Appendix IV

Library Layers

Other Data

LIBRARY LAYER: road_lines

COVERAGE NAME : rd_lin

PRECISION : Double

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : LINE

DESCRIPTION : Roads and road related line data

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
FNODE#	4	5	B	-
TNODE#	4	5	B	-
LPOLY#	4	5	B	-
RPOLY#	4	5	B	-
LENGTH	8	18	F	5
RD_LIN#	4	5	B	-
RD_LIN-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

FNODE# : From Node
TNODE# : To Node
LPOLY# : Left Polygon#
RPOLY# : Right Polygon#
LENGTH : Lenght of the ARC
RD_LIN# : Internal ID Number!
RD_LIN-ID : User defined ID Number
CODE : Code Number for each features

CODE DESCRIPTION:

CODE	DESCRIPTION
1	All weather, hard surface road, two or more lanes wide
2	All weather, hard surface road, one lane wide
3	All weather, loose surface, two or more lanes wide
4	All weather, loose surface, one lane wide
5	Dry weather, loose surface
6	Cart track
7	Footpath
8	Streets in built-up areas
60	Ferry
61	Ford

LIBRARY LAYER : road_points

COVERAGE NAME : rd_pts

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Roads and Related Point Data

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
RD_PTS#	4	5	B	-
RD_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
RD_PTS# : Internal ID Number
RD_PTS-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION

CODE	DESCRIPTION
12	Bridge
13	Footbridge
60	Ferry
61	Ford

LIBRARY LAYER : road_carto

COVERAGE NAME : rd_carto

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Road related cartographic point data

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
RD_PTS#	4	5	B	-
RD_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
RD_PTS# : Internal ID Number
RD_PTS-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION

CODE	DESCRIPTION
9	Rout Maker (National)
10	Rout Maker (Other National)
11	Traffic Circle

LIBRARY LAYER: rail_lines

COVERAGE NAME : rr_lin

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : LINE

DESCRIPTION : Railroads and rail line data

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
FNODE#	4	5	B	-
TNODE#	4	5	B	-
LPOLY#	4	5	B	-
RPOLY#	4	5	B	-
LENGTH	8	18	F	5
RR_LIN#	4	5	B	-
RR_LIN-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

FNODE#	: From Node
TNODE#	: To Node
LPOLY#	: Left Polygon#
RPOLY#	: Right Polygon#
LENGTH	: Lenght of the ARC
RD_LIN#	: Internal ID Number!
RD_LIN-ID	: User defined ID Number
CODE	: Code Number for each features

CODE DESCRIPTION:

CODE	DESCRIPTION
16	Railroad Track

LIBRARY LAYER: rail_points

COVERAGE NAME : rr_pts

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Railroad related point data

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
RR_PTS#	4	5	B	-
RR_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
RR_PTS# : Internal ID Number
RR_PTS-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION

CODE	DESCRIPTION
17	Railroad Station
18	Railroad Bridge

LIBRARY LAYER: infra_polys

COVERAGE NAME : pop_shp

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Polygons describing the extents of built-up areas, villages, cemeteries, airfields or other special man-made features.

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
POP_SHP#	4	5	B	-
POP_SHP-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
POP_SHP# : Internal ID Number
POP_SHP-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION:

CODE	DESCRIPTION
0	Holes or complex polygons within this data set (not drawn)
22	Built-up Area
23	Village (with a high density of structures)
24	Village (with a medium density of strctures)
25	Village (with a low density of structures)
36	Cemetary
39	Airfield
42	Floating Village (with a high density of structures)
43	Floating Village (with a medium to low density of structures
45	Dock or Pier
225	Large areas of numerous low density villages

LIBRARY LAYER: infra_points

COVERAGE NAME : pop_pts

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Infrastructure point features

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
POP_PTS#	4	5	B	-
POP_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA	: Area in Square Meter
PERIMETER	: Perimeter in Meter
POP_SHP#	: Internal ID Number
POP_SHP-ID	: User Defined ID Number
CODE	: Code Number

CODE DESCRIPTION:

CODE	DESCRIPTION
21	Buildings
26	Khet Office and Krong Office
27	Srok Office and Khan Office
28	Khum Office
29	Temple
30	School
31	Church
32	Mosque
33	Stupa
34	Post Office
35	Hospital
37	Historical Site
38	Light House
40	Mine
41	Port

LIBRARY LAYER: infra_carto

COVERAGE NAME : pop_cart

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Infrastructure cartographic point features

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
POP_PTS#	4	5	B	-
POP_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
POP_SHP# : Internal ID Number
POP_SHP-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION:

CODE	DESCRIPTION
44	Grounds/Playgrounds/Stadiums

LIBRARY LAYER: hydrology_polys

COVERAGE NAME : dn_pol

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Water and water related polygon features

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
DN_NET#	4	5	B	-
DN_NET-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
DN_NET# : Internal ID Number
DN_NET-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION:

CODE	DESCRIPTION
0	Holes or Complex Poloygons within this data set (not drawn)
51	River/Stream (perennial or permanent water)
52	Intermittent River/Stream (temporal or intermittent water)
53	Lake or Pond (perennial)
54	Lake or Pond (temporal)
55	Salt Evaporator

LIBRARY LAYER: hydrology_lines

COVERAGE NAME : dn_lin

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : LINE

DESCRIPTION : Water and water related line features

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
FNODE#	4	5	B	-
TNODE#	4	5	B	-
LPOLY#	4	5	B	-
RPOLY#	4	5	B	-
LENGTH	8	18	F	5
DN_NET#	4	5	B	-
DN_NET-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

FNODE#	: From Node
TNODE#	: To Node
LPOLY#	: Left Polygon#
RPOLY#	: Right Polygon#
LENGTH	: Lenght of the ARC
DN_NET#	: Internal ID Number
DN_NET-ID	: User defined ID Number
CODE	: Code Number for each features

CODE DESCRIPTION:

CODE	DESCRIPTION
51	River/Stream (permanent water)
52	Intermint River/Stream (temporal or intermittent water)
53	Arcs from polygon features (not drawn)
54	Arcs from polygon features (not drawn)
55	Arcs from polygon features (not drawn)
56	Canal Small
57	Canal Large
64	Levee
65	Concrete of Stone Revetment
69	Abondoned Canal

LIBRARY LAYER: hydrology_points

COVERAGE : dn_pts

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Water related point features

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
DN_PTS#	4	5	B	-
DN_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
DN_PTS# : Internal ID Number
DN_PTS-ID : User Defined ID Number
CODE : Code Number

CODE DESCRIPTION:

CODE	DESCRIPTION
63	Eathern Dam
67	Water Tower/Tank

LIBRARY LAYER: topographic_pts

COVERAGE NAME : topo_pts

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Topographic features described as points

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
TOPO_PTS#	4	5	B	-
TOPO_PTS-ID	4	5	B	-
CODE	4	5	B	-

ITEM DEFINITION:

AREA	: Area in Square Meter
PERIMETER	: Perimeter in Meter
TOPO_PTS#	: Internal ID Number
TOPO_PTS-ID	: User Defined ID Number
CODE	: Code Number

CODE DESCRIPTION:

CODE	DESCRIPTION
94	Small Hill

LIBRARY LAYER: benchmarks

COVERAGE NAME : cont_pts

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Control Points, Benchmarks, and Spot Elevations

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
CONT_PTS#	4	5	B	-
CONT_PTS-ID	4	5	B	-
CODE	4	5	B	-
SPOT	4	5	B	-

ITEM DEFINITION:

AREA	: Area in Square Meter
PERIMETER	: Perimeter in Meter
TOPO_PTS#	: Internal ID Number
TOPO_PTS-ID	: User Defined ID Number
CODE	: Code Number
SPOT	: Spot Elevation in Meter

CODE DESCRIPTION:

CODE	DESCRIPTION
101	Horizontal Control Point (established after 1990)
102	Horizontal Control Point (established before 1990)
103	Bench Mark (established before 1990)
104	Spot Elevation in Meter
106	Bench Mark (established after 1990)

LIBRARY LAYER: contours

COVERAGE NAME : cont_lin

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : LINE

DESCRIPTION : Contour Lines

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
FNODE#	4	5	B	-
TNODE#	4	5	B	-
LPOLY#	4	5	B	-
RPOLY#	4	5	B	-
LENGTH	8	18	F	5
CONT_LIN#	4	5	B	-
CONT_LIN-ID	4	5	B	-
CODE	4	5	B	-
SPOT	4	5	B	-

ITEM DEFINITION:

FNODE#	: From Node
TNODE#	: To Node
LPOLY#	: Left Polygon#
RPOLY#	: Right Polygon#
LENGTH	: Lenght of the ARC
CONT-LIN#	: Internal ID Number
CONT-LIN-ID	: User defined ID Number
CODE	: Code Number for each features
SPOT	: Contour value in Meter

CODE DESCRIPTION:

CODE	DESCRIPTION
112	Index Contour
113	Intermediate Contour
114	Suppementary Contour
115	Depression Contour

LIBRARY LAYER: landuse

COVERAGE NAME : landuse

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Landuse data as interpreted from LandSAT TM imagery

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
LANDUSE#	4	5	B	-
LANDUSE-ID	4	5	B	-
LU_CODE	4	5	B	-
TOPO_CODE	4	5	B	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
LANDUSE# : Internal ID Number
LANDUSE-ID : User Defined ID Number
LU_CODE : Landuse Code Number
TOPO_CODE : Topographic Map Landuse Code Number (see TOPO_LANDUSE entry)

RELATED DATA FILE : LANDUSE_TEXT

RELATED ITEM : LU_CODE

RELATED DATA FILE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
LU_CODE	4	5	B	-
CLASSIFICATION	5	5	C	-
CATEGORY	40	40	C	-
NAME	80	80	C	-

LIBRARY LAYER: landuse

RELATED DATA FILE DESCRIPTION:

LU_CODE	CLASSIFICATION	CATEGORY	NAME
1	U	Urban, Built-up Areas	Settlement
2	I	Urban, Built-up Areas	Infrastructure (Airfield, factory, etc.)
3	Ar	Agricultural lands	Paddy field
4	Al	Agricultural lands	Receding and Floating rice fields
5	Au	Agricultural lands	Field crop
6	As	Agricultural lands	Swidden agriculture (Slash and burn)
7	Ao	Agricultural lands	Orchard
8	Ap	Agricultural lands	Plantation (Rubber plantation)
9	Av	Agricultural lands	Village garden crop
10	Ag	Agricultural lands	Garden crop
11	Arv	Agricultural lands	Paddy field with villages
12	G	Grasslands	Grassland (undifferentiated)
13	Ga	Grasslands	Abandoned field covered by grass
14	Gf	Grasslands	Flooded grassland
15	Gs	Grasslands	Grass Savannah
16	Gm	Grasslands	Grass with termite mounds
17	Ms	Grasslands	Marsh and swamp
18	S	Shrublands	Shrubland (undifferentiated)
19	Sa	Shrublands	Abandoned field covered by shrub
20	Sf	Shrublands	Flooded shrub
21	St	Shrublands	Woodland and scattered trees (C < 10%)
22	Fe	Forest covers	Evergreen broad leafed forest
23	Fc	Forest covers	Coniferous forest
24	Fd	Forest covers	Deciduous forest
25	Fdo	Forest covers	Dry Deciduous (Open) forest
26	Fx	Forest covers	Mixed forest from evergreen and deciduous species
27	Fr	Forest covers	Riparian forest
28	Fs	Forest covers	Bamboo and Secondary forests
29	Ff	Forest covers	Flooded forest
30	Fm	Forest covers	Mangrove forest
31	Fmd	Forest covers	Degraded mangove forest
32	Fp	Forest covers	Forest plantation
33	Wl	Water Features	Lakes (>8 ha)
34	Wp	Water Features	Lakes (<8 ha)
35	Wr	Water Features	Reservoir
36	Ws	Water Features	Shrimp/Fish farming and Salt pan
37	Wo	Water Features	Others (Sea, Bay, etc.)
38	B	Soils and Rocks	Barren land
39	Bs	Soils and Rocks	Sand bank
40	Br	Soils and Rocks	Rock outcrop

LIBRARY LAYER: topo_landuse

COVERAGE NAME : lu_topo

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Landuse grouped and dissolved for topographic maps

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
LANDUSE#	4	5	8	-
LANDUSE-ID	4	5	8	-
TOPO_CODE	4	5	8	-

ITEM DEFINITION:

AREA : Area in Square Meter
PERIMETER : Perimeter in Meter
LANDUSE# : Internal ID Number
LANDUSE-ID : User Defined ID Number
TOPO_CODE : Topographic Map Landuse Code Number

LIBRARY LAYER: topo_landuse

TOPO_CODE DESCRIPTION:

TOPO_CODE	DESCRIPTION
53	Lake or Pond
55	Salt Evaporator
51	Open Water (oceans, large lakes and rivers)
91	Rock Outcrops
96	Sand Terrain
98	Barren Land
151	Dense Frest or Jngle
152	Clear Forest
153	Shrubland
155	Plantation
156	Flooded Grassland
157	Flooded Shrub
158	Flooded Forest
159	Marsh or Swamp
160	Rice Field
161	Mangrove
162	Field Crops
163	Swidden Agriculture
164	Grassland
165	Orchards
166	Village Garden Crops
167	Receding Rice Fields and Floating Rice Fields
169	Urban, and Built-up Areas

Other Data: geology

COVERAGE NAME : geology

PRECISION : DOUBLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Geology/Landforms

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	8	18	F	5
PERIMETER	8	18	F	5
GEOLOGY#	4	5	B	-
GEOLOGY-ID	4	5	B	-
GEO100K	4	4	I	-
GEO500K	4	4	I	-

ITEM DEFINITION:

AREA	: Area in Square Meter
PERIMETER	: Perimeter in Meter
GEOLOGY#	: Internal ID Number
GEOLOGY-ID	: User Defined ID Number
GEO100K	: Codes for 1:100,000 Scale Data
GEO500K	: Codes for 1:500,000 Scale Data

RELATED DATA FILE : GEOLOGY.LEG

RELATED ITEM : GEO500K

RELATED DATA FILE DESCRIPTION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
GEO500K	4	5	B	-
LEGEND_CODE	40	40	C	-
CATEGORY	60	60	C	-
LEGEND_EG	100	100	C	-

Other Data: geology

GEO500K DESCRIPTION:

GEO500K	LEGEND_CODE	CATEGORY	LEGEND_EG
1	W	Landform	Water
2	Fp	Cenozoic	Floodplains
3	Af	Cenozoic	Alluvial fans
4	Co	Cenozoic	Colluvial (Talus conces)
5	Pd	Cenozoic	Pediments
6	Lb	Cenozoic	Lakebeds
7	Db	Cenozoic	deltaic deposits
9	Br	Cenozoic	levees
10	Sw	Cenozoic	Organic deposits (swamps)
12	Ap	Cenozoic	Alluvial plains
14	Ta	Cenozoic	Terrace allivial
105	Jac	Mesozoic	claystone
106	JCg	Mesozoic	sandstone
107	JCcg	Mesozoic	conglomerates
108	J	Mesozoic	sandstone
109	J1-2	Mesozoic	Red Terrane (reddish brown sandstone, siltstone and marl
111	Tg	Mesozoic	formation (sandstone and micro-breccias)
112	Tx	Mesozoic	formation (siltstone, schists and marl)
115	CP	Pareozoic	limestone
116	DC	Pareozoic	Black shists, phtanites, sandstone
117	DHj	Pareozoic	Phtanites
118	DHx	Pareozoic	Shists and sandstone
123	CS2q	Pareozoic	quartzites
124	Csq	Pareozoic	quartzites
125	CSx	Pareozoic	schists
126	CScg	Pareozoic	metaconglomerates
201	C	Unknown Geologic Era	hornfels
303	p2/p2b	Volcanic Rocks	rhyolites and rhyodacites
305	b	Volcanic Rocks	dacites
306	p1	Volcanic Rocks	rhyolites
307	p	Volcanic Rocks	rhyolites
308	α1	Volcanic Rocks	trachyte, andesites, andestes and tuffs
309	α	Volcanic Rocks	andesites, andesitic breccias and tuffs
310	r2t	Volcanic Rocks	Volucano-sedimentary breccias and acidic tuffs
311	r1t	Volcanic Rocks	acid tuffs
401	g4	Pultonic Rocks	high alumina granite
402	g3	Pultonic Rocks	granite or g3-4 coarse grainded granites
404	g3-2	Pultonic Rocks	fine grained granites
407	g2	Pultonic Rocks	granite
409	gb	Pultonic Rocks	granodiorite
999	NC	No Classified Rocks	No Classified Rocks

Other Data: khet50

COVERAGE NAME : khet50

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Khet political boundaries

SOURCE : Geographic Survey Institute of Cambodia

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	12	F	3
PERIMETER	4	12	F	3
KHET50#	4	5	B	-
KHET50-ID	4	5	B	-
CODEKHET	2	2	I	-
KHET_CODE	4	5	B	3

ITEM DEFINITION:

AREA : Area
PERIMETER : Perimeter
KHET50# : Internal ID Number
KHET50-ID : User defined ID Number
CODE_KHET : Khet ID Code
KHET_CODE : Khet ID Code

RELATED DATA FILE : KHET50.DAT

RELATED ITEM : KHET_CODE

RELATED DATA FILE DESCRIPTION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
KHET_CODE	4	5	B	-
UTMX	8	12	F	3
UTMY	8	12	F	3
KHMER_NAME	60	60	C	-
ROMAN_NAME	60	60	C	-
ROMAN_NAME_CAPS	60	60	C	-

Other Data: srok50

COVERAGE NAME : srok50

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Srok political boundaries

SOURCE : Geographic Survey Institute of Cambodia

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	12	F	3
PERIMETER	4	12	F	3
SROK50#	4	5	B	-
SROK50-ID	4	5	B	-
CODESROK	2	2	I	-
SROK_CODE	4	5	B	3

ITEM DEFINITION:

AREA	: Area
PERIMETER	: Perimeter
SROK50#	: Internal ID Number
SROK50-ID	: User defined ID Number
CODESROK	: Srok ID Code
SROK_CODE	: Srok ID Code

RELATED DATA FILE : SROK50.DAT

RELATED ITEM : SROK_CODE

RELATED DATA FILE DESCRIPTION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
SROK_CODE	4	5	B	-
UTMX	8	12	F	3
UTMY	8	12	F	3
KHMER_NAME	60	60	C	-
ROMAN_NAME	60	60	C	-
ROMAN_NAME_CAPS	60	60	C	-

Other Data: khum50

COVERAGE NAME : khum50

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POLYGON

DESCRIPTION : Khum political boundaries

SOURCE : Geographic Survey Institute of Cambodia

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	12	F	3
PERIMETER	4	12	F	3
KHUM50#	4	5	B	-
KHUM50-ID	4	5	B	-
CODEKHUM	2	2	I	-
KHUM_CODE	4	5	B	3

ITEM DEFINITION:

AREA	: Area
PERIMETER	: Perimeter
KHUM50#	: Internal ID Number
KHUM50-ID	: User defined ID Number
CODEKHUM	: Khum ID Code
KHUM_CODE	: Khum ID Code

RELATED DATA FILE : NEWKHUM50.DAT

RELATED ITEM : KHUM_CODE

RELATED DATA FILE DESCRIPTION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
KHUM_CODE	4	5	B	-
UTMX	8	12	F	3
UTMY	8	12	F	3
KHMER_NAME	60	60	C	-
ROMAN_NAME	60	60	C	-
ROMAN_NAME_CAPS	60	60	C	-

Other Data: annotation

COVERAGE NAME : annotation

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Annotation Label Points

SOURCE : Geographic Survey Institute of Cambodia

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	5	B	3
PERIMETER	4	5	B	3
ANNOTATION#	4	5	B	-
ANNOTATION-ID	4	5	B	-
ANNO_CODE	4	5	B	-
UTMX	8	12	F	3
UTMY	8	12	F	3
KHMER_NAME	60	60	C	-
ROMAN_NAME	60	60	C	
MAP_SHEET	8	8	C	
ROMAN_NAME_CAPS	60	60	C	-

ITEM DEFINITION:

AREA : Area
PERIMETER : Perimeter
ANNOTATION# : Internal ID Number
ANNOTATION-ID : User defined ID Number
ANNO_CODE : Annotation CODE Value
UTMX : UTM X value
UTMY : UTM Y value
KHMER_NAME : Khmer character Name
ROMAN_NAME : Roman character Name
MAP_SHEET : Map Sheet Number
ROMAN_NAME_CAPS : Uppercase version of Roman_Name

Other Data: annotation

CODE DESCRIPTION:

CODE	DESCRIPTION
15	Lake or Pond
16	River canal or stream, less than 18m wide

50	River canal or stream, more than 18m wide
51	Lake or pond (having no water during the dry season)
52	Canalor stream (having no water during the dry season)
401	Additional Annotation Strings
500	Additional Annotation Strings
600	Mountain
601	Additional Annotation Strings
602	Additional Annotation Strings
700	Island
701	Additional Annotation Strings

OTHER DATA: gps_points

COVERAGE NAME : gps_points

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : additional benchmark related data

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	12	F	3
PERIMETER	4	12	F	3
GPS_POINTS#	4	5	B	-
GPS_POINTS-ID	4	5	B	-
CODE	8	8	I	-
TYPE	4	5	B	-
LONG1	5	5	C	-
LONG2	5	5	C	-
LAT1	5	5	C	-
LAT2	5	5	C	-
UTM-X	8	15	F	3
UTM-Y	8	15	F	3
HEIGHT	8	9	F	3

ITEM DEFINITION:

AREA : Area
PERIMETER : Perimeter
GPS_POINTS# : Internal ID Number
GPS_POINTS-ID : User defined ID Number
CODE : Unique Feature ID
TYPE : Type as Defined by Benchmark Layer
LONG1 : Longitude Minutes
LONG2 : Longitude Seconds
LAT1 : Latitude Minutes
LAT2 : Latitude Seconds
UTM-X : UTM Easting
UTM-Y : UTM Northing
HEIGHT : Elevation (if known) of the point

OTHER DATA: gps_points

TYPE DESCRIPTION:

TYPE	DESCRIPTION
102	Horizontal Control Point (established before 1990)
103	Bench Mark (established before 1990)
104	Spot Elevation in Meter
106	Bench Mark (established after 1990)
107	Unknown

OTHER DATA: hist_sties

COVERAGE NAME : hist_sites

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : Additional Historical Sites

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	12	F	3
PERIMETER	4	12	F	3
HIST_SITES#	4	5	B	-
HIST_SITES-ID	4	5	B	-
CODE	8	8	I	-
NAME	60	60	C	-
UTM-X	8	15	F	3
UTM-Y	8	15	F	3

ITEM DEFINITION:

AREA	: Area
PERIMETER	: Perimeter
HIST_SITES#	: Internal ID Number
HIST_SITES-ID	: User defined ID Number
CODE	: Unique Feature ID (concatination with sheet number)
NAME	: Name of the site in Roman Characters
UTM-X	: UTM Easting
UTM-Y	: UTM Northing

TYPE DESCRIPTION:

CODE	DESCRIPTION
NA	Bascially a unique indentifer, not useful as a CODE

OTHER DATA: rd_direction

COVERAGE NAME : rd_direction

PRECISION : SINGLE

PROJECTION : UTM, Meters, Zn: 48, Sph.: Everest 1830, Dat.: Indian 1954

FEATURE TYPE : POINT

DESCRIPTION : points for road direciton arrows along map sheet boundaries

DATABASE SCHEMA DEFINITION:

ITEM NAME	ITEM WIDTH	ITEM OUTPUT WIDTH	ITEM TYPE	ITEM DECIMAL PLACES
AREA	4	12	F	3
PERIMETER	4	12	F	3
RD_DIRECTION#	4	5	B	-
REC_NO	4	5	B	-
SHEET_NUMBER	4	5	I	-
COUNT	3	3	I	-
X_POS	8	15	F	3
Y_POS	8	15	F	3
KHMER_STR	60	60	C	
ROMAN_STR	60	60	C	

ITEM DEFINITION:

AREA : Area
PERIMETER : Perimeter
HIST_SITES# : Internal ID Number
REC_NO : User Defined Record Number
SHEET_NUMBER : Map Sheet Number
COUNT : Point number per sheet
X_POS : UTM Easting
Y_POS : UTM Northing
KHMER_STR : Khmer Text String
ROMAN_STR : Roman Text String

TYPE DESCRIPTION:

	DESCRIPTION
NA	No unique indentifer, not useful as a CODE