers

**FTY Faulting Type**

Type of a faulting

- FTY 1 Normal
- FTY 2 ~~Wrench~~ Reverse
- FTY 3 Strike slip
- FTY 4 Thrust
- FTY 5 Transcurrent with displacement

**FYH Forest Year Harvested**

Identifies the year of forest harvested

- FYH 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Year	yyyy			

**FYT Forest Year Treated**

Identifies the year of forest treated

- FYT 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Year	yyyy			

**GAC Geological Accuracy**

Degree of accuracy of a geological boundary or feature

- GAC 1 Observed
- GAC 2 Defined
- GAC 3 Approximate
- GAC 4 Inferred

**GAS Global Position System Active Station (MASS)**

Primary class Global Positioning System reference stations tied to the International GPS framework whose data can be downloaded through JUPEM's web site for GPS post-processing

- GAS 1 Active
- GAS 2 Not Active

**GAM / Minimum / Maximum Geological Age in Period or Epoch  
GAX**

Minimum / Maximum geological age of a feature measured in Period or Epoch  
GAM / GAX 100 RECENT

**CENOZOIC**

GAM / GAX 210 QUATERNARY  
GAM / GAX 211 Holocene  
GAM / GAX 212 Pleistocene  
GAM / GAX 220 TERTIARY  
GAM / GAX 221 Neogene  
GAM / GAX 222 Pliocene  
GAM / GAX 223 Miocene  
GAM / GAX 224 Palaeogene  
GAM / GAX 225 Oligocene  
GAM / GAX 226 Eocene  
GAM / GAX 227 Paleocene

**MESOZOIC**

GAM / GAX 310 CRETACEOUS  
GAM / GAX 311 Late Cretaceous  
GAM / GAX 312 Early Cretaceous  
GAM / GAX 320 JURASSIC  
GAM / GAX 321 Late Jurassic  
GAM / GAX 322 Middle Jurassic  
GAM / GAX 323 Early Jurassic  
GAM / GAX 330 TRIASSIC  
GAM / GAX 331 Late Triassic  
GAM / GAX 332 Middle Triassic  
GAM / GAX 333 Early Triassic

**PALAEOZOIC**

GAM / GAX 410 PERMIAN  
GAM / GAX 411 Lopingian  
GAM / GAX 412 Guadalupian  
GAM / GAX 413 Cisuralian  
GAM / GAX 420 CARBONIFEROUS  
GAM / GAX 421 Pennsylvanian  
GAM / GAX 422 Late Pennsylvanian  
GAM / GAX 423 Middle Pennsylvanian  
GAM / GAX 424 Early Pennsylvanian  
GAM / GAX 425 Mississippian  
GAM / GAX 426 Late Mississippian  
GAM / GAX 427 Middle Mississippian  
GAM / GAX 428 Early Mississippian  
GAM / GAX 430 DEVONIAN  
GAM / GAX 431 Late Devonian  
GAM / GAX 432 Middle Devonian  
GAM / GAX 433 Early Devonian  
GAM / GAX 440 SILURIAN  
GAM / GAX 441 Late Silurian  
GAM / GAX 442 Pridoli  
GAM / GAX 443 Ludlow  
GAM / GAX 444 Early Silurian  
GAM / GAX 445 Wenlock  
GAM / GAX 446 Llandovery  
GAM / GAX 450 ORDOVICIAN

GAM / GAX	451	Late Ordovician
GAM / GAX	452	Middle Ordovician
GAM / GAX	453	Early Ordovician
GAM / GAX	460	CAMBRIAN
GAM / GAX	461	Late Cambrian
GAM / GAX	462	Middle Cambrian
GAM / GAX	463	Early Cambrian

**PROTEROZOIC AND ARCHEAN**

GAM / GAX	510	PRECAMBRIAN
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**GDS Road Guide Sign**

GDS	G.11	Bus Stop (Perhentian Bas )
GDS	G.13	Public Phone (Telefon Awam )
GDS	G.14	Parking Area (Tempat Letak Kenderaan)
GDS	G.15	Health Centre (Pusat Kesihatan)
GDS	G.16	Hospital
GDS	G.17	Petrol Station (Stesen Minyak )
GDS	G.18	Dead End (Jalan Mati)
GDS	G.19	U-Turn Sign (Dibenarkan Berpusing Balik )
GDS	T.1	Road Works (Jalan Sedang Diperbaiki )
GDS	T.8a	Detour Sign (Lencongan)
GDS	Gd.1	Distance To Reach Destination (Papan Tanda Tempat Tuju/Destinas)
GDS	Gd.2	Distance To Reach Destination (Papan Tanda Tempat Tuju/Destinas)
GDS	Gt.1	Intersection Direction Sign (Papan Tanda Tunjuk Arah )
GDS	Gt.2	Signboard Show Direction With Tourism Area Signboard (Papan Tanda Tunjuk Arah Dengan Papan Tanda Kawasan Perlancongan )
GDS	Gt.3	Signboard Show Direction With Signboard Show Direction To Highway (Papan Tanda Tunjuk Arah Dengan Papan Tanda Ke Lebuhraya)
GDS	Gt.4	Signboard Show Circular Path (Papan Tanda Tunjuk Arah Bulatan )
GDS	Gt.5	Directions Signboard On Gantry (Papan Tanda Panduan Arah Di Atas Gantri)
GDS	Gt.6	Direction Signboard On Highways (Papan Tanda Panduan Arah Di Lebuhraya)
GDS	Gx.1	Distance Signboard (for 2 Routes) (Papan Tanda Jarak)
GDS	Gx.2	Distance Signboard (for 1 Route) (Papan Tanda Jarak)

**GDT Gazette Date**

Identifies the date of gazette area

GDT 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Date	yyyy /mm/ dd			

**GEO Geologist(s)**

Name of the person in charge of the work

GEO 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**GEP Geochemical Survey Area Purpose**

Identifies the purpose of a geochemical survey area

GEP	1	Mineral
GEP	2	Environment

**GET Gas Pipeline Type**

Type of a gas pipeline

GET	1	Transmission
GET	2	Distribution

**GFD Geological Feature Description**

Detailed description of geological feature(s)

GFD            A            Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			200 Characters

**GHS Geohazard Status**

Identifies the status of a geohazard

GHS	1	Occurred
GHS	2	Potential

**GHT Geohazard Type**

Type of a geohazard

GHT	1	Landslide
GHT	2	Sinkhole
GHT	3	Settlement Land Subsidence
GHT	4	Rockfall
GHT	5	Erosion

~~**GFN Geological Formation Name**~~ **GLN Geological Lithostratigraphic / Lithodemic Name**

~~Identifies the name of a geological formation~~

Stratigraphic name of a geological lithostratigraphic or lithodemic unit

GLN                            L                            Actual Value

Geographic Name<space>    Uppercase First Letter (Rank/Lithology) for Formal formation/unit such as Semantan Formation or Chuping Limestone

Rank or lithology                Lowercase First Letter (rank/lithology) for informal formation/unit such as Kenny Hill formation or Tiang schist

Units	Format	Range	Increment	Maximum Character
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**GLL \*Geological Lithostratigraphic / Lithodemic Label**

Unique label (Geo-text) of a stratigraphical unit used in geological map

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			12 Characters

**GLR Geological Lithostratigraphic / Lithodemic Rank**

Identifies the rank or stratigraphic level of each defined unit

GLR	400	Complex	Unranked, but equals to Suite or Supersuite (Volcanic & Structure Complexes)
GLR	100	Supergroup	Lithostratigraphic Classes Rank
GLR	200	Group	(Sedimentary & Pyroclastic tuff)
GLR	300	Formation	
GLR	310	Member	
GLR	320	Bed	
GLR	330	Flow	
GLR	340	Informal formation	
GLR	350	Informal member	
GLR	105	Supersuite	Lithodemic Classes Rank
GLR	205	Suite	(Intrusive, Extrusive-Lavaflows & Highly metamorphosed)
GLR	305	Lithodeme	

**GLS Geological Lithostratigraphic / Lithodemic Type**

Identifies type of a stratigraphic unit

GLS	100	Unconsolidated Sediments
GLS	110	Clay
GLS	120	Mud
GLS	130	Silt
GLS	140	Loess

GLS	150	Sand
GLS	160	Gravel
GLS	170	Peat
GLS	180	Volcanic ash
GLS	190	Coral
GLS	195	Shell
GLS	200	Sedimentary Rocks
GLS	210	Argillaceous
GLS	220	Arenaceous
GLS	230	Rudaceous
GLS	240	Calcareous
GLS	250	Siliceous
GLS	260	Carbonaceous
GLS	270	Evaporites

GLS	280	Extrusive – pyroclastic
GLS	300	Metamorphic Rocks
GLS	310	Regional
GLS	320	Contact
GLS	330	Dynamic
GLS	340	Impact
GLS	400	Igneous Rocks
GLS	410	Intrusive
GLS	420	Extrusive igneous - Lavaflows
GLS	430	Metamorphic - Highly metamorphosed

**GLT Groundwater Limit Type**

Type of a groundwater limit

GLT	1	Salt-water interface
GLT	2	Hydraulic isopach

**GMT Gas Marker Type**

Type of Gas Pipe Marker

GMT	1	Type A
GMT	2	Type B
GMT	3	Flush Type

**GNU Gazette References Number**

References number for gazette area

GNU	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			

**GPC Global Position Station System Class**

Class of GPS point accuracy

GPC	1	Primary Global Position System Station
GPC	2	Secondary Global Position System Station
GPC	3	Tertiary Global Position System Station
GPC	4	Base Point Reference Station

**GPM Geophysical Method**

Method of geophysical investigation

GPM	1	Seismic
GPM	2	Surface gravity
GPM	3	Aeromagnetic
GPM	4	Surface magnetic
GPM	5	Electrical
GPM	6	Electromagnetic
GPM	7	Radiometric
GPM	8	Airborne electromagnetic
GPM	9	Airborne Radiometric
GPM	10	Airborne gravity
GPM	11	Downhole logging

**GPT Grass Polutant Type**

GPT	1	Grass Polutant Type 1
GPT	2	Grass Polutant Type 2
GPT	3	Grass Polutant Type 3

**GRC Groundwater Potential Class**

Identifies the class of a groundwater potential

GRC	1	A1
GRC	2	A2
GRC	3	B1
GRC	4	B2

**GRL Grade Location**

Identifies the location of a feature with respect to the ground

GRL	1	On ground
GRL	2	Underground
GRL	3	Elevated
GRL	4	Buried Underwater
GRL	5	Exposed Underwater

**GRP Gravity Reference Point**

Class of a gravity point accuracy

GRP	1	Absolute
GRP	2	First Order
GRP	3	Second Order
GRP	4	Third Order

**MS 1759:2012****GSC Geological Structure Category**

Category of a geological structure

GSC	1	Foliation
GSC	2	Schistosity
GSC	3	Cleavage
GSC	4	Unconformity
GSC	5	Disconformity
GSC	6	Gneissosity

**GSS Land Subsidence Site Type**

Type of land subsidence

GSS 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**GST Groundwater Station Type**

Type of a groundwater station

GST	1	Piezometer
GST	2	Settlement gauge

**GWP Groundwater Potential Class**

Identifies the class of a groundwater potential

GWP	1	Very high
GWP	2	High
GWP	3	Medium
GWP	4	Low

## GWQ Groundwater Quality

Determine the quality of water extracted from a tube well

GWQ	1	Fresh, generally potable
GWQ	2	Slight saline, marginally potable
GWQ	3	Moderately saline, suitable for live stock
GWQ	4	Highly saline, generally unsuitable for live stock

## HEI Height

Height of a feature, in meters

HEI 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meters	Floating			

## HMU Highmast Usage

Type of Highmast Usage

HMU	1	Park/Recreational
HMU	2	Bridge
HMU	3	Stadium
HMU	4	Street/Highway
HMU	5	Airport
HMU	6	Rest and Service Area (RSA)
HMU	7	Toll Plaza
HMU	8	Interchanges
HMU	999	Others

## HNT Hydrogeological Natural Feature Type

Type of a hydrogeological natural feature

HNT	1	Spring
HNT	2	Artesian

## HOR Host Rock

The type of rock in which groundwater accumulated

HOR 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			200 Characters

## **HPT**    **Height Point Type**

Type of point with height measurement

HPT	1	Spot Height (derived by photogrammetric method)
HPT	2	Bench Mark
HPT	3	Ground control point (derived by ground survey method)
HPT	4	Relative height point (derived by photogrammetric method)
HPT	5	Tide Gauge Station (STAPS)

## **HSC**    **Historical Site Category**

Category of a historical site

HSC	1	Archaeological
HSC	2	Fort
HSC	3	Castle
HSC	4	Grave
HSC	5	Well
HSC	6	Cave
HSC	7	Heritage

## **HST**    **Hydrological Station Type**

Type of a hydrological station

HST	1	Rainfall Station
HST	2	Water Level Station
HST	3	Telemetric Station
HST	4	Water Quality Station
HST	5	Stream flow Station
HST	6	Tidal Station
HST	7	Suspended Sediment Station
HST	8	Evaporation Station

## **HZT**    **Hydrogeological Zone Type**

Type of a hydrogeological zone

HZT	1	Well field
HZT	2	Aquifer zone
HZT	3	Protection zone
HZT	4	Vulnerability zone

## **IAM**    **ISO Meteorological Amount Measured (IAM)**

Meteorological amount measured to calculate the value of temperature, rainfall, humidity, wind speed, sunshine hour, solar radiation, evaporation and pressure.

IAM	0	Actual Value
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**ICC Irrigation Canal Category**

Category of canals used for a water distribution

ICC	1	Main
ICC	2	Secondary
ICC	3	Tertiary
ICC	4	Quaternary

**ICS Irrigation Canal Structures Purpose**

Purpose of structures

ICS	1	Conveyance
ICS	2	Regulating
ICS	3	Water Measuring

**IDC Category of Industry**

Category of an industry

IDC	1	Light Industry
IDC	2	Medium Industry
IDC	3	Heavy Industry
IDC	4	Service Industry
IDC	5	Special Industry
IDC	6	Mining and Quarry

**IDL Industry Permit Status**

Identifies whether or not an industry is operating with a permit

IDL	1	With Permit
IDL	2	Without Permit

**IDN Identification Number**

Official number assigned to a feature for identification purpose

IDN	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			12 Characters

**IDP Industrial Planned Category**

Identifies whether or not an industry is planned

IDP	1	Planned
IDP	2	Unplanned

**IDS Industry Tax Status**

Identifies the tax status of an industry

IDS	1	Tax Free
IDS	2	Non Tax Free

**IDT Industrial Building Type**

Type of building used for industrial activities

IDT	1	Detached
IDT	2	Semi Detached
IDT	3	Terrace/Link
IDT	4	Multi Storey
IDT	5	Complex

**IDU Industrial Usage**

Type of uses of an industrial building

IDU	1	Workshop
IDU	2	Warehouse or Godown
IDU	3	Factory
IDU	4	Explosive Magazine

**IGC Irrigation Scheme Category**

Category of irrigation scheme

IGC	1	Granary
IGC	2	Mini Granary
IGC	3	Small Scheme

**IGT Irrigation Scheme Type**

Type of irrigation scheme

IGT	1	Gravity
IGT	2	Pumping
IGT	3	Mixed

**INC Institutional Category**

Category of an institution

INC	1	Government
INC	2	Private

**INT Institutional Building Type**

Identifies the type of building used for institutional purposes

INT	1	Detached
INT	2	Semi Detached
INT	3	Terrace/Link
INT	4	Multi-Storey
INT	5	Complex

**INU Institutional Usage**

Type of institutional uses of a building

INU	1	Airport Terminal
INU	2	Detention Center
INU	3	Foreign Diplomatic Mission
INU	4	Fire Station
INU	5	Government Office
INU	6	Handicapped Home
INU	7	Hospital
INU	8	Hostel
INU	9	Library/Archive
INU	10	Memorial
INU	11	Multi Purpose Hall
INU	12	Army Camp
INU	13	Museum
INU	14	Old Folk Home
INU	15	Parliament House
INU	16	Phone Booth
INU	17	Police Station
INU	18	Police Training Center
INU	19	Police Beat (Pondok Polis)
INU	20	Port
INU	21	Post Office
INU	22	Prison
INU	23	Army Training Center
INU	24	Public Toilet

INU	25	Immigration Detention Center (Pusat Tahanan Imigresen)
INU	26	Railway Station
INU	27	Rehabilitation Center
INU	28	Research Station/Laboratory
INU	29	Science Center
INU	30	State Assembly Hall
INU	31	Taxi Stand
INU	32	Bus Stop
INU	33	Bus Station
INU	34	Town Hall
INU	35	Art Theatre (National Theatre)
INU	36	Welfare Home
INU	37	Youth Club
INU	38	Youth Hostel
INU	39	Community Hall (Balai Raya)
INU	40	Clinic
INU	41	Club House
INU	42	Court
INU	43	Orphanage
INU	44	Palace

**IRC Irrigation Drain Category**

Category of an irrigation drain

IRC	1	Main
IRC	2	Secondary
IRC	3	Field

**IRG Igneous Rock Group**

Identifies the group of igneous rocks based on genesis type

IRG	1	Intrusive type
IRG	2	Extrusive - Lavaflores type
IRG	3	Extrusive - Pyroclastic type

**IRI International Roughness Index**

Measurement of the degree of roughness of a pavement surface adopting REAM guidelines

IRI	1	0 m/km – 5 m/km (true planar surface)
IRI	2	6 m/km – 11 m/km (moderately rough paved roads)
IRI	3	12 m/km – 19 m/km (extremely rough paved roads with potholes & patches)
IRI	4	≥ 20 m/km (extremely rough unpaved roads)

**IRP Igneous Rock Composition Type**

Type of an igneous rock based on origin magmatic composition

IRP	1	Acid
IRP	2	Intermediate
IRP	3	Basic
IRP	4	Ultrabasic

## IRS Irrigation Drain Structures

### Type of Structures

IRS	1	Drainage Control
IRS	2	Drainage Crossing
IRS	3	Drainage Control cum Crossing
IRS	4	Drainage Protection

## IRT Igneous Rock Type

### Type of an igneous rock

IRT	1	Acid
IRT	2	Intermediate
IRT	3	Basic
IRT	4	Ultrabasic

### ACID INTRUSIVE

IRT	401	Granite
IRT	402	Dolerite
IRT	403	Aplite
IRT	404	Pegmatite

### INTERMEDIATE INTRUSIVE

IRT	501	Syenite
IRT	502	Granodiorite
IRT	503	Diorite
IRT	504	Monzonite
IRT	505	Monzodiorite
IRT	506	Tonalite
IRT	507	Adamellite

### BASIC INTRUSIVE

IRT	601	Gabbro
IRT	602	Gabbronorite
IRT	603	Anorthosite
IRT	604	Lamprophyre

### ULTRABASIC INTRUSIVE

IRT	701	Dunite
IRT	702	Lherzolite
IRT	703	Harzburgite
IRT	704	Pyroxenite
IRT	705	Peridotite
IRT	706	Hornblendite

### ACID EXTRUSIVE - FLOW

IRT	101	Rhyolite
IRT	102	Rhyodacite
IRT	103	Ignimbrite

### INTERMEDIATE EXTRUSIVE - FLOW

IRT	201	Andesite
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IRT 202 Dacite  
 IRT 203 Trachyte  
 IRT 204 Latite

**BASIC EXTRUSIVE - FLOW**

IRT 301 Basalt  
 IRT 302 Splite

**EXTRUSIVE - PYROCLASTIC**

IRT 801 Tuff  
 IRT 802 Lapili-stone  
 IRT 803 Agglomerate  
 IRT 804 Volcanic bomb

**GLASSY ACID TO BASIC EXTRUSIVE – FLOW & OTHERS**

IRT 901 Pumice  
 IRT 902 Scoria  
 IRT 903 Obsidian  
 IRT 904 Vitrophyre  
 IRT 905 Volcanic breccias

**ISC Intrusive Structure Composition**

Composition of an intrusive structure

ISC	L	Actual Value			
Units	Format	Range	Increment	Maximum Character	
Text String	ASCII Text			24 Characters	

**IST Intrusive Structure Type**

Type of an intrusive structure

IST 1 Reef  
 IST 2 Dyke  
 IST 3 Sill  
 IST 4 Vein  
 IST 5 Batholith  
 IST 6 Lacolith  
 IST 7 Lopolith  
 IST 8 Phacolith  
 IST 9 Stock  
 IST 10 Diapir

**ITT Interchange Type**

Type of a road interchange

ITT 1 Trumpet

ITT	2	Ramps in one quadrant
ITT	3	Diamond interchange
ITT	4	Partial clover leaf
ITT	5	Full clover leaf

**IUT Irrigation Structure Type**

Structures constructed in an irrigation area to regulate and remove excess water for paddy cultivation

IUT	1	Drainage Control
IUT	2	Drainage Crossing
IUT	3	Drainage Control cum Crossing
IUT	4	Drainage Protection

**JYC Jetty Category**

Category of a jetty

JYC	1	Passenger
JYC	2	Freight
JYC	3	Fishery

**KCT Kampung Coverage Type**

Category of a kampung Coverage Type

KCT	1	Traditional
KCT	2	Fishing
KCT	3	Tersusun
KCT	4	Atas Air
KCT	5	Aboriginal
KCT	6	Group Settlement
KCT	7	New Village
KCT	8	Squatters
KCT	9	Estate

**KMT Kilometer Post/ Marker Type**

Type of a kilometre post/marker

KMT	A	kilometer post/marker assigned by JKR at every 5 kilometres
KMT	B	kilometre post/marker assigned by JKR at every 1 kilometre
KMT	C	kilometre post/marker assigned by LLM at every 100 metres
KMT	D	kilometre post/marker assigned by LLM at every 1 kilometre

**KMU Kilometer Post Usage**

Usage of a kilometer post

KMU 1 Road  
 KMU 2 Railway

**KSK Information Kiosk**

Availability of information Kiosk

KSK 1 Yes  
 KSK 2 No

**LAN Number of Lane**

Number of travel lane on a road surface

LAN 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Lane	Short Integer			24 Characters

**LAU Lay-by Usage**

Usage of a lay-by

LAU 1 Taxi  
 LAU 2 Bus  
 LAU 3 Emergency

**LBL Label**

Label on the item

LBL 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**LBT Landing Base Type**

Type of a landing base for helicopters

LBT 1 On Building  
 LBT 2 On Ground  
 LBT 3 Deck

**LCC Light Characteristic Category**

The sequence, grouping and distinctive character of light

LCC	1	Alternating
LCC	2	Flashing
LCC	3	Long-Flashing
LCC	4	Occulting
LCC	5	Ultra Quick
LCC	6	Quick
LCC	8	Very Quick
LCC	9	Group
LCC	10	Composite Group
LCC	11	Morse Code
LCC	12	Isophase
LCC	13	Lighted
LCC	14	Unlighted
LCC	15	Interrupted
LCC	16	Fixed
LCC	17	Intensified
LCC	18	Directional

**LEN Length**

Value of a contour line

LEN 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meters	Floating			

**LIF Lift Facilities**

Identifies whether or not a building has lift

LIF 1 Has Lift  
LIF 2 Has No Lift

**LIP Lineament Dip Inclination**

Inclination of lineament derived from aerial photographs or remotely sensed data.

LIP 1 Low angle (<30 degrees)  
LIP 2 Moderate angle (30-60 degrees)  
LIP 3 Steep angle (>60 degrees)

**LPT Lamp Pole Type**

LPT 1 Accent Light

LPT	2	Bollard Light
LPT	3	Underwater Light
LPT	4	Floor Uplight
LPT	5	Irideon Light
LPT	6	Spot Light
LPT	7	Flood Light
LPT	8	Uplight
LPT	9	Wall Light
LPT	999	Others

**LPU Lamp Pole Usage**

Type of lamp pole usage

LPU	1	Recreational Park
LPU	2	Sport Complex
LPU	3	Public Area
LPU	4	Residential Area
LPU	5	Commercial Area
LPU	999	Others

**LST Landslide Type**

Type of a landslide

LST	1	Circular
LST	2	Translational
LST	3	Compound
LST	4	Debris flow
LST	5	Mudflow

**LTY Lineament Type**

Type of lineament

LTY	1	Lineament positive
LTY	2	Lineament negative
LTY	3	Scarp

**LUT Land Use Type**

Type of land use activities for development plan, planning control and regulatory.

<b>LUT</b>	<b>TBA 000</b>	<b>Built Up (Tepu Bina)</b>
<b>LUT</b>	<b>TRM 000</b>	<b>Residential (Kediaman)</b>
LUT	TRM 100	Planned Housing (Perumahan Terancang)
LUT	TRM 101	Planned Housing – Strata Housing (Perumahan Terancang – Perumahan Strata)

LUT	TRM 102	Planned Housing – Non-Strata Housing (Perumahan Terancang – Perumahan Bukan Strata)
LUT	TRM 103	Planned Housing – Staff Housing (Perumahan Terancang - Perumahan Kakitangan)
LUT	TRM 104	Planned Housing – Organized village (Perumahan Terancang - Kampung Tersusun)
LUT	TRM 105	Planned Housing - Felda village (Perumahan Terancang – Kampung Felda)
LUT	TRM 106	Planned Housing – New village (Perumahan Terancang – Kampung Baru)
LUT	TRM 107	Planned Housing - Estate Housing (Perumahan Terancang - Perumahan Ladang / Estet)
<b>LUT</b>	<b>TRM 200</b>	<b>Unplanned Housing (Perumahan Tidak Terancang )</b>
LUT	TRM 201	Unplanned Housing – Tradisional village (Perumahan Tidak Terancang – Kampung Tradisi)
LUT	TRM 202	Unplanned Housing – Fisherman village (Perumahan Tidak Terancang - Kampung Nelayan)
LUT	TRM 203	Unplanned Housing – Water village Perumahan Tidak Terancang – Kampung Atas Air)
LUT	TRM 204	Unplanned Housing – Aboriginal village (Perumahan Tidak Terancang - Kampung Orang Asli)
LUT	TRM 205	Unplanned Housing - Squatter village (Perumahan Tidak Terancang - Kampung Setinggan)

<b>LUT</b>	<b>TIN 000</b>	<b>Industry Industri</b>
<b>LUT</b>	<b>TIN 100</b>	<b>Planned Industry (Industri Terancang )</b>
LUT	TIN 101	Planned Industry - Light (Industri Terancang - Ringan)
LUT	TIN 102	Planned Industry - Medium (Industri Terancang – Sederhana)
LUT	TIN 103	Planned Industry - Heavy (Industri Terancang - Berat)
LUT	TIN 104	Planned Industry - Specific (Industri Terancang – Khas)
LUT	TIN 105	Planned Industry – Sevice (Industri Terancang – Perkhidmatan)
LUT	TIN 106	Planned Industry - Cottage /Country (Industri Terancang - Kotej/Desa)
<b>LUT</b>	<b>TIN 200</b>	<b>Unplanned Industry (Industri Tidak Terancang)</b>
LUT	TIN 201	Unplanned Industry - Light (Industri Tidak Terancang – Ringan)
LUT	TIN 202	Unplanned Industry - Medium (Industri Tidak Terancang – Sederhana)
LUT	TIN 203	Unplanned Industry – Heavy (Industri Tidak Terancang - Berat)
LUT	TIN 204	Unplanned Industry - Specific (Industri Tidak Terancang – Khas)
LUT	TIN 205	Unplanned Industry - Sevice (Industri Tidak Terancang – Perkhidmatan)
LUT	TIN 206	Unplanned Industry - Cottage / Country (Industri Tidak Terancang - Kotej/Desa)
LUT	TIN 300	Mine / quarry (Lombong / Kuari)
LUT	TIN 301	Mine / quarry – Active mine (Lombong / Kuari - Perlombongan Aktif)
LUT	TIN 302	Mine / quarry – Active quarry (Lombong / Kuari - Kuari Aktif)
<b>LUT</b>	<b>TPD 000</b>	<b>Commecial and Services (Perniagaan dan Perkhidmatan)</b>
<b>LUT</b>	<b>TPD 100</b>	<b>Planned commercial (Perniagaan Terancang)</b>
LUT	TPD 101	Planned commercial - Shop (Perniagaan Terancang - Perkedaian)
LUT	TPD 102	Planned commercial - Business complex – (Perniagaan Terancang Kompleks Perniagaan)
LUT	TPD 103	Planned commercial - Entertainment Centre (Perniagaan Terancang –Pusat Hiburan)
LUT	TPD 104	Planned commercial - Accommodation building (Perniagaan Terancang – Bangunan Penginapan)
LUT	TPD 105	Planned commercial - Financial Centre

LUT	TPD 106	(Perniagaan Terancang – Pusat Kewangan) Planned commercial - Booth / Bazaar (Perniagaan Terancang –Gerai / Bazar)
LUT	TPD 107	Planned commercial - Market (Perniagaan Terancang – Pasar)
LUT	TPD 108	Planned commercial - Food court (Perniagaan Terancang - Pusat Makanan/Medan Selera)
LUT	TPD 109	Planned commercial - Petrol pam station (Perniagaan Terancang – Stesen Minyak)
LUT	TPD 110	Planned commercial - Private institutions (clinics, hospitals, schools etc) (Perniagaan Terancang - Institusi Swasta (Klinik, Hospital, Sekolah dll)
LUT	TPD 111	Planned commercial - others (Perniagaan Terancang - Lain-lain)
<b>LUT</b>	<b>TPD 200</b>	<b>Unplanned commercial (Perniagaan Tidak Terancang)</b>
LUT	TPD 201	Unplanned commercial - Shop (Perniagaan Tidak Terancang – Perkedaian)
LUT	TPD 202	Unplanned commercial - Business complex (Perniagaan Tidak Terancang – Kompleks Perniagaan)
LUT	TPD 203	Unplanned commercial - Entertainment Centre (Perniagaan Tidak Terancang - Pusat Hiburan)
LUT	TPD 204	Unplanned commercial - Accommodation building (Perniagaan Tidak Terancang - Bangunan Penginapan)
LUT	TPD 205	Unplanned commercial - Financial Centre (Perniagaan Tidak Terancang - Pusat Kewangan)
LUT	TPD 206	Unplanned commercial - Booth / Bazaar (Perniagaan Tidak Terancang - Gerai / Bazar)
LUT	TPD 207	Unplanned commercial - Market (Perniagaan Tidak Terancang - Pasar)
LUT	TPD 208	Unplanned commercial - Food court (Perniagaan Tidak Terancang - Pusat Makanan/Medan Selera)
LUT	TPD 209	Unplanned commercial - Petrol pam station (Perniagaan Tidak Terancang - Stesen Minyak)
LUT	TPD 210	Unplanned commercial - Private institutions (clinics, hospitals, schools etc) (Perniagaan Tidak Terancang - Institusi Swasta (Klinik, Hospital, Sekolah dll)
LUT	TPD 211	Unplanned commercial - others (Perniagaan Tidak Terancang - Lain-lain)
<b>LUT</b>	<b>TIS 000</b>	<b>Institution and Public Amenity (Institusi dan Kemudahan Masyarakat)</b>
<b>LUT</b>	<b>TIS 100</b>	<b>Education (Pendidikan)</b>
LUT	TIS 101	Education - Kindergarten (Pendidikan - Tadika)
LUT	TIS 102	Education – Primary school (Pendidikan - Sekolah Rendah)
LUT	TIS 103	Education – Secondary school (Pendidikan - Sekolah Menengah)
LUT	TIS 104	Education - Religious Schools (Pendidikan - Sekolah Agama)
LUT	TIS 105	Education – Intergrated school (Pendidikan - Sekolah Bersepadu)
LUT	TIS 106	Education - Special Education Schools (Pendidikan - Sekolah Pendidikan Khas)
LUT	TIS 107	Education - College / Institute / Polytechnic (Pendidikan - Kolej/Maktab/Politeknik)
LUT	TIS 108	Education – Higher Education Institute (Pendidikan - Institut Pendidikan Tinggi)
LUT	TIS 109	Education – Research Centre (Pendidikan - Pusat Penyelidikan)
LUT	TIS 110	Education – Training Institute (Pendidikan - Institut Latihan)
LUT	TIS 111	Education - Others (Pendidikan - Lain-lain )
<b>LUT</b>	<b>TIS 200</b>	<b>Health (Kesihatan )</b>
LUT	TIS 201	Health - Rural Clinic (Kesihatan - Klinik Desa)
LUT	TIS 202	Health - Health Clinic (Kesihatan - Klinik Kesihatan)
LUT	TIS 203	Health - Dental Clinic (Kesihatan - Klinik Pergigian)
LUT	TIS 204	Health - Hospital (Kesihatan - Hospital)

LUT	TIS 205	Health - others (Kesihatan - Lain-lain)
<b>LUT</b>	<b>TIS 300</b>	<b>Religious (Keagamaan)</b>
LUT	TIS 301	Religious - Prayers room (Keagamaan - Surau)
LUT	TIS 302	Religious - Mosque (Keagamaan - Masjid)
LUT	TIS 303	Religious - Temple (kuil) (Keagamaan - Kuil)
LUT	TIS 304	Religious - Temple (tokong) (Keagamaan - Tokong)
LUT	TIS 305	Religious - Church (Keagamaan - Gereja)
LUT	TIS 306	Religious - Others (Keagamaan - Lain-lain)
<b>LUT</b>	<b>TIS 400</b>	<b>Cemetery (Perkuburan)</b>
LUT	TIS 401	Cemetery - Moslem (Perkuburan - Islam)
LUT	TIS 402	Cemetery - Sepulcher Chinese / Buddhist (Perkuburan - Jirat Cina/Buddha)
LUT	TIS 403	Cemetery - Christian (Perkuburan - Kristian)
LUT	TIS 404	Cemetery - Hindu / Sikh (Perkuburan - Hindu / Sikh)
LUT	TIS 405	Cemetery - Crematorium (Perkuburan - Krematoria)
LUT	TIS 406	Cemetery - Others (Perkuburan - Lain-lain)
<b>LUT</b>	<b>TIS 500</b>	<b>Security (Keselamatan)</b>
LUT	TIS 501	Security - Police Beat (Keselamatan - Pondok Polis)
LUT	TIS 502	Security - Police Station (Keselamatan - Balai Polis)
LUT	TIS 503	Security - State Police Headquarters / District (Keselamatan - Ibu Pejabat Polis Negeri / Daerah)
LUT	TIS 504	Security - Fire and Rescue Station (Keselamatan - Balai Bomba dan Penyelamat )
LUT	TIS 505	Security - Prison (Keselamatan - Penjara)
LUT	TIS 506	Security - Immigration Detention Centre / Special (Keselamatan – Pusat Tahanan Imigresen / Khas)
LUT	TIS 507	Security - Drug Rehabilitation Centre (Keselamatan - Pusat Serenti Dadah)
LUT	TIS 508	Security - Training Centre for Military / Police / Fire fighter (Keselamatan - Pusat Latihan Tentera / Polis / Bomba)
LUT	TIS 509	Security - Military camp (Keselamatan - Kem Tentera)
LUT	TIS 510	Security - Others (Keselamatan - Lain-lain)
<b>LUT</b>	<b>TIS 600</b>	<b>Welfare Home (Rumah Kebajikan)</b>
LUT	TIS 601	Welfare Home - The Orphanage (Rumah Kebajikan - Rumah Anak Yatim)
LUT	TIS 602	Welfare Home - Elderly home (Rumah Kebajikan - Rumah Warga Emas)
LUT	TIS 603	Welfare Home - Disabilities Persons House / Special (Rumah Kebajikan - Rumah Orang Kurang Upaya / Istimewa)
LUT	TIS 604	Welfare Home - Association / Organization Houses (Rumah Kebajikan - Rumah Persatuan / Pertubuhan)
LUT	TIS 605	Welfare Home - Rehabilitation Centre (Rumah Kebajikan - Pusat Pemulihan Akhlak)
LUT	TIS 606	Welfare Home - Others (Rumah Kebajikan - Lain-lain)
<b>LUT</b>	<b>TIS 700</b>	<b>Use of government / statutory body (Kegunaan Kerajaan / Badan Berkanun)</b>
LUT	TIS 701	Use of government / statutory body - Palace (Kegunaan Kerajaan / Badan Berkanun - Istana)
LUT	TIS 702	Use of government / statutory body - Museum (Kegunaan Kerajaan / Badan Berkanun - Muzium)
LUT	TIS 703	Use of government /statutory body - Government Office/Government Agencies

LUT	TIS 704	(Kegunaan Kerajaan / Badan Berkanun - Pejabat Kerajaan / Agensi Kerajaan)
		Use of government / statutory body - Statutory Bodies (Kegunaan Kerajaan / Badan Berkanun - Badan Berkanun)
LUT	TIS 705	Use of government / statutory body - Others (Kegunaan Kerajaan / Badan Berkanun - Lain-lain)
<b>LUT</b>	<b>TIS 800</b>	<b>Other Community Facilities (Lain-Lain Kemudahan Masyarakat)</b>
LUT	TIS 801	Other Community Facilities - Public Multipurpose Hall (Lain-Lain Kemudahan Masyarakat - Dewan Serbaguna Awam)
LUT	TIS 802	Other Community Facilities - Public Hall (Lain-Lain Kemudahan Masyarakat - Dewan Orang Ramai)
LUT	TIS 803	Other Community Facilities - hall (Lain-Lain Kemudahan Masyarakat - Balai Raya)
LUT	TIS 804	Other Community Facilities - Public Library (Lain-Lain Kemudahan Masyarakat - Perpustakaan Awam)
LUT	TIS 805	Other Community Facilities – Post Office (Lain-Lain Kemudahan Masyarakat - Pejabat Pos)
LUT	TIS 806	Other Community Facilities – Others (Lain-Lain Kemudahan Masyarakat - Lain-lain)
<b>LUT</b>	<b>TLR 000</b>	<b>Open Space and Recreation (Tanah Lapang dan Rekreasi)</b>
<b>LUT</b>	<b>TLR 100</b>	<b>Open Space (Tanah Lapang)</b>
LUT	TLR 101	Open Space - Playground lot (Tanah Lapang - Lot Permainan)
LUT	TLR 102	Open Space - Playground (Tanah Lapang - Padang Permainan)
LUT	TLR 103	Open Space - Neighbourhood fields (Tanah Lapang - Padang Kejiranan)
LUT	TLR 104	Open Space - Local parks (Tanah Lapang - Taman Tempatan)
LUT	TLR 105	Open Space - Municipal parks (Tanah Lapang - Taman Bandaran)
LUT	TLR 106	Open Space - Provincial parks / State (Tanah Lapang - Taman Wilayah / Negeri)
LUT	TLR 107	Open Space - National parks (Tanah Lapang - Taman Nasional)
LUT	TLR 108	Open Space - Botanical parks (Tanah Lapang - Taman Botani)
LUT	TLR 109	Open Space - Special parks (Tanah Lapang - Taman Khas)
LUT	TLR 110	Open Space - Others (Tanah Lapang - Lain-lain)
<b>LUT</b>	<b>TLR 200</b>	<b>Sports and Recreation Facilities (Kemudahan Sukan dan Rekreasi)</b>
LUT	TLR 201	Sports and Recreation Facilities - Stadium (Kemudahan Sukan dan Rekreasi - Stadium)
LUT	TLR 202	Sports and Recreation Facilities - Sports complex (Kemudahan Sukan dan Rekreasi - Kompleks Sukan)
LUT	TLR 203	Sports and Recreation Facilities - Racing circuit (Kemudahan Sukan dan Rekreasi - Litar Lumba Kereta/Motosikal)
LUT	TLR 204	Sports and Recreation Facilities – Games Arena (Kemudahan Sukan dan Rekreasi - Gelanggang Permainan)
LUT	TLR 205	Sports and Recreation Facilities - Golf course (Kemudahan Sukan dan Rekreasi - Padang Golf)
LUT	TLR 206	Sports and Recreation Facilities - Polo fields/Aquastrian/Horse racing circuit (Kemudahan Sukan dan Rekreasi - Padang Polo/Aquastrian/Lumba kuda)
LUT	TLR 207	Sports and Recreation Facilities - Go-Cart circuit (Kemudahan Sukan dan Rekreasi - Gelanggang Go-Kart)
LUT	TLR 208	Sports and Recreation Facilities - Shooting range (Kemudahan Sukan dan Rekreasi - Lapang Sasar)
LUT	TLR 209	Sports and Recreation Facilities - Theme park (Kemudahan Sukan dan Rekreasi - Taman Tema)
LUT	TLR 210	Sports and Recreation Facilities - Zoo (Kemudahan Sukan dan Rekreasi - Zoo)

LUT	TLR 211	Sports and Recreation Facilities - Others (Kemudahan Sukan dan Rekreasi - Lain-lain)
<b>LUT</b>	<b>TLR 300</b>	<b>Green Area (Kawasan Hijau)</b>
LUT	TLR 301	Green Area - Development excess area (Kawasan Hijau - Kawasan Lebih Pembangunan)
LUT	TLR 302	Green Area - Vacant land surround water bodies (Kawasan Hijau - Tanah Kosong Sekitar Badan Air)
LUT	TLR 303	Green Area - Buffer zone (Kawasan Hijau - Zon Penamparan)
<b>LUT</b>	<b>TTK 000</b>	<b>Vacant Land (Tanah Kosong)</b>
<b>LUT</b>	<b>TTK 100</b>	<b>Natural Vacant Land (Tanah Kosong Semulajadi)</b>
LUT	TTK 101	Natural Vacant Land - shrub (Tanah Kosong Semulajadi - Belukar)
LUT	TTK 102	Natural Vacant Land - Turf / Weeds (Tanah Kosong Semulajadi - Tanah Berumput / Lalang)
<b>LUT</b>	<b>TTK 200</b>	<b>Made Vacant Land (Tanah Kosong Buatan)</b>
LUT	TTK 201	Made Vacant Land - Abandoned Project Site (Tanah Kosong Buatan - Tapak Projek Terbengkalai)
LUT	TTK 202	Made Vacant Land – Construction Project site (Tanah Kosong Buatan - Tapak Projek Dalam Pembinaan)
LUT	TTK 203	Made Vacant Land - infill site (Tanah Kosong Buatan - Tapak Infill)
LUT	TTK 204	Made Vacant Land - Former Mine Land (Tanah Kosong Buatan - Tanah Bekas Lombong)

<b>LUT</b>	<b>IUU 000</b>	<b>Transportation, Infrastructure and Utility (Pengangkutan, Infastruktur dan Utiliti)</b>
<b>LUT</b>	<b>IPG 000</b>	<b>Transportation (Pengangkutan)</b>
<b>LUT</b>	<b>IPG 100</b>	<b>Road (Jalan)</b>
LUT	IPG 101	Road – Highways (Jalan – Lebuhraya)
LUT	IPG 102	Road – Federal roads (Jalan – Jalan Persekutuan)
LUT	IPG 103	Road – State roads (Jalan – Jalan Negeri)
LUT	IPG 104	Road – Municipal roads (Jalan – Jalan Bandaran)
LUT	IPG 105	Road – Others (Jalan – Lain-lain)
<b>LUT</b>	<b>IPG 200</b>	<b>Platform (Landasan)</b>
LUT	IPG 201	Platform – Railways (Landasan – Landasan Keretapi)
LUT	IPG 202	Platform – Monorail track (Landasan – Landasan Monorail)
LUT	IPG 203	Platform – LRT/MRT track (Landasan – Landasan LRT/MRT)
LUT	IPG 204	Platform – Runway (Landasan – Landasan Terbang)
LUT	IPG 205	Platform – Others (Landasan – Lain-lain)
<b>LUT</b>	<b>IPG 300</b>	<b>Transportation Facilities (Kemudahan Pengangkutan)</b>
LUT	IPG 301	Transportation Facilities – Airport (Kemudahan Pengangkutan – Lapangan Terbang)
LUT	IPG 302	Transportation Facilities – Seaport (Kemudahan Pengangkutan – Pelabuhan Laut)
LUT	IPG 303	Transportation Facilities – Inland port (Kemudahan Pengangkutan – Pelabuhan Darat)
LUT	IPG 304	Transportation Facilities – Marina centre (Kemudahan Pengangkutan – Pusat Marina)
LUT	IPG 305	Transportation Facilities – Terminal / Bus station

LUT	IPG 306	(Kemudahan Pengangkutan – Terminal / Stesen Bas) Transportation Facilities – Terminal / Taxi station (Kemudahan Pengangkutan – Terminal / Stesen Teksi)
LUT	IPG 307	Transportation Facilities – Terminal / Train station / LRT/MRT (Kemudahan Pengangkutan – Terminal /Stesen Keretapi/LRT/MRT)
LUT	IPG 308	Transportation Facilities – Bus Depot (Kemudahan Pengangkutan – Depot Bas)
LUT	IPG 309	Transportation Facilities – Train depot / LRT (Kemudahan Pengangkutan – Depot Keretapi / LRT)
LUT	IPG 310	Transportation Facilities – Truck depot / Heavy equipment (Kemudahan Pengangkutan – Depot Lori / Jentera Berat)
LUT	IPG 311	Transportation Facilities – Terminal / Ferry Jetty (Kemudahan Pengangkutan – Terminal / Jeti Feri)
LUT	IPG 312	Transportation Facilities – Terminal / Boat Jetty (Kemudahan Pengangkutan – Terminal / Jeti Bot)
LUT	IPG 313	Transportation Facilities – Intergrated transport terminal (Kemudahan Pengangkutan – Terminal Pengangkutan Bersepadu)
LUT	IPG 314	Transportation Facilities – Jetty - fisherman (Kemudahan Pengangkutan – Jeti Nelayan)
LUT	IPG 315	Transportation Facilities – Ship repair centre (Kemudahan Pengangkutan – Pusat Membaiki Kapal)
LUT	IPG 316	Transportation Facilities – Parking (Kemudahan Pengangkutan – Tempat Letak Kereta)
LUT	IPG 317	Transportation Facilities – Stesen Pemindahan Kargo (Kemudahan Pengangkutan – Stesen Pemindahan Kargo)
LUT	IPG 318	Transportation Facilities - Cargo transfer station (Kemudahan Pengangkutan – Lain-lain)

<b>LUT</b>	<b>IFU 000</b>	<b>Infrastructure and Utility (Infrastruktur dan Utiliti)</b>
<b>LUT</b>	<b>IFU 100</b>	<b>Electricity Supply (Bekalan Elektrik)</b>
LUT	IFU 101	Electricity Supply – Transmission line 500 kv (Bekalan Elektrik – Talian Rentis 500 kv)
LUT	IFU 102	Electricity Supply – Transmission line 275 kv (Bekalan Elektrik – Talian Rentis 275 kv)
LUT	IFU 103	Electricity Supply – Transmission line 132 kv (Bekalan Elektrik – Talian Rentis 132 kv)
LUT	IFU 104	Electricity Supply – Transmission line 66 kv (Bekalan Elektrik – Talian Rentis 66 kv)
LUT	IFU 105	Electricity Supply – Electric power plant (Bekalan Elektrik – Loji Janakuasa Elektrik)
LUT	IFU 106	Electricity Supply – Hydro power plant (Bekalan Elektrik – Loji Janakuasa Hidro)
LUT	IFU 107	Electricity Supply – Substation main divider (PPU) (Bekalan Elektrik – Pencawang Masuk Utama (PMU))
LUT	IFU 108	Electricity Supply – Substation main divider (PPU) (Bekalan Elektrik – Pencawang Pembahagi Utama (PPU))
LUT	IFU 109	Electricity Supply – Electrical substation (PE) (Bekalan Elektrik – Pencawang Elektrik (PE))
<b>LUT</b>	<b>IFU 200</b>	<b>Gas supllly (Bekalan Gas)</b>
LUT	IFU 201	Gas suplly – Gas pipeline Gas PGU I (Bekalan Gas – Laluan Paip Gas PGU I)
LUT	IFU 202	Gas Supply – Gas pipeline Gas PGU II (Bekalan Gas – Laluan Paip Gas PGU II)
LUT	IFU 203	Gas Supply –Gas pipeline PGU III (Bekalan Gas – Laluan Paip Gas PGU III)

LUT	IFU 204	Gas Supply –City Gates Bekalan Gas – City Gates
LUT	IFU 205	Gas Supply – Gas distributor station (Bekalan Gas – Stesen Pengagih Gas)
LUT	IFU 206	Gas Supply – Others (Bekalan Gas – Lain-lain)
<b>LUT</b>	<b>IFU 300</b>	<b>Water Supply (Bekalan Air)</b>
LUT	IFU 301	Water Supply – Dam (Bekalan Air – Empangan)
LUT	IFU 302	Water Supply – Inter-state / Countries water flow pipe (Bekalan Air – Paip Pengaliran Air Antara Negara / Negeri)
LUT	IFU 303	Water Supply – District water flow pipe (Bekalan Air – Paip Pengaliran Air Antara Daerah)
LUT	IFU 304	Water Supply – Water treatment plant (Bekalan Air – Loji Rawatan Air)
LUT	IFU 305	Water Supply – Water plant (Bekalan Air – Loji Air)
LUT	IFU 306	Water Supply – Water intake (Bekalan Air – Takat Pengambilan Air)
LUT	IFU 307	Water Supply – Groundwater intake (Bekalan Air – Takat Pengambilan Air Bawah Tanah)
LUT	IFU 308	Water Supply – Water pump house (Bekalan Air – Rumah Pam Bekalan Air)
LUT	IFU 309	Water Supply – Water Tanks (Bekalan Air – Tangki Air)
<b>LUT</b>	<b>IFU 400</b>	<b>Irrigation and Drainage (Pengairan dan Perparitan)</b>
LUT	IFU 401	Irrigation and Drainage – Pool Reservoir (Pengairan dan Perparitan – Kolam Takungan)
LUT	IFU 402	Irrigation and Drainage – Detention pond (Pengairan dan Perparitan – Kolam Tahanan)
LUT	IFU 403	Irrigation and Drainage – Pump Station (Pengairan dan Perparitan – Stesen Pam)
LUT	IFU 404	Irrigation and Drainage – Agricultural Drainage (Pengairan dan Perparitan – Saliran Pertanian)
LUT	IFU 405	Irrigation and Drainage – Drainage System Network (Pengairan dan Perparitan – Rangkaian Sistem Perparitan)
<b>LUT</b>	<b>IFU 500</b>	<b>Telecommunication (Telekomunikasi)</b>
LUT	IFU 501	Telecommunication – Earth satellite (Telekomunikasi – Satelit Bumi)
LUT	IFU 502	Telecommunication – VSAT Station (Telekomunikasi – Stesen VSAT)
LUT	IFU 503	Telecommunication – Cellular radio station (Telekomunikasi – Stesen Radio Selular)
LUT	IFU 504	Telecommunication – Exchange building (Telekomunikasi – Bangunan Ibu Sawat)
LUT	IFU 505	Telecommunication – Hill station (Telekomunikasi – Stesen Bukit)
LUT	IFU 506	Telecommunication – Radio station (Telekomunikasi – Stesen Radio)
LUT	IFU 507	Telecommunication – Radar tower / Antenna (Telekomunikasi – Menara Radar / Antena)
LUT	IFU 508	Telecommunication – IT Hub (Telekomunikasi – IT Hub)
LUT	IFU 509	Telecommunication – Telecommunications transmission tower (Telekomunikasi – Menara Pemancar Telekomunikasi)
LUT	IFU 510	Telecommunication – Telecommunications network (Telekomunikasi – Rangkaian Telekomunikasi)
<b>LUT</b>	<b>IFU 600</b>	<b>Solid Waste Disposal (Pelupusan Sisa Pepejal)</b>
LUT	IFU 601	Solid Waste Disposal – Solid waste transfer site (Pelupusan Sisa Pepejal – Pusat Pemindahan)
LUT	IFU 602	Solid Waste Disposal – Solid waste disposal site (Pelupusan Sisa Pepejal – Tapak Pelupusan)
LUT	IFU 603	Solid Waste Disposal – Solid waste collection site

<b>LUT</b>	<b>IFU 700</b>	<b>Toxic Waste Disposal Pelupusan Sisa Toksid</b>
LUT	IFU 701	Toxic Waste Disposal – Toxic waste treatment plant - Chemical / Hazardous (Pelupusan Sisa Toksid – Loji Rawatan – Kimia / Berbahaya)
LUT	IFU 702	Toxic Waste Disposal – Toxic waste exchange site - Chemical / Hazardous (Pelupusan Sisa Toksid – Pusat Pertukaran – Kimia / Berbahaya)
LUT	IFU 703	Toxic Waste Disposal – Toxic waste incinerator plant - Chemical / Hazardous (Pelupusan Sisa Toksid – Loji Incinerator – Kimia / Berbahaya)
LUT	IFU 704	Toxic Waste Disposal – Under control toxic waste buried site – Chemical/ Hazardous (Pelupusan Sisa Toksid – Timbus Terkawal – Kimia / Berbahaya)
LUT	IFU 705	Toxic Waste Disposal – Toxic waste treatment plant - Clinical (Pelupusan Sisa Toksid – Loji Rawatan – Klinikal)
LUT	IFU 706	Toxic Waste Disposal – Toxic waste exchange site - Clinical (Pelupusan Sisa Toksid – Pusat Pertukaran – Klinikal)
LUT	IFU 707	Toxic Waste Disposal – Toxic waste incinerator plant - Clinical (Pelupusan Sisa Toksid – Loji Incinerator – Klinikal)
LUT	IFU 708	Toxic Waste Disposal – Under control toxic waste buried site - Clinical (Pelupusan Sisa Toksid – Timbus Terkawal – Klinikal)
LUT	IFU 709	Toxic Waste Disposal – Toxic waste treatment plant- Radioactive (Pelupusan Sisa Toksid – Loji Rawatan – Radioaktif)
LUT	IFU 710	Toxic Waste Disposal – Toxic waste treatment centre - Radioactive (Pelupusan Sisa Toksid – Pusat Rawatan – Radioaktif)
LUT	IFU 711	Toxic Waste Disposal – Toxic waste buried site - Radioactive (Pelupusan Sisa Toksid – Timbus – Radioaktif)

<b>LUT</b>	<b>IFU 800</b>	<b>Sewerage (Pembentungan)</b>
LUT	IFU 801	Sewerage – Sewerage treatment plant (Pembentungan – Loji Rawatan Kumbahan)
LUT	IFU 802	Sewerage – Range pump system (Pembentungan – Stesen Pump Rangkaian)
LUT	IFU 803	Sewerage – Oxidation ponds (Pembentungan – Kolam Oksidasi)
LUT	IFU 804	Sewerage – Others (Pembentungan – Lain-lain)

<b>LUT</b>	<b>PTA 000</b>	<b>Agriculture (Pertanian)</b>
<b>LUT</b>	<b>PTA 100</b>	<b>Rubber (Getah)</b>
LUT	PTA 101	Rubber Estate (Ladang Getah)
LUT	PTA 102	Smallholdings rubber (Kebun Kecil Getah)
LUT	PTA 103	Others – Rubber (Lain-lain – Getah)

<b>LUT</b>	<b>PTA 200</b>	<b>Oil palm (Kelapa Sawit)</b>
LUT	PTA 201	Oil Palm Plantations (Ladang Kelapa Sawit)
LUT	PTA 202	Smallholdings Oil Palm (Kebun Kecil Kelapa Sawit)
LUT	PTA 203	Others – Oil Palm (Lain-lain – Kelapa Sawit)

<b>LUT</b>	<b>PTA 300</b>	<b>Paddy (Padi)</b>
LUT	PTA 301	Rice Irrigation Scheme (Skim Perairan Padi)
LUT	PTA 302	Non-Rice Irrigation Scheme (Luar Skim Perairan Padi)

<b>LUT</b>	<b>PTA 400</b>	<b>Other Types of Agriculture (Lain-lain Jenis Pertanian)</b>
LUT	PTA 401	Other Types of Agriculture – orchard (Lain-lain Jenis Pertanian – Dusun)
LUT	PTA 402	Other Types of Agriculture – forest Planting (Lain-lain Jenis Pertanian – Hutan Tanam)

LUT	PTA 403	Other Types of Agriculture – Coffee (Lain-lain Jenis Pertanian – Kopi)
LUT	PTA 404	Other Types of Agriculture – Coco (Lain-lain Jenis Pertanian – Koko)
LUT	PTA 405	Other Types of Agriculture – Tea (Lain-lain Jenis Pertanian – Teh)
LUT	PTA 406	Other Types of Agriculture – Pine (Lain-lain Jenis Pertanian – Mengkuang)
LUT	PTA 407	Other Types of Agriculture – Pineapple (Lain-lain Jenis Pertanian – Nenas)
LUT	PTA 408	Other Types of Agriculture – Tobacco (Lain-lain Jenis Pertanian – Tembakau)
LUT	PTA 409	Other Types of Agriculture – Sugar Cane (Lain-lain Jenis Pertanian – Tebu)
LUT	PTA 410	Other Types of Agriculture – Tapioca (Lain-lain Jenis Pertanian – Ubi Kayu)
LUT	PTA 411	Other Types of Agriculture – Banana (Lain-lain Jenis Pertanian – Pisang)
LUT	PTA 412	Other Types of Agriculture – Rice Paddy (Lain-lain Jenis Pertanian – Padi Bukit)
LUT	PTA 413	Other Types of Agriculture – Black Pepper (Lain-lain Jenis Pertanian – Lada Hitam)
LUT	PTA 414	Other Types of Agriculture – Vegetables (Lain-lain Jenis Pertanian – Sayur-sayuran)
LUT	PTA 415	Other Types of Agriculture – Cash Crops (Lain-lain Jenis Pertanian – Cash Crops)

LUT	PTA 416	Other Types of Agriculture – Spice (Lain-lain Jenis Pertanian – Rempah)
LUT	PTA 417	Other Types of Agriculture – Coconut (Lain-lain Jenis Pertanian – Kelapa)
LUT	PTA 418	Other Types of Agriculture – Others (Lain-lain Jenis Pertanian – Lain-lain)

<b>LUT</b>	<b>PTA 500</b>	<b>Vacant Land (Tanah Terbiar)</b>
LUT	PTA 501	Vacant Land – Not in Operation Agricultural Land (Tanah Terbiar – Tanah Pertanian Tidak Diusahakan)
LUT	PTA 502	Vacant Land – Undevelop Land (Tanah Terbiar – Tanah Tidak Diusahakan)

<b>LUT</b>	<b>PAA 000</b>	<b>Livestock and Aquaculture (Penternakan dan Akuakultur)</b>
<b>LUT</b>	<b>PAA 100</b>	<b>Livestock (Penternakan )</b>
LUT	PAA 101	Livestock – Poultry (Penternakan – Ternakan Ayam)
LUT	PAA 102	Livestock – Cattle farm (Penternakan – Ladang Lembu)
LUT	PAA 103	Livestock – Dairy farm (Penternakan – Ladang Tenusu)
LUT	PAA 104	Livestock – Pig farm (Penternakan – Ladang Babi)
LUT	PAA 105	Livestock – Mixed livestock (Penternakan – Ternakan Campuran)
LUT	PAA 106	Livestock – Duck (Penternakan – Itik)
LUT	PAA 107	Livestock – goose (Penternakan – Angsa)
LUT	PAA 108	Livestock – Kambing (Penternakan – Kambing)
LUT	PAA 109	Livestock – Sheep (Penternakan – Biri-biri)
LUT	PAA 110	Livestock – Grazing (Penternakan – Padang Ragut)
LUT	PAA 111	Livestock – Others (Penternakan – Lain-lain Ternakan)

<b>LUT</b>	<b>PAA 200</b>	<b>Aquaculture (Akuakultur)</b>
LUT	PAA 201	Aquaculture – Salt Water (Akuakultur Air Masin)
LUT	PAA 202	Aquaculture – Fresh Water (Akuakultur Air Tawar)
LUT	PAA 203	Aquaculture - brackish water (Akuakultur Air Payau)
<b>LUT</b>	<b>HTA 000</b>	<b>Forest (Hutan)</b>
<b>LUT</b>	<b>HTA 100</b>	<b>Forest Land (Hutan Darat)</b>
LUT	HTA 101	Forest Land – Reserve forest (Hutan Darat – Hutan Simpan Kekal)
LUT	HTA 102	Forest Land – State reserve forest (Hutan Darat – Hutan Simpan Negeri)
LUT	HTA 103	Forest Land – Protected forest zone (Hutan Darat – Kawasan Hutan Perlindungan)
<b>LUT</b>	<b>HTA 200</b>	<b>Wetlands Forest (Hutan Tanah Lembap)</b>
LUT	HTA 201	Wetlands Forest – Reserve forest (Hutan Tanah Lembap – Hutan Simpan Kekal)
LUT	HTA 202	Wetlands Forest – State reserve forest (Hutan Tanah Lembap – Hutan Simpan Negeri)
LUT	HTA 203	Wetlands Forest – Protected forest zone (Hutan Tanah Lembap – Kawasan Hutan Perlindungan)
<b>LUT</b>	<b>HTA 300</b>	<b>Peat forests (Hutan Tanah Gambut)</b>
LUT	HTA 301	Peat forests – Reserve forest (Hutan Tanah Gambut – Hutan Simpan Kekal)
LUT	HTA 302	Peat forests – State reserve forest (Hutan Tanah Gambut – Hutan Simpan Negeri)
LUT	HTA 303	Peat forests – Protected forest zone (Hutan Tanah Gambut – Kawasan Hutan Perlindungan)
<b>LUT</b>	<b>HTA 400</b>	<b>Cleared Forest (Hutan Yang Dibersihkan)</b>
<b>LUT</b>	<b>BAA 000</b>	<b>Water Body (Badan Air)</b>
<b>LUT</b>	<b>BAA 100</b>	<b>Natural Water Bodies (Badan Air Semulajadi)</b>
LUT	BAA 101	Natural Water Bodies – River (Badan Air Semulajadi – Sungai)
LUT	BAA 102	Natural Water Bodies – Lake (Badan Air Semulajadi – Tasik)
LUT	BAA 103	Natural Water Bodies – Swamp (Badan Air Semulajadi – Paya)
LUT	BAA 104	Natural Water Bodies – Lagoon / cape (Badan Air Semulajadi – Lagun / Tanjung)
LUT	BAA 105	Natural Water Bodies – Sea (Badan Air Semulajadi – Laut)
<b>LUT</b>	<b>BAA 200</b>	<b>Made Water Bodies (Badan Air Buatan)</b>
LUT	BAA 201	Made Water Bodies – Fomer mining site (Badan Air Buatan – Bekas Lombong)
LUT	BAA 202	Made Water Bodies – Recreational lake (Badan Air Buatan – Tasik Rekreasi)
LUT	BAA 203	Made Water Bodies – Dam lake (Badan Air Buatan – Tasik Empangan)
<b>LUT</b>	<b>PNA 000</b>	<b>Coast (Pantai)</b>
<b>LUT</b>	<b>PNA 100</b>	<b>Natural Coast (Pantai Semulajadi)</b>
LUT	PNA 101	Natural Coast – Public Coast (Pantai Semulajadi – Pantai Awam)
LUT	PNA 102	Natural Coast – coast Forest (Pantai Semulajadi – Pantai Hutan)
<b>LUT</b>	<b>PNA 200</b>	<b>Causeway coast (Pantai Tambak)</b>
LUT	PNA 201	Causeway coast – Public Coast (Pantai Tambak – Pantai Awam)
LUT	PNA 202	Causeway coast – coast Forest (Pantai Tambak – Pantai Hutan)

## **LVS**

### **Level of Service**

Operating conditions (freedom to maneuver) at the time the traffic is at the design hour volume

LVS	A	Free Flow with low volumes, densities and high speeds. Drivers can maintain their desired speeds with little or no delay.
LVS	B	Stable Flow. Operating speeds beginning to be restricted somewhat by traffic conditions. Some slight delay.
LVS	C	Stable Flow. Speeds and maneuverability are more closely controlled by higher volumes. Acceptable delay.
LVS	D	Approaching Unstable Flow. Tolerable operating speeds which are considerably affected by operating conditions. Tolerable delay.
LVS	E	Unstable Flow. Yet lower operating speeds and perhaps stoppages of momentary duration. Volumes are at or near capacity congestion and intolerable delay.
LVS	F	Forced Flow. Speeds and volume can drop to zero. Stop pages can occur for long periods. Queues of vehicles backing up from, a restriction downstream.

**MAE Mineral Anomaly Elements**

Identifies the elements of a mineral anomaly

MAE 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**MDF Mixed Dipterocarp Forest Type**

Type of a mixed dipterocarp forest

MDF	1	Upper Dipterocarp
MDF	2	Hill Dipterocarp
MDF	3	Lowland Dipterocarp

**MED Road Median**

Type of Road Median

MED	1	Concrete
MED	2	Safety Barrier
MED	3	Drain Median
MED	4	Vegetation Cover

**MET Mineral Exploration Block Type**

Type of a mineral exploration block

MET	1	Geological
MET	2	Geochemical
MET	3	Geophysical
MET	4	Prospecting
MET	5	Geological Remote Sensing

MET	6	Environmental Geology
MET	7	Hydrogeology
MET	8	Engineering Geology

**MFT Montane Forest Type**

Type of a montane forest

MFT	1	Upper Montane Forest
MFT	2	Lower Montane Forest

**MIC Mineral Category**

Identifies the category of a mineral

MIC	1	Occurrence
MIC	2	Prospect
MIC	3	Deposit
MIC	4	Reserve

**MIG Mineral Group**

Identifies the group of minerals

MIG	1	Metallic minerals
MIG	2	Non-metallic minerals
MIG	3	<del>Precious minerals</del> Fertilizer minerals
MIG	4	Energy minerals
MIG	5	Mixed minerals

**MIN Mineral Name**

Identifies the name of a mineral

**PRECIOUS METAL**

MIN	111	Gold
MIN	112	Silver
MIN	113	Platinum
MIN	114	Titanium

**BASE METAL**

MIN	121	Copper
MIN	122	Lead
MIN	123	Zink
MIN	124	Antimony
MIN	125	Mercury

MIN	126	Bismuth
MIN	127	Galena
MIN	128	Barite
MIN	129	Barite/Zink

#### LIGHT METAL

MIN	131	Bauxite
MIN	132	Ilmenite
MIN	133	Beryllium
MIN	134	Lithium

#### IRON & FERROUS ALLOY

MIN	141	Iron
MIN	142	Manganese
MIN	143	Tungsten
MIN	144	Chromium
MIN	145	Cobalt
MIN	146	Molybdenum
MIN	147	Nickel
MIN	148	Columbite-tantalum
MIN	149	Magnesium

#### TIN & ASSOCIATED MINERAL

MIN	151	Tin
MIN	152	Tin/Cassiterite
MIN	153	Tin/cassiterite & cobaltium

#### RARE METALS

MIN	161	Niobium-tantalum
MIN	162	Zirconium
MIN	163	Yttrium/Thorium
MIN	164	Monazite
MIN	165	Xenotime
MIN	166	Xenotime/Monazite
MIN	167	Allanite

#### CLAY-BASED

MIN	211	Common clay
MIN	212	Ball clay
MIN	213	Kaolin
MIN	214	Marine clay
MIN	215	Kaolinitic clay
MIN	216	Shale

#### SAND-BASED

MIN	221	Silica sand
MIN	222	Sand and gravel
MIN	223	Feldspathic sand

#### ROCK-BASED

MIN	231	Dimension stone
MIN	232	Rock aggregate
MIN	233	Silica rock
MIN	234	Quartz sericite
MIN	235	Feldspar
MIN	236	Baryte

MIN 237 Dolomite  
MIN 238 Jade

ENERGY MINERALS  
MIN 301 Coal  
MIN 302 Uranium

FERTILIZER MINERALS  
MIN 401 Phosphate/Guano

**MKT Marker Type**

Type of an international or state boundary marker

MKT 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**MNT Mine Type**

Type of a mine

MNT 1 Surface (other than dredging)  
MNT 2 Dredging  
MNT 3 Underground

**MOS Monument Station**

Identifies whether or not a surveyed point is monumented

MOS 1 Monumented  
MOS 2 Not Monumented

**MPT Mine Pit Type**

Type of a mine pit

MPT 1 Surface  
MPT 2 Underground

**MRG Metamorphic Rock Group**

Identifies the group of metamorphic rocks

MRG 1 ~~Regional~~ Regional metamorphic rock  
MRG 2 ~~Contact~~ Contact metamorphic rock  
MRG 3 ~~Dynamic~~ Dynamic metamorphic rock  
MRG 4 Impact metamorphic rock

**MRT Metamorphic Rock Type**

Type of a metamorphic rock

REGIONAL MET. TYPE

MRT	101	Marble
MRT	102	Slate
MRT	103	Phyllite
MRT	104	Schist
MRT	105	Gneiss
MRT	106	Metasandstone
MRT	107	Metaconglomerate
MRT	108	Serpentine

CONTACT MET. TYPE

MRT	201	Hornfels
MRT	202	Greisen
MRT	203	Skarn
MRT	204	Granulite
MRT	205	Migmatite

DYNAMIC MET. TYPE

MRT	301	Mylonite
MRT	302	Phyllonite
MRT	303	Cataclasite
MRT	304	Pseudotachylite

IMPACT MET. TYPE

MRT	401	Tektites
MRT	402	Suevites

**MSC Meteorology Station Category Type**

Category of a meteorological station

MSC	1	Main
MSC	2	Auxiliary

**MSL Mean Sea Level**

Mean Sea Level measurement

MSL	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
	Real Number			8 Characters

**MSS Motorcycle Shelter Structure**

Type of motorcycle shelter structures

MSS	1	Hut-Style Lay By
MSS	2	Improvised Space underneath High-level Overpass

**MTP Mineral Type**

Type of a mineral

MTP 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**MTT Mining Tail Area Type**

Type of a mining tail area

MTT 1 Wet area  
 MTT 2 Dry area

**MTY Metallic Mineral Type**

Type of a metallic mineral

MTY 1 Precious metals  
 MTY 2 Base metals  
 MTY 3 Light metals  
 MTY 4 Iron & ferrous alloy  
 MTY 5 Tin & associated minerals  
 MTY 6 Rare metals

**NAM Name**

Any name to identify a feature

NAM 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			80 Characters

**NAT Navigation Aid Type**

Type of a navigation aid

NAT 1 Locator  
 NAT 2 Non-Directional Beacon (NDB)  
 NAT 3 VHF Omni-Directional Radio Range (VOR)  
 NAT 4 UHF Tactical Air Navigation Aid (TACAN)

**NBE Nos of Berm**

Nos of Berm value

NAM 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**NBR Road Noise Barrier Structure**

Possible structure of road noise barriers

NBS 1 At-grade

NBS 2 Elevated

**NBS Number of Bridge Span**

Number of span supporting a bridge

NBS 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Span	Short Integer			

**NBT Road Noise Barrier Type**

Possible type of road noise barriers

NBT 1 Concrete Masonry Unit

NBT 2 Metal

**NMT Non-Metallic Mineral Type**

Type of a non-metallic mineral

NMT 1 Clay-based

NMT 2 Sand-based

NMT 3 Rock-based

NMT 4 Other non-metallic minerals

**NOB Number of Berth**

Number of Berth

NOB 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**NOC Nature of Construction**

Nature of construction

NOC 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**NOD Number of Direction**

The total number of directions a vehicle is allowed to proceed at a road junction

NOD 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Span	Short Integer			

**NOS Number of Storey**

Number of storey of a building or man-made structure

NOS 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Storey	Floating			

**NUM Number**

Any number to identify a feature

NAM 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			

**OPS Operational Status**

Identifies the status of a mine/quarry

OPS 1 Active  
 OPS 2 Inactive  
 OPS 3 Abandoned

**OSP Offshore Production**

Type of offshore production

OSP	1	Gas
OSP	2	Oil

**OSM Outer Space Material**

Type of outer space material

OSM	1	Stony (chondrite and achondrite)
OSM	2	Stony-iron
OSM	3	Iron

**PAT Parking Area Type**

Type of a parking area

PAT	1	On Ground
PAT	2	Underground
PAT	3	Multistorey

**PAU Passage Usage**

Usage of an overhead or subway passage

PAU	1	Pedestrian
PAU	2	Cycle
PAU	3	Both

**PCC Coverage Percentage**

Percentage of survey area covered

PCC	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Percent	Floating			

**PCU Pond Complex Usage**

Usage of the pond complex

PCU	1	Flood Retention
PCU	2	Silt Retention
PCU	3	Recreational

PCU	4	Aquatic Farming
PCU	5	Others

**PD1 Primary Destination\_1**

Distance value display on kilometre post

DS2 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Alphanumeric	1 to 10			24 Characters

**PER Person**

Name of the responsible person

PER 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**PFT Planted Forest Type**

Type of a planted forest

PFT	1	Pine Tree
PFT	2	Acacia
PFT	3	Teak
PFT	4	Sentang
PFT	5	Hevea

**PGS Playground Services**

Type of playground services

PGS	1	Children
PGS	2	Tennis
PGS	3	Futsal
PGS	4	Takraw
PGS	5	Badminton
PGS	6	X-game

**PHU Pump House Usage**

Usage of a pump house

PHU	1	Water Supply
PHU	2	Flood
PHU	3	Drainage

PHU	4	Ground Water
PHU	5	Irrigation/Agriculture

**PIL Pillar Status**

Status of Pillar

PIL	1	Unfinalized
PIL	2	Finalized

**PLA Power Line Category**

Category of a power line

PLA	1	On Ground
PLA	2	Under Ground
PLA	3	Elevated
PLA	4	Sub Marine

**PLC Power Line Characteristic**

Identifies whether the power line is insulated or bare

PLC	1	Insulated
PLC	2	Bare

**PLT Power Line Type**

Type of a power line

PLT	1	Transmission
PLT	2	Distribution

**MS 1759:2012**

**POT Pond Type**

Type of a pond

POT	1	Retention
POT	2	Detention
POT	3	Aquaculture
POT	4	Wastewater
POT	5	Mining

**POU Pole Usage**

Usage of a pole

POU	1	Electricity
POU	2	Telecommunication

**PPT Pipe Line Type**

Type of an oil/gas pipeline

PPT	1	Gas
PPT	2	Oil

**PRJ Project Name**

Name of the project/ company

PRJ 0 Actual Value

Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**PRN Priority**

Identifies the importance of an anomaly for follow-up investigation

PRN	1	Require immediate follow-up
PRN	2	Require follow-up
PRN	3	May require follow-up
PRN	4	Does not require follow-up

**PRT Processing Plant Type**

Type of a processing plant

PRT	1	Liquid Propane Gas (LPG)
PRT	2	<del>NGV</del> Natural Gas
<del>PRT</del>	<del>3</del>	<del>Natural Gas</del>

**PSA Principal Submitted Person Contact Address**

Contact address of the responsible person

PSA 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			100 Characters

**PSN Principal Submitted Person Contact Number**

Contact number of the responsible person

PSN 0 Actual Value

Units	Format	Range	Increment	Maximum Character

**PSP Principal Submitted Person**

Contact number of the responsible person

PSP 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			100 Characters

**PST Power Station Type**

Type of energy source used to generate power

PST	1	<del>Hydro</del> Hydroelectric
PST	2	<del>Coal</del> Thermal
PST	3	<del>Oil</del> Wind
PST	4	<del>Gas</del> Solar
PST	5	<del>Diesel</del> Nuclear
PST	9 999	<del>Cogen</del> Others

**PTY Profile Type**

Type of a profile

PTY	1	Geological cross section
PTY	2	Hydrogeological cross section
PTY	3	Engineering geology profile
PTY	4	Geophysical profile

**PVT Pavement Surface Type**

The selection of pavement type is determined by the volume and composition of traffic etc

PVT	1	Asphaltic Concrete Wearing Course
PVT	2	Dense Bituminous Macadam
PVT	3	Polymer Modified Asphalt
PVT	4	Concrete
PVT	5	Stone Mastic Asphaltic
PVT	6	Continuous Reinforced Concrete Pavement
PVT	7	Gravel/Semigrout (unpaved)

**PYU Pylon Usage**

Identifies the usage of a pylon

PYU	1	Electricity transmission
PYU	2	Cable car

**QAT Quarry Authorized Type**

Type of an authorized quarry

QAT	1	Lease
QAT	2	License
QAT	3	Permit

**QUT Quarry Type**

Type of a quarry

QUT	1	Surface
QUT	2	Subsurface

**QUU Quarry Use**

Identifies the use of a quarry

QUU	1	Aggregate
QUU	2	Dimension stone
QUU	3	Agricultural application
QUU	4	Lime
QUU	5	Cement
QUU	6	Armour stone

**RBT Rock Boulders Type**

Type of a rock boulder

RBT	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**RBU Religious Building Usage**

Usage of a religious building

RBU	1	Surau
RBU	2	Mosque
RBU	3	Chapel or Church
RBU	4	Chinese Temple
RBU	5	Hindu Temple
RBU	6	Buddhist Temple
RBU	7	Sikh Temple
RBU	8	Thai Temple
RBU	9	Bahai Temple

**RCF Federal Road Category**

RCF	1	Major federal road
RCF	2	Regional development Scheme Road
RCF	3	Access road to Federal Government Institutions
RCF	4	Industrial road

**RCS Road Class**

Identifies the Type of Road

RCS	1	Dual Carriage Highway
RCS	2	Single Carriage Highway
RCS	3	Dual Carriage Road
RCS	4	Single Carriage Road
RCS	5	Unsealed Road
RCS	6	Road Under Construction

**RCT Religious Burial Ground Type**

Type of a burial ground

RCT	1	Muslim
RCT	2	Christian
RCT	3	Chinese
RCT	4	Hindu
RCT	5	Bahai
RCT	6	Sikh
RCT	7	Orang Asli
RCT	8	Mixed

**RDC Road Category**

Category of a road

RDC	1	Toll Expressway & Toll Highway – Interstate national network for through traffic with full control of access
RDC	2	Federal Trunk Road (Jalan Persekutuan) –Major roads forming the basic network of the road transportation system within states ; link up state capitals & district capitals or other major towns
RDC	3	State Road (Jalan Negeri) – Major roads forming the basic network of the road transportation system within districts.

RDC	4	Municipality Road (Jalan PBT) – Major roads which penetrate and serve identifiable neighborhoods, commercial areas and industrial areas.
RDC	5	Private Road – Basic road network owned by certain individuals.
RDC	6	Jalan Kampung / Rural Roads – Basic road network within a neighborhood serves primarily to offer direct access to abutting land.
RDC	7	Loggers Road
RDC	8	Farm Road (Jalan Pertanian)

**RDF Traffic Flow**

Identifies whether the traffic flow is in one or two direction

RDF	1	One Direction
RDF	2	Two Direction

**RDS Road Service Area**

An area where Road Service located

RDS	1	Urban
RDS	2	Rural

**REC Record Number**

Identifies the file or record number

REC	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			12 Characters

**RES Report Status**

Identifies the status of a report

RES	1	Draft
RES	2	Final

**RET Residential Building Type**

Type of building used for residential purposes

RET	1	Detached
RET	2	Semi Detached
RET	3	Terrace/Link
RET	4	Multi Storey
RET	5	Long House
RET	6	Cluster

RET	7	Town Houses
RET	8	Multi Unit

## REU Residential Usage

Usage of a residential building

REU	1	Condominium
REU	2	Service Apartment
REU	3	Apartment
REU	4	Low Cost House
REU	5	Low Cost Flat
REU	6	Public Housing
REU	7	Private Housing
REU	8	Flat
REU	9	Government Quarters
REU	10	Squatters
REU	11	Transit Housing
REU	12	Communal Housing

## RFC Reef Category

Category of a reef

RFC	1	Submerged Reef
RFC	2	Inter Tidal Reef

## RFT Rockfall Type

Type of a rockfall

RFT	1	Toppling
RFT	2	Planar
RFT	3	Wedge

## RGS Regulatory Sign

RGS	Rp.1	Stop At Junction (Berhenti Di Persimpangan)
RGS	Rp.2a	No Left Turn (Dilarang Belok Ke Kiri)
RGS	Rp.2b	No Right Turn (Dilarang Belok Ke Kanan)
RGS	Rp.3	No 'U'-Turn (Dilarang Berpusing Balik)
RGS	Rp.4	No Entry (Kenderaan Dilarang Masuk)
RGS	Rp.5	Vehicle Exceeding - Tonne Kept Out (Kenderaan Melebihi - Tan Dilarang Masuk)
RGS	Rp.6	Vehicle Exceeding - Altimeter Kept Out (Kenderaan Melebihi - Meter Tinggi dilarang Masuk)
RGS	Rp.7	Speed Limit (Had Laju)
RGS	Rp.8a	This Type Vehicle Kept Out (Kenderaan Jenis Ini Dilarang Masuk)
RGS	Rp.8b	Motorcycle Kept Out (Motersikal Dilarang Masuk)
RGS	Rp.9	Speed Limit End (Had Laju Tamat)
RGS	Rp.10	Prohibited Park (Dilarang Meletak Kenderaan)
RGS	Rp.11	Prohibited Stop (Dilarang Berhenti)

RGS	Rp.12	Prohibited Honking (Dilarang Membunyikan Hon)
RGS	Rp.13	Give Way (Beri Laluan)
RGS	Rp.14	Vehicle Exceeding – Meter Broad Kept Out (Kenderaan Melebihi Meter – Lebar Dilarang Masuk)
RGS	Rp.15	Stop Sign For Children Crossing (Berhenti Kanak-Kanak Melintas)
RGS	Rp.17	Prohibited Overtake (Dilarang Memotong)
RGS	Rp.18	Prohibited Fishing (Dilarang Memancing)
RGS	Rm.1a	Arrow (Left/Right) (Ikut Arah)
RGS	Rm.1b	Arrow (Straight) (Ikut Arah)
RGS	Rm.1c	Straight Or Turn Right Only (Jalan Terus Atau Belok Ke Kanan Sahaja)
RGS	Rm.1d	Turn Right Only (Belok Ke Kanan Sahaja)
RGS	Rm.4	Keep Left (Ikut Kiri)
RGS	Rm.2a	Cycle Track (Lorong Basikal Sahaja)
RGS	Rm.2c	Motorcycle Lane (Lorong Motosikal Sahaja)

## **RGU Road Guide Sign**

RGU	G.11	Perhentian BasBus Stop
RGU	G.13	Telefon AwamPublic Phone
RGU	G.14	Tempat Letak Kenderaan Parking Area
RGU	G.15	Pusat KesihatanHealth Centre
RGU	G.16	HospitalHospital
RGU	G.17	Stesen Minyak Petrol Station
RGU	G.18	Jalan Mati Dead End
RGU	G.19	Dibenarkan Berpusing Balik U-Turn Sign
RGU	T.1	Jalan Sedang Diperbaiki Road Works
RGU	T.8a	Lencongan Detour Sign
RGU	Gd.1	Papan Tanda Tempat Tuju/DestinasDistance To Reach Destination
RGU	Gd.2	Papan Tanda Tempat Tuju/DestinasDistance To Reach Destination
RGU	Gt.1	Papan Tanda Tunjuk ArahIntersection Direction Sign
RGU	Gt.2	Papan Tanda Tunjuk Arah Dengan Papan Tanda Kawasan Perlancongan Signboard Show Direction With Tourism Area Signboard
RGU	Gt.3	Papan Tanda Tunjuk Arah Dengan Papan Tanda Ke Lebuhraya Signboard Show Direction With Signboard Show Direction To Highway
RGU	Gt.4	Papan Tanda Tunjuk Arah Bulatan Signboard Show Circular Path
RGU	Gt.5	Papan Tanda Panduan Arah Di Atas GantriDirections Signboard On Gantry
RGU	Gt.6	Papan Tanda Panduan Arah Di Lebuhraya Direction Signboard On Highways
RGU	Gx.1	Papan Tanda Jarak Distance Signboard (2 Route)
RGU	Gx.2	Papan Tanda Jarak Distance Signboard (1 Route)

## **RGT Railway Gate Type**

Type of a railway gate

RGT	1	Manned
RGT	2	Unmanned

## **RIT Ridge Type**

Type of a ridge

RIT	1	Outcrop
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**RKT Rock Type**

Type of a rock

RKT 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**RLH Road Level Height**

Identifies the Level of Height

- RLH 1 Lower level
- RLH 2 Second level or tier of the road from bottom
- RLH 3 Third level or tier of the road from bottom
- RLH 4 Fourth level or tier of the road from bottom
- RLH 5 Fifth level or tier of the road from bottom
- RLH 6 Sixth level or tier of the road from bottom

**RLP Reclaimed Land Purpose**

Usage of land after reclamation

- RLP 1 Industrial
- RLP 2 Residential
- RLP 3 Recreational
- RLP 4 Commercial

**RML Road Marking Location**

- RML 1 Left hand side
- RML 2 Center
- RML 3 Right hand side
- RML 4 All

**RNO Registered Number**

Unique reference number of a feature

RNO 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			12 Characters

**ROT Rock Outcrop Type**

Type of a rock outcrop

ROT 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**RPS Portion Class**

Type of portion class

RPS 1 Upper

RPS 2 Lower

RPS 3 Close

**RPT Riverbank Protection Type**

Type of material used for river protection works

RPT 1 Concrete

RPT 2 Steel

RPT 3 Rocks

RPT 4 Bakau

**RPV Road Pavement Type**

The physical surface type of a road

RPV 1 Rigid

RPV 2 Flexible

**RRC Rural Road Category**

Categories of roads in rural areas

RRC 1 Expressway

RRC 2 Highway

RRC 3 Primary Road

RRC 4 Secondary Road

RRC 5 Minor Road

**RSC Road Surface Composition**  
The physical surface composition of a road

RSC 1 Paved (sealed)

RSC 2 Unpaved (Unsealed)

**RST Rail Station Type**

Type of a rail station

RST	1	Station
RST	2	Halt

**RTC Rail Track Category**

Category of a rail track

RTC	1	Single Rail
RTC	2	Standard Gauge Rail
RTC	3	Meter Gauge Rail

**RTE Rail Track Electrification**

Identifies whether or not electricity is provided for a rail track

RTE	1	Electrified
RTE	2	Non Electrified

**RTF Rail Track Function**

Type of a rail track in terms of its functionality

RTF	1	Main
RTF	2	Branch
RTF	3	Siding
RTF	4	Loop
RTF	5	Spurline

**RTN Route Number**

Official route number assigned to a route

RTN	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			6 Characters

**MS 1759:2012**

**RTR Rail Tracking**

Identifies whether a rail is a single or double track

RTR	1	Single Track Rail
RTR	2	Double Track Rail
RTR	3	Single Track Light Rail
RTR	4	Double Track Light Rail
RTR	5	High Speed Rail

**RTU Rail Usage**

Usage of a rail track, station or terminal

RTU	1	Mono Rail
RTU	2	Keretapi Tanah Melayu (KTM)
RTU	3	Express Rail Link (ERL)
RTU	4	<del>Projek Usahasama Transit Aliran Ringan (PUTRA)</del> Sistem Transit Aliran Ringan
<del>RTU</del>	<del>5</del>	<del>Sistem Transit Aliran Ringan (STAR)</del>
RTU	6	Funicular
RTU	7	Electric Train Service (ETS)
RTU	8	Mass Rapid Transit (MRT)
RTU	9	High Speed Train

**RVT Reservoir Type**

Type of a reservoir

RVT	1	Balancing Reinforced Concrete (RC)
RVT	2	Service Prestressed Concrete
RVT	3	Fibreglass Reinforced Polyester (FRP)
RVT	4	Glass Coated Steel
RVT	5	Galvanised Pressed Steel
RVT	999	Others

**RVU Reservoir Use**

Use of a reservoir

RVU	1	Balancing
RVU	2	Principal
RVU	3	Service

**RYT River Groyne Type**

Type of material used for river protection works

RYT	1	Permeable
RYT	2	Impermeable

**RWC Reservoir/Water Tank Category**

Reservoir/water tank Category

RWC	1	Covered
RWC	2	Uncovered
RWC	3	Tower

**SBS Base saturation**

Base saturation refers to the proportion of the cation exchange sites in the soil that are occupied by the various cations (hydrogen, calcium, magnesium, potassium)

SBS 1 Low (< 50%)  
 SBS 2 High (> 50%)

**SCC Submarine Cable Category**

Category of a submarine cable

SCC 1 Power  
 SCC 2 Telecommunication

**SCG Soil Colour Group**

Dominant soil matrix colour taken at 50 cm depth from soil surface or just above the lithic or paralithic contact whichever is shallower

SCG DR Dusky red  
 SCG BR Brown  
 SCG Rd Red  
 SCG RY Red-yellow  
 SCG Yw Yellow  
 SCG Pd Pallid  
 SCG Gy Gray  
 SCG Bk Dark brown-black  
 SCG Gg Greenish grey  
 SCG Ol Olive

**SCN Scientific Name**

Scientific Name applied

SCN 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**SCT Clinic Service Type**

Category of a Clinic Service Type

SCT 1 Rural  
 SCT 2 Dental  
 SCT 3 Maternity  
 SCT 4 Polyclinic

**SD2 Secondary Destination\_2**

Distance value display on kilometre post

SD2 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Alphanumeric	1 to 10			24 Characters

**SDA Submission Date**

Date of Planning Permission Submission

SDA 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Date	yyyy /mm/ dd			

**SDG Soil Drainage Class**

Soil drainage is the frequency and duration of periods when the soil is free of saturation or partial saturation. The depth of occurrence and intensity of gley features usually indicate the drainage status/class of the soil.

- SDG 0 Very poorly drained
- SDG 1 Somewhat poorly drained
- SDG 2 Poorly drained
- SDG 3 Somewhat poorly drained
- SDG 4 Imperfectly drained
- SDG 5 Somewhat imperfectly drained
- SDG 6 Moderately well drained
- SDG 7 Well drained
- SDG 8 Somewhat excessively drained
- SDG 9 Excessively drained

**SDC Surficial Deposit Composition Type**

Composition of a surficial deposit

- SDC 0 Unknown
- SDC 1 Clay
- SDC 2 Mud
- SDC 3 Silt

SDC	4	Loess
SDC	5	Sand
SDC	6	Gravel
SDC	7	Peat
SDC	8	Volcanic ash
SDC	9	Coral
SDC	10	Shell

**SDP Depth to pedological features**

The effective depth of the soil at which root growth of grasses or crops is strongly inhibited

SDP	1	0 - 25 (Very shallow)
SDP	2	25 - 50 (Shallow)
SDP	3	50 - 75 (Somewhat moderately deep)
SDP	4	75 - 100 (Moderately deep)
SDP	5	100 - 125 (Deep)
SDP	6	> 125 (Very deep)

**SDT Surficial Deposit Type**

Type of a surficial deposit

SDT	1	Residual
SDT	2	Alluvial
SDT	3	Glacial

**SEC Section Number**

Official section number assigned to a route by the road authority

SEC	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
	Real Number			8 Characters

**SFA Abundance of Pedological features**

The percentage coverage of hard rocks or indurated gravel layers.

SFA	0	None
SFA	VF	Very few < 15%
SFA	F	Few 15-35%
SFA	C	Common 35-60%

SFA M Many 60-80%  
SFA A Abundant >80%

**SFT Swamp Forest Type**

Type of forest found in swampy area on coastal and riverian flats

SFT	1	Peat Swamp Forest
SFT	2	Freshwater Swamp Forest
SFT	3	Nipah

**SGR Slope Gradient**

A value representing the gradient of a slope

SGR 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Percentage	Floating			

**SHT Shore Type**

Tabulates the material type likely to be found at a shore

SHT	1	Sandy
SHT	2	Stony
SHT	3	Muddy

**SHV Spot Height Value**

A value representing above mean sea level height, usually for photogrammetrically derived point

SHV 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Percentage	Floating			

**SIG Signalisation**

Identifies whether or not a feature is signalized.

SIG	1	Signalised
SIG	2	Unsignalised

**SKH Sinkhole Type**

Types of sinkhole

SKH	1	Dissolution
SKH	2	Cover-subsidence
SKH	3	Cover-collapse

**SLC Street Light Category**

Category of a street light

SLC	1	On Ground
SLC	2	Under Ground

**SLD Slope Designation**

Possible slope designation

SCN	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
	Alphanumeric			24 Characters

**SLF Soil Local Family Name**

Name of soil local family

SLF	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text	ASCII			24 Characters

**SMC Soil Colour Matrix**

Actual dominant soil matrix colour taken at 50 cm depth from soil surface or just above the lithic or paralithic contact whichever is shallower using Munsell Soil Colour Chart

SMC	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			50 Characters

**SMD Sewerage Force Main Diameter**

The diameter of a sewerage main line

SMD	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Millimeters	Short Integer			24 Characters

**SMM Sewerage Force Main Material**

Material used for the construction of a sewerage main line

SMM	1	Steel
SMM	2	Centrifugal Glass Reinforced Plastic
SMM	3	Unplasticised Polyvinyl Chloride
SMM	4	Ductile Iron

**SMN Soil Minerology Class**

Soil Minerology Class

SMN 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text	ASCII			30 Characters

**SMP Soil material type underlying the organic layer/peat**

Dominant mineral soil between 50 -100 cm depth from soil surface if it is shallow organic soil OR dominant soil material > 100 cm depth from soil surface if it is moderately deep or deep organic soil

SMP	1	Clayey riverine
SMP	2	Loamy riverine
SMP	3	Sandy riverine
SMP	4	Clayey Marine/ Estuarine/ Brackish (Non sulfuric/Non sulfidic)
SMP	5	Loamy Marine/ Estuarine/ Brackish (Non sulfuric/Non sulfidic)
SMP	6	Sandy Marine/ Estuarine/ Brackish (Non sulfuric/Non sulfidic)
SMP	7	Clayey Marine/ Estuarine/ Brackish (Sulfuric/Sulfudic)
SMP	8	Loamy Marine/ Estuarine/ Brackish (Sulfuric/Sulfudic)
SMP	9	Sandy Marine/ Estuarine/ Brackish (Sulfuric/Sulfudic)
SMP	10	Sapric material on Marine/ Estuarine/ Brackish (Non sulfuric/Non sulfidic)
SMP	11	Hemic material on Marine/ Estuarine/ Brackish (Non sulfuric/Non sulfidic)
SMP	12	Fibric material on Marine/ Estuarine/ Brackish (Non sulfuric/Non sulfidic)
SMP	13	Sapric material on Marine/ Estuarine/ Brackish (Sulfuric/Sulfudic)
SMP	14	Hemic material on Marine/ Estuarine/ Brackish (Sulfuric/Sulfudic)
SMP	15	Fibric material on Marine/ Estuarine/ Brackish (Sulfuric/Sulfudic)

**STT Soil Terrain Class**

Refers to the slope which dominates the area of a soil series or association.

STT	C1	Flat (0 – 2 degree)
STT	C2	Undulating (2 – 6 degree)
STT	C3	Rolling (6 – 12 degree)
STT	C4	Hilly (12 – 20 degree)

STT	C5	Very hilly (20 – 25 degree)
STT	C6	Steep (25 – 30 degree)
STT	C7	Very steep (>30 degree)

**SPD Sewerage Pipe Diameter**

Diameter of a sewerage pipe

SPD 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Millimeters	Short Integer			

**SPE Soil Profile Development**

A constructive process where in disintegrated material resulted from weathering of rocks and minerals gets converted into a soil body. It is a key to understanding the processes that have taken in soil development and is the means of determining the types of soil that occur and is the basis for their classification

SPE	A	Argillic horizon
SPE	C	Cambic horizon
SPE	E	Albic horizon
SPE	F	Sulfidic material
SPE	H	Organic soil
SPE	M	Mollic epipedon
SPE	O	Oxic horizon
SPE	S	Spodic horizon
SPE	T	Sulfuric (thionic) horizon
SPE	U	No diagnostic horizon/property
SPE	V	Vertic properties

**SPF Type of Pedological features**

Type of hard rock or indurated gravel layers that governed the effective depth of the soil.

SPF	O	None
SPF	C	Laterised parent materials
SPF	L	Laterite
SPF	M	Manganese
SPF	P	Plinthite
SPF	W	Pebbles/stones
SPF	R	Rock fragments
SPF	V	Vein quartz
SPF	Q	Quartz

**SPH Soil pH-range**

The term acid, neutral and alkaline refer to the relative concentrations of hydrogen ions (H+) and hydroxyl ions (OH-) in the soil solution. These concentrations are measured in terms of pH value, which gives a measure of the active acidity in the soil solution. Soil pH is a measure of soil acidity.

SPH	1	Extremely acid (<3.5 pH)
SPH	2	Very strong acid (3.5 - 5.0 pH)
SPH	3	Strongly acid (5.1 - 5.5 pH)
SPH	4	Moderately acid (5.6 - 6.0 pH)
SPH	5	Slightly acid (6.1 - 6.5 pH)
SPH	6	Neutral (6.6 - 7.3 pH)
SPH	7	Slightly alkaline (7.4 - 7.8 pH)
SPH	8	Moderately alkaline (7.9 - 8.4 pH)
SPH	9	Strongly alkaline (8.5 - 9.0 pH)

**SPM Sewerage Pipe Material**

Material used for the construction of a sewerage pipe

SPM	1	Vitrified Clay
SPM	2	Reinforced Concrete
SPM	3	High Density Polyethylene
SPM	4	Centrifugal Glass Reinforced Plastic
SPM	5	Ductile Iron
SPM	999	Others

**SPA Soil Parent Material**

Soil Parent material

SPA	G	Granite, Adamellite, Syenite, Microgranite, Gneiss
SPA	R	Rhyolite, Rhyolitic tuff, Rhyodacite, Trachyte.
SPA	D	Diorite, Granidiorite, Dacite, Dacitic tuff, Quartz andesite.
SPA	B	Andesite, Basalt, Andesitic tuff, Basic Tuff, Gabbro, Norite, Serpentinite, Dunnite, Biotite schist, Amphibolite.
SPA	Q	Conglomerate, quartzite, Sandstone, and other predominantly arenaceous rocks.
SPA	S	Shale, Slate, Mudstone, Phyllite, Siltstone quartz mica schist and other predominantly argillaceous rocks.
SPA	L	Limestone, Dolomite and other predominantly calcareous rocks
SPA	P	Reworked material (sol remanie) or lateritic soil
SPA	T3	Older Alluvium and terraces
SPA	T2	Subrecent alluvium and coluvium materials
SPA	T1	Recent alluvium deposits
SPA	A	Beach ridge and related deposits
SPA	E	Marine, brackish water and estuarine deposits
SPA	O	Organic deposits
SPA	H	Human influence(urban and mining)

**SPS Soil Particle Size Class**

Soil Particle Size Class

SPS	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
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**SPT Sewerage Pipe Type**

Type of a sewerage pipe

SPT	1	Trunk
SPT	2	Reticulation
SPT	3	Lateral Connection
SPT	4	Forcemain

**SRC Slope Drain Category**

SRC	1	Toe drain
SRC	2	Berm drain
SRC	3	Inceptor drain
SRC	4	Bench drain

**SRG Sedimentary Rock Group**

Identifies the group of sedimentary rocks

SRG	1	Argillaceous
SRG	2	Arenaceous
SRG	3	Rudaceous
SRG	4	Calcareous
SRG	5	Siliceous
SRG	6	Carbonaceous
SRG	7	Evaporites

**SRT Sedimentary Rock Type****ARGILLACEOUS**

SRT	101	Mudstone
SRT	102	Shale
SRT	103	Siltstone
SRT	104	Claystone

**ARENACEOUS**

SRT	201	Sandstone
SRT	202	Graywacke

**RUDACEOUS**

SRT	301	Conglomerate
SRT	302	Sedimentary breccias

**CALCAREOUS**  
 SRT 401 Limestone  
 SRT 402 Dolomite

**SILICEOUS**  
 SRT 501 Chert

**CARBONACEOUS**  
 SRT 601 Coal

**EVAPORITES**  
 SRT 701 Borates  
 SRT 702 Carbonates  
 SRT 703 Halides  
 SRT 704 Nitrates  
 SRT 705 Sulphates

**SSC Substation Category**

Category of a substation

SSC	1	Primary	Main Intake Substation (PMU)
SSC	2	Primary	Main Distribution Substation (PPU)
SSC	3	Secondary PE	Main Switching Station (SSU)
SSC	4	Indoor Room	Distribution Substation (PCE)

**SSG Soil Taxonomy Subgroup**

USDA Soil Taxonomy Subgroup

SSG 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text	ASCII			24 Characters

**SSL Soil Salinity**

Measurement of the quantity of mineral salts found in a soil..

SSL	1	Very low (>0.5 - 1 dS/m)
SSL	2	Low (>1 - 2 dS/m)
SSL	3	Moderate (>2 - 4 dS/m)
SSL	4	High (>4 dS/m)

## SST Substation Type

Type of a Substation

SST	1	Indoor
SST	2	Outdoor
SST	3	Pole Mounted
SST	4	Underground
SST	5	Indoor & Outdoor
SST	999	Others

## STA Status

Operational status of a feature ~~such as railway and road~~

STA	1	In Operation
STA	2	To be Constructed
STA	3	Under Construction
STA	4	Abandon

## STC Soil Textural Class

Textural classes refers to the fine-earth fraction that reflect the relative proportions of clay (fraction less than 2 microns), silt(2 - 50 microns) and sand (50 - 2,000 microns) in the soil.

STC	H	Heavy clay
STC	C	Clay, Sandy Clay
STC	Cf	Fine sandy clay
STC	Cm	Medium sandy clay
STC	Cc	Coarse sandy clay
STC	T	Silty clay
STC	M	Sandy Clay Loam
STC	Mf	Fine Sandy Clay Loam
STC	Mm	Medium Sandy Clay Loam
STC	Mc	Coarse Sandy Clay Loam
STC	O	Loam
STC	L	Clay Loam
STC	I	Silty clay loam, Silt loam, Silt
STC	A	Sandy loam
STC	Af	Fine sandy loam
STC	Ac	Coarse sandy loam
STC	S	Loamy sand, Sand
STC	Sf	Fine sand
STC	Sc	Coarse sand
STC	fS	Fine loamy sand
STC	cS	Coarse loamy sand
STC	Oi	Fibric soil material
STC	Oe	Hemic soil material
STC	Oa	Sapric soil material

**STE Settlement Type**

Type of settlement

STE	1	City
STE	2	Town
STE	3	Pekan
STE	4	Kampung

**STH Thickness of Pedological features**

Thickness of hard rocks or indurated gravel layers

STH	0	None
STH	1	< 25 cm
STH	2	> 25 cm

**STL Soil Terrain Class**

Thickness of organic layer to the underlying soil materials

STL	C1	Flat (0 – 2 degree)
STL	C2	Undulating 2 - 6
STL	C3	Rolling 6 - 12
STL	C4	Hilly 12 - 20
STL	C5	Very hilly 20 - 25
STL	C6	Steep 25 - 30
STL	C7	Very steep >30

**STO Thickness of Organic Layer**

Thickness of organic layer to the underlying soil materials

STO	1	0 - 25 cm	(Mineral soil)
STO	2	25 - 50 cm	(Mineral soil)
STO	3	50 - 75 cm	(Shallow organic soil)
STO	4	75 - 100 cm	(Shallow organic soil)
STO	5	100 - 300 cm	(Moderately deep organic soil)
STO	6	>300 cm	(Deep organic soil)

**STP Sewerage Treatment Plant Category**

Category of a sewerage treatment plant

STP	1	Covered
STP	2	Uncovered

**STR Strike**

Direction or trend taken by a structural surface or line with respect to north in clockwise direction

STR 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Degree	Floating			

**STM Soil Temperature Regime**

Soil Temperature Regime

STM 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text	ASCII			30 Characters

**STS Capital Status**

Status of Settlement

STS	1	Nation Capital
STS	2	State Capital
STS	3	Division Capital
STS	4	District/Jajahan Capital
STS	5	Sub District Capital

**STT Sewerage Treatment Plant Type**

Type of a sewerage treatment plant

STT	1	Communal Septic Tank
STT	2	Omhoff Tank
STT	3	Oxidation Ponds
STT	4	Bio Drum
STT	5	Bio Filter
STT	6	Bio Soil
STT	7	Trickling Filter
STT	8	Rotating Biological Contact
STT	9	Acty Bio
STT	10	Aerated Lagoon
STT	11	Activated Sludge
STT	12	Extended Aeration
STT	13	Loyal Extended Aeration
STT	14	High Kleen
STT	15	Oxidation Ditch
STT	16	Sewerage Aeration Treatment System
STT	17	Sequential Batch Reactor
STT	18	Upflow Aerobic Sludge Blanket

**STY Stockpile Type**

Type of a stockpile

STY	1	Mining stockpile
STY	2	Quarry stockpile

**SUS Status of Survey**

The status of survey for a land parcel or lot

SUS	1	Survey completed
SUS	2	Survey not yet completed

**SUT Survey Point Type**

Type of a survey point on the ground of known position

SUT	1	Tellurometer Traverse Point
SUT	2	Bearing Tellurometer Distance Point
SUT	3	Photo Control Point
SUT	4	Reference Secondary Point
SUT	5	Standard Traverse Point
SUT	6	Reference Tellurometer Transit Point
SUT	7	Reference Standard Traverse Point
SUT	8	Tertiary Point
SUT	9	Cadastral Boundary Point

**SVM Small VMS Type**

Type of small VMS

SVM	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Text String	ASCII			20 Characters

**SVP Survey Phase**

Identifies the phase of a survey

SVP	1	Reconnaissance
SVP	2	Follow-up
SVP	3	Detailed

**SWT Swamp Type**

Type of a swamp

SWT	1	Tidal
SWT	2	Non Tidal

**SZT Supply Zone Type**

Type of a supply zone

SZT	1	Demand Area
SZT	2	Demand Center

**TAT Tank Type**

Type of a tank

TAT	1	Ground Tank
TAT	2	Tower Tank

**TAU Tank Usage**

Identifies the usage of a tank

TAU	1	Water
TAU	2	Petroleum

**TBE Type of Berm**

TBE	1	Cutting Area
TBE	2	Filling Area

**TBT Trap Boom Types**

The different types of booms

TBT	1	Long Boom
TBT	2	Trash Screen
TBT	3	Trash Rake

**TCC Track Category**

Category of a travel path

TCC	1	Motorable
TCC	2	Unmotorable

**TCL Type of Cycle lane**

TCL	1	Exclusive – Segregated motorcycle path separated by a physical barrier.
TCL	2	Non Exclusive – Dedicated motorcycle lane separated from traffic by lane marking.

**TCO Telecommunication Operators**

Name of Telecommunication Service providers

TCO	1	Telekom Malaysia
TCO	2	Time Telekom
TCO	3	CELCOM
TCO	4	MAXIS
TCO	5	DIGI
TCO	6	U MOBILE
TCO	999	Others

**TCT Track Type**

Type of a travel path

TCT	1	Recreational
TCT	2	Logging
TCT	3	Cycle

**TDS Total Dissolved Solid**

Determine range of total dissolved solid content in a tube well

TDS	1	< 1,500 mg/l
TDS	2	1,500 - 5,000 mg/l
TDS	3	5,000 - 10,000 mg/l
TDS	4	> 10,000 mg/l

**TEX Texture**

~~Identifies the texture of a silt, sand, gravel, colluvium and clay features~~  
 Identifies the texture of a surficial deposit

TEX	1	Clayey
TEX	2	Silty
TEX	3	Sandy
TEX	4	Gravelly

**TJC Road Junction**

Type of Road Junction

JCT	1	T-Junction
JCT	2	Cross Junction
JCT	3	Staggered
JCT	999	Others

**TLA Traffic Light Aspect**

Type of traffic light aspect

TTA	1	LED (18W)
TTA	2	Halogen (50W)

**TLC Traffic Light Cable**

Type of traffic light cable

TLC	1	Multi Core
TLC	2	Armoured

**TLN Type of Lane**

Identify the type of lanes

TLN	1	Fast Lane
TLN	2	Middle Lane
TLN	3	Slow Lane
TLN	4	Emergency Lane

**TLP Traffic Light Pole**

Type of Traffic Light Pole

TLP	1	Standard
TLP	2	Overhead

**TLQ Traffic Light Quantity**

Quantity of Traffic Light Pole

TLQ	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
	Real Number			24 Characters

**TNU Tunnel Usage**

Usage of a tunnel

TNU	1	Railway
TNU	2	Road
TNU	3	Flood Mitigation
TNU	4	Multi Modal

**TOL Toll**

Identifies whether the use of a highway/road is free or charged

TOL	1	Toll
TOL	2	Free

**TOP Top Mark**

#### Type of Top Mark

TOP	1	Cone
TOP	2	Sphere
TOP	3	Cylinder
TOP	4	Board
TOP	5	X-Shape

#### **TOS Toll Operating System**

##### Type of TOS

TOS	1	Open Toll System
TOS	2	Close Toll System

#### **TQM Air Quality Monitoring Tunnel**

TQM	1	Ground Level
TQM	2	Under Ground

#### **TRA Traffic Sign Type**

##### Type of a traffic sign

TRA	1	Standard Road Sign
TRA	2	Variable Message Sign

#### **TRM Type of road marking**

TRM	1	centre line
TRM	2	lane line
TRM	3	edge line
TRM	4	no passing zone line
TRM	5	turn line
TRM	6	stop line
TRM	7	give way line
TRM	8	pedestrian crossing markings
TRM	9	words and symbol messages
TRM	10	arrows
TRM	11	painted islands and chevron marking
TRM	12	chevron separator for motorcycle lane
TRM	13	yellow boxes
TRM	14	kerb marking
TRM	15	transverse yellow bars

#### **TRT Trench Type**

##### Type of Trench

TRT	1	Covered
TRT	2	Uncovered

**TRU Trench Usage**

Usage of Trench

TRU	1	Utility
TRU	999	Others

**TSB Traffic Safety Barriers**

Possible type of traffic safety barriers

TSB	1	Guardrail
TSB	2	Wire rope
TBB	3	New Jersey barrier
TSB	4	Crash Cushion

**TSD Road Traffic Safety Devices Type**

Possible type of road traffic safety devices

TSD	1	Flexible post/ safety bollard
TSD	2	Raised Pavement Marker (Tiger eye, Cat Eye)
TSD	3	Delineator post
TSD	4	Antiglare fence
TSD	5	Road stud
TSD	6	Amber light
TSD	7	Interlocking Paver

**TSL Street Light Type**

Type of Street Light

TSL	1	Fauna
TSL	2	Flora
TSL	3	Obor
TSL	4	Wau Bulan
TSL	999	Others

**TST Trigonometry Station Type**

Type of a trigonometric station

TST	1	Geodetic Station
TST	2	Primary Station
TST	3	Secondary Station
TST	4	Reference Secondary Point
TST	5	Tertiary Station
TST	6	Traverse Trigonometry Station
TST	7	Brunei Trigonometry Station

**TYP      Type of Slope Protection**

- TYP    1    Vegetation
- TYP    2    Retaining Wall
- TYP    3    Gabion
- TYP    4    Cement Grouting

**ULT      Underpass Lighting Type**

Type of Underpass Lighting

- ULT    1    Brick Light
- ULT    2    Spot Light
- ULT    3    Wall Light
- ULT    4    Flood Light
- ULT    999    Others

**VEP      Vegetation Yield Production**

A value representing the yield production of vegetation

- VEP    0    Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**VGS      Vegetation Status**

A value representing the status of vegetation

- VGS    0    Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**VGT      Vegetation Grass Type**

Type of vegetation grass

- VGT    1    Pasture
- VGT    2    Grass Nursery
- VGT    3    Grassland

**VIT      Volcanic Intermediate Rock Type**

Type of a volcanic intermediate rock

- VIT    1    Andesite
- VIT    2    Trachyte
- VIT    3    Dacite

**VLT Voltage**

A value representing the voltage of a power line

VLT 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Volts	Short Integer			

**VMS Variable Message Sign Structure**

Type of Variable Message Sign Structure

VMS 1 Cantilever  
 VMS 2 Unipole  
 VMS 3 Gantry  
 VMS 999 Others

**VMT Valve Material Type**

Type of valve material

VMT 1 Polyathelene (exposed)  
 VMT 2 Steel (enclosed in chamber)

**VPT Vegetation Paddy Type**

Type of Paddy

VPT 1 Wet Paddy  
 VPT 2 Dry Paddy

**VTC Vertical Clearance**

A value representing the minimum height that is passable to traffic

VTC 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meter	Short Integer			

**VVY Vegetation Variety**

Any variety to identify a feature

VVY 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			

**WWM Vegetation Water Management**

Type of vegetation water management

WWM 1 Irrigated  
WWM 2 Rainfed

**VYP Vegetation Year Planted**

A value representing the planted year of vegetation

VYP 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Text String	ASCII Text			24 Characters

**WAM Water Level Mark**

The line along a coast that marks a high or low tide

WAM 1 High Water Mark  
WAM 2 Low Water Mark

**WAT Waste Type**

Type of a waste

WAT 1 Chemical  
WAT 2 Hazardous  
WAT 3 Clinical  
WAT 4 Radioactive  
WAT 5 Solid

**WID Width**

Width of a feature, in meters

WID 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meter	Floating			

**WIT Water Pipe Type**

Type of a water pipe

WIT 1 Trunk  
WIT 2 Distribution  
WIT 3 Reticulation  
WIT 4 Communication  
WIT 5 Raw

**WKC Wreck Category**

Category of a wreck

WKC 1 Swept  
WKC 2 Unswept

**WKD Wreck Depth**

Identifies whether the depth of a wreck is known or unknown

WKD 1 Depth Known  
WKD 2 Depth Unknown

**WLN Width of Lane**

Width of a lane, in meters

WLN 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meter	Real Number			24 Characters

**WLT Well Type**

Type of a well

WLT 1 Masonry  
WLT 2 Earth  
WLT 3 Tube

**WOS Work Status**

Status of a work

WOS	1	Ongoing
WOS	2	Completed

**WPC Water Pump Category**

Category of a water pump

WPC	1	Treatment
WPC	2	Raw

**WPM Water Pipe Material**

Type of material used for water pipes

WPM	1	Acrylonitrile Butadiene Styrene (ABS)
WPM	2	Asbestos Cement (AC)
WPM	3	Cast Iron
WPM	4	Copper
WPM	5	Ductile Iron (DI)
WPM	6	Galvanized Iron (GI)
WPM	7	High Density Polyethylene (HDPE)
WPM	8	Mild Steel (MS)
WPM	9	Poly Steel
WPM	10	Poly Vinyl Chloride (PVC)
WPM	11	Polypropylene Random (PPR)
WPM	12	Stainless Steel
WPM	13	Unplasticized Poly Vinyl Chloride (UPVC)
WPM	999	Others

**WPT Water Pump Type**

Type of a water pump

WPT	1	<del>Inlet</del> End Suction
WPT	2	<del>Outlet</del> Split Casing
WPT	3	Submersible
WPT	999	Others

**WRN Road Warning Sign**

WRN	Wd.1	Uneven Road (Jalan Tidak Rata)
WRN	Wd.2	Sharp Meander (Liku Tajam)
WRN	Wd.3	Cross Road (Simpang Empat)
WRN	Wd.4	Fenced Railroad Crossing (Lintasan Keretapi Berpagar)
WRN	Wd.5	Fenced Automatic Railroad Crossing (Lintasan Keretapi Berpagar Automatik)
WRN	Wd.6 & Wd.7	Railroad Crossing Without Fence (Lintasan Keretapi Tanpa Pagar)
WRN	Wd.8	Slope Decline (Cerun Menurun)
WRN	Wd.9	Slope Climbing (Cerun Mendaki)
WRN	Wd.10a	Right Corner (Liku Kanan)
WRN	Wd.10b	Left Corner (Liku Kiri)
WRN	Wd.11	Winding Road (Jalan Bengkang Bengkok)
WRN	Wd.12	Soft Shoulder (Bahu Jalan Lembut)
WRN	Wd.13	Slippery When Wet (Jalan Licin)
WRN	Wd.14	Pedestrian Crossing (Lintasan Pejalan Kaki)
WRN	Wd.15	Children Crossing Area (Kawasan Kanak-Kanak Melintas)
WRN	Wd.16	Caution (Berhati-Hati)
WRN	Wd.17	Towing Zone (Zon Tunda)
WRN	Wd.18	Stop Sign Ahead (Papan Tanda Berhenti Di Hadapan)
WRN	Wd.19	Give Way Sign Ahead (Papan Tanda Beri Laluan Di Hadapan)
WRN	Wd.20	Narrow Passage Ahead (Laluan Sempit Di Hadapan)
WRN	Wd.21	Road Narrows On The Left Or Right (Jalan Semakin Sempit)
WRN	Wd.22	Traffic Signals Ahead (Lampu Isyarat Di Hadapan)
WRN	Wd.23	Obstruction Sign (Halangan Di Hadapan)
WRN	Wd.24	No Restriction (Tiada Halangan)
WRN	Wd.25	Staggered Junctions (Simpang Tak Serentak)
WRN	Wd.26	Staggered Junctions With One No-Entry Sign Is Used (Simpang Tak Serentang Dengan Satu Jalan Di Tutup)
WRN	Wd.27a	'T' Junction (Simpang Tiga)
WRN	Wd.27b	Right Junction (Simpang Kanan)
WRN	Wd.27c	Left Junction (Simpang Kiri)
WRN	Wd.27d	Right/Straight Optional Lane (Jalan Menyimpang Di Sebelah Kanan)
WRN	Wd.27e	Left/Straight Optional Lane (Jalan Menyimpang Di Sebelah Kiri)
WRN	Wd.28a	Merging Road On The Right (Jalan Kecil Bercantum Di Sebelah Kanan)
WRN	Wd.28b	Merging Road On The Left (Jalan Kecil Bercantum Di Sebelah Kiri)
WRN	Wd.29	Stone Area / Landslide (Kawasan Batu / Tanah Runtuh)
WRN	Wd.30	Cattle Crossing Area (Kawasan Lembu Melintas)
WRN	Wd.31	Circular Intersection (Bulatan Di Hadapan)
WRN	Wd.32a	Lane Climbing (Lorong Mendaki)
WRN	Wd.32b	Lane Decline (Lorong Menurun)
WRN	Wd.33	Blind People Crossing (Orang Buta Melintas)
WRN	Wd.34	Disabled Person Path (Lintasan Orang Cacat)
WRN	Wd.35	Narrow Bridge (Jambatan Sempit)
WRN	Wd.36	Diverging Traffic (Berpisah Arah)
WRN	Wd.37	Two-Way Traffic (Jalan Dua Hala)
WRN	Wd.38a	Divided Highway Ends (Jalan Kembar Tamat)
WRN	Wd.38b	Divided Highway (Symbol) (Jalan Kembar Di Hadapan)
WRN	Wd.39a	Chevron (Right Way) (Tanda Arah Selekoh Ke Kanan)
WRN	Wd.39b	Chevron (Left Way) (Tanda Arah Selekoh Ke Kiri)
WRN	Wd.40	Bridge Deliberate Station (Stesen Jambatan Timbang)
WRN	Wd.41	Wild Animal Crossing Area (Kawasan Binatang Liar Melintas)
WRN	Wd.42	Y-Intersection (Simpang Jalan Ke Kiri Dan Ke Kanan)
WRN	Wd.45	Playground (Padang Permainan)
WRN	Wd.49	Speed Hump (Bonggol Dihadapan)
WRN	Wd. 51	Speed Limit Zone (Peringatan Di Zon Had Laju)
WRN	Wd. 52	Speed Limit Zone Ahead (Zon Had Laju Di Hadapan)

**WRU Water Route Usage**

Usage of a water route

WRU	1	Ferry
WRU	2	Boat
WRU	3	Ship

**WTU Tube Well Use**

Determine the usage of a tube well

WTU	1	Agriculture
WTU	2	Domestic
WTU	3	Industrial
WTU	4	Natural mineral water/bottled

**WTY Well Type**

Type of a well

WTY	1	Pump
WTY	2	Test
WTY	3	Production
WTY	4	Monitoring

**WVT Water Valve Type**

Type of a water valve

WVT	1	Foot Valve
WVT	2	Air Valve
WVT	3	Altitude Valve
WVT	4	Sluice Valve
WVT	5	Pressure Reducing Valve
WVT	6	Non Return Valve
WVT	7	Butterfly Valve
WVT	8	Scour Valve
WVT	999	Others

**YER Year**

Identifies the year of data

YER	0	Actual Value
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Units	Format	Range	Increment	Maximum Character
Year	yyyy			

**ZEL Z Ellipsoidal**

A value representing height above an ellipsoid

ZEL 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meter	Floating			24 Characters

**ZGP Z Global Positioning System**

A value representing height obtained from GPS observations

ZGP 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meter	Floating			

**ZOC Zoning Category**

Category of zoning

ZOC 1 Residential  
 ZOC 2 Commercial  
 ZOC 3 Industrial

**ZOR Z Orthometric**

A value representing vertical distance (height) of a feature measured the from mean sea level

ZOR 0 Actual Value

Units	Format	Range	Increment	Maximum Character
Meters	Floating			

*will be decided by the committee of TC2*

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