ArcGIS 9.0 Planimetric GeoDatabase - Data Dictionary

City of Columbia, Missouri

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PINNACLE MAPPING TECHNOLOGIES, INC.

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Table of Contents

GEODATABASE PARAMETERS	,
TRANSPORTATION FEATURE DATASET	4
ROAD_EDGE (Line)	
Road Annotation (PL_PAVT_ROAD_TEXT)	
RAILROAD_CENTERLINE (Line)	
BRIDGE (Polygon)	
PARKING (Line)	1
DRIVEWAY (Line)	1:
AIRPORT (Line)	1;
TRAIL (Line)	1′
Trail Annotation (PL_PAVT_TRAIL_TEXT)	1
STRUCTURE FEATURE DATASET	19
STRUCTURE (Polygon)	1
MISCELLANEOUS_STRUCTURE (Point)	2
BARRIER (Line)	2
LAND USE FEATURE DATASET	2:
TREE_MASS (Polygon)	2
HYDROLOGY FEATURE DATASET	
HYDROLOGY_WATERBODY (Polygon)	
HYDROLOGY DRAIN (LINE)Hydrology Annotation (PL_WATR_TEXT)	3
nyurorogy Amiotation (PL_WATK_TEXT)	

PLANIMETRIC GEODATABASE

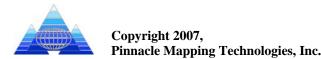
This Planimetric GeoDatabase is one component of a suite of integrated GeoDatabases designed by Pinnacle for local government. Our other GeoDatabases address Topography, Orthophotography, Cadastral, Public Works, Utilities, Asset Management, Environmental, Emergency Management, Public Safety, and Economic Development. All of our GeoDatabases are designed and developed by Pinnacle for the exclusive use of our Photogrammetry and GIS mapping clients.

Pinnacle has designed the planimetric GeoDatabase to leverage the power of ArcGIS 9.0. By creating network and topology models of selective planimetric features captured in the mapping process, we provide the planimetric data in a GIS-ready format. The resulting planimetric GeoDatabase can immediately be used out-of-the-box with ESRI's ArcCatalog, ArcMap, other Extensions, and 3rd-party applications without the need to translate or re-engineer the delivered data. As our clients create more mapping and GIS data layers our suite of GeoDatabases also provide plug-and-play expansion capabilities.

Pinnacle also offers several optional extensions to help our clients integrate the delivered data with other applications. For example, extensions for Pinnacle's Planimetric GeoDatabase include:

- Transportation Model Management and Integration Tools allows end-users to easily conflate the transportation network graphics with GDT Dynamap2000 data.
- Hydrology Model Management and Integration Tools allows end-users to easily conflate the hydrology network graphics with the National Hydrographic Dataset (NHD) Reach Index Model.
- Cadastral Integration Tools allows end-users to integrate the new basemap graphics with commercial off-the-shelf parcel management applications (e.g. Bruce Harris and Associates)
- HAZUS-MH Integration Tools allows end users to integrate the new Basemap data layers into FEMA's Multi Hazard loss estimating GIS application.

The following sections describe ArcGIS 9.0 GeoDatabase and the data dictionary for the Planimetric Basemap features being captured for the City of Columbia, Missouri by Pinnacle Mapping Technologies, Inc.



GEODATABASE PARAMETERS

Properties

GeoDatabase Name: Columbia_Planimetrics.mdb Coordinate System: NAD 1983 State Missouri Central FIPS 2402 (Feet)

Storage Units: feet Spatial Domains:*

Min X:	1,612,700	Max X:	1,852,700
Min Y:	1,013,300	Max Y:	1,253,300
X/Y Precision:	8,947.8485		
Min Z:	200	Max Z:	2000
Z Precision:	1,193,046.469		
Min M:	0	Max M:	396,000
M Precision:	5422.9384		

^{*}Note: The GeoDatabase stores coordinates as positive 4-byte integers that have a maximum value of 4,147,483,645. This range of integers is called a spatial domain. We define the spatial domain values by manually setting our precision and adjusting the Min X,Y,Z, and M values accordingly to generate Max values appropriate for the intended use.

Setting the ArcGIS Geoprocessing Environment:

Setting the geoprocessing environment on your machine to use a specific spatial reference

- 1. In ArcCatalog or ArcMap, from the Tools menu, click Options.
- 2. Click the Geoprocessing tab.
- 3. Click the Environments button.
- 4. Expand General Settings.
- 5. For Output Spatial Reference, click As Specified Below.
- 6. Next to the following input box, click the folder icon.
- 7. On the Coordinate System tab, click Select.
 - a. Browse to:

/Projected Coordinate Systems/State Plane/NAD 1983 (Feet)/

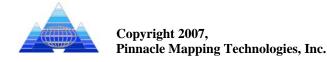
b. Select the following .prj file:

NAD 1983 State Missouri Central FIPS 2402 (Feet).pri

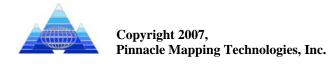
c. Click Add.

10. Click OK to all the open dialogs.

All subsequent geoprocessing operations, including importing new data, performed by the current user on this machine, will use this spatial reference.



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TRANSPORTATION FEATURE DATASET

The Transportation Feature Dataset consists of feature classes to depict road edges, bridges, parking areas and driveways.

ROAD_EDGE (Line)

Properties

Feature Dataset TRANSPORTATION Feature Class ROAD EDGE Type: Line

Topology/Network: n/a

Description

Visible road features within the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_PAVT_ROAD	1	1	0	0	Edge of Paved Road: Defined as	Collect as a double line. Continue visible paved driving
						Edge of Road Pavement.	surface over bridge decks, but do not capture the hidden
							road edge under the deck.
2	PL_PAVT_ROAD_SEC	2	2	0	0	Unpaved Road: Unpaved road over	Collect as a double line. Continue visible unpaved driving
						100' long. Unpaved surfaces will	surface over bridge decks, but do not capture the hidden
						include dirt, gravel or other compact	road edge under the deck.
						surface.	

AutoCAD Attributes

LAYER	COLOR	LINETYPE	THICKNESS
PL_PAVT_ROAD	155	Continuous	0
PL_PAVT_ROAD_SEC	155	ACAD_ISO03W100	0

Road_Annotation (PL_PAVT_ROAD_TEXT)

Reference Scale	1:1,200				
Font Size	10				
Font	Arial Arial				
Color	253				
Vertical Alignment	Baseline				
Horizontal Alignment	Left				
Note: All other fields are default values generated by the ESRI Import CAD Annotation Tool					

RAILROAD_CENTERLINE (Line)

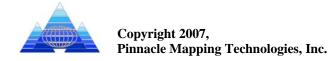
Properties

Feature Dataset TRANSPORTATION Type: Polyline Topology/Network: n/a
Feature Class RAILROAD_CENTERLINE

Description

Linear element defining the centerline of a railroad track within the imagery.

Name (Alias)	Туре	Length	Default Value	Domain	Index	System, Required, Optional	Data Source	Description
OBJECTID (FID)	Object ID	3	<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	0	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_STRC_RAIL	3	3	0	0	Railroads: The centerline abstraction of a Railroad.	Capture the apparent middle point between the rails. Assign classification by visual inspection of the imagery. Capture the centerline of all visible railroad tracks, including those in rail yards and all visible rail spurs and sidings.
2	PL_STRC_RAIL_ABND	4	4	0	0	Abandoned Railroad: The centerline abstraction of an Abandoned Railroad.	Capture the apparent middle point between what is remaining of the rails and/or ties. Assign classification by visual inspection of the imagery. If no rails or ties are remaining, do not capture.

LAYER	COLOR	LINETYPE	THICKNESS
PL_STRC_RAIL	40	RR	0
PL_STRC_RAIL_ ABND	40	RR	0

BRIDGE (Polygon)

Properties

Feature Dataset TRANSPORTATION Type: Polygon Topology/Network: n/a

Feature Class BRIDGE

Description

Visible bridge features within the imagery.

Name (Alias)	Туре	Length	Default Value	Domain	Index	System, Required, Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Polygon			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
SHAPE_AREA	Double		<not null></not 			S	ArcMap	Internal attribute with calculated area of the polygon (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	Text	String	254			R	AutoCAD	Name of AutoCAD Layer
COLOR	Integer	Long	9			R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	Text	String	254			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	Double	19			R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_STRC_BRIDGE	5	5	0	0	Pedestrian or vehicle bridge. Collect outer edge of bridge surface.	Collect as a closed polygon with the bridge feature to the right. Continue visible paved or unpaved driving surface over bridge decks, but not the hidden road edge under the deck.

LAYER	COLOR	LINETYPE	THICKNESS
PL_STRC_BRIDGE	155	Continuous	0

PARKING (Line)

Properties

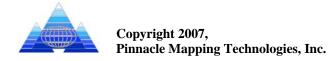
Feature Dataset TRANSPORTATION Type: Polyline Topology/Network: n/a

Feature Class PARKING

Description

Paved or unpaved parking area features visible within the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_PAVT_PARK	6	6	0	0	Paved Parking: Commercial and/or Residential paved surfaces used primarily for parking vehicles.	Collect edge of parking surface. Parking features should snap to any Road Edge or Building feature they abut to with the common edges showing the same geometry. (DO compile islands or medians in parking areas.)
2	PL_PAVT_PARK_UNPAVED	7	7	0	0	Unpaved Parking: Commercial and/or Residential unpaved surfaces (dirt, gravel) used primarily for parking vehicles.	Collect edge of parking surface. Parking features should snap to any Road Edge or Building feature they abut to with the common edges showing the same geometry. (DO compile islands or medians in parking areas.)

LAYER	COLOR	LINETYPE	THICKNESS
PL_PAVT_PARK	155	Continuous	0
PL_PAVT_PARK_UNPAVED	155	HIDDEN2	0

DRIVEWAY (Line)

Properties

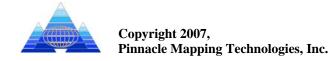
Feature Dataset TRANSPORTATION Type: Polyline Topology/Network: n/a

Feature Class DRIVEWAY

Description

Paved or unpaved driveway features visible within the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_PAVT_DRIVE	8	8	0	0	Paved commercial and/or residential driveway.	Collect edge of driveway surface. Driveway features should snap to any Road Edge or Building feature they abut to with the common edges showing the same geometry. Always extend driveways through sidewalk features.
2	PL_PAVT_DRIVE_UNPAVED	9	9	0	0	Unpaved commercial and/or residential driveway.	Collect edge of driveway surface. Driveway features should snap to any Road Edge or Building feature they abut to with the common edges showing the same geometry. Always extend driveways through sidewalk features.

LAYER	COLOR	LINETYPE	THICKNESS
PL_PAVT_DRIVE	155	Continuous	0
PL_PAVT_DRIVE_UNPAVED	155	HIDDEN2	0

AIRPORT (Line)

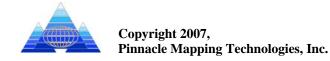
Properties

Feature Dataset TRANSPORTATION
Type: Polyline
Topology/Network: n/a
Feature Class AIRPORT

Description

Visible airport runways, taxiways, and aprons within the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_STRC_RUNWAY	10	10	0	0	Edge of paved surface used for takeoff, landing, taxiing and parking of airplanes. Runway also includes helipads.	Collect the edge of the paved surface. Include: runways, taxiways, and aprons.

LAYER	COLOR	LINETYPE	THICKNESS
PL_STRC_RUNWAY	205	Continuous	0

TRAIL (Line)

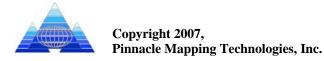
Properties

Feature Dataset TRANSPORTATION Type: Line Topology/Network: n/a
Feature Class TRAIL

Description

Miscellaneous transportation features visible within the imagery that serves as paths for recreational or off-road traffic.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
SHAPE_AREA	Double		<not null></not 			S	ArcMap	Internal attribute with calculated area of the polygon (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CO	DE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1		PL_PAVT_TRAIL	11	11	0	0	The edge of a visible Trail. Must be at least 10' in width.	Capture as double line feature. Assign classification by visual inspection of the imagery. Bicycle and Walking trails will always have an improved surface of some kind.

AutoCAD Attributes

LAYER	COLOR	LINETYPE	THICKNESS
PL_PAVT_TRAIL	36	Continuous	0

Trail_Annotation (PL_PAVT_TRAIL_TEXT)

Reference Scale	1:1,200						
Font Size	10						
Font	Arial						
Color	253						
VerticalAlignment	Baseline						
Horizontal Alignment	Left						
Note: All other fields	Note: All other fields are default values generated by the ESRI Import CAD Annotation Tool						

Topology/Network: n/a

STRUCTURE FEATURE DATASET

The Structure Feature Dataset consists of feature classes to depict structures (buildings and transmission towers); miscellaneous structures (cell towers, radio antennas, industrial smokestacks, and tall flagpoles); and barriers (property line fences and retaining walls).

STRUCTURE (Polygon)

Properties

Feature Dataset STRUCTURE

Feature Class STRUCTURE

Type: Polygon

Description

The footprint of buildings and transmission towers visible in the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Polygon			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
SHAPE_AREA	Double		<not null></not 			S	ArcMap	Internal attribute with calculated area of the polygon (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the feature subtype (see domain list for values).



Name (Alias)	Туре	Length	Default Value	Domain	Index	System, Required, Optional	Data Source	
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature

CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_BLDG_DWELLING	12	12	0	0	Polygon enclosing all erect (not under construction) buildings; i.e. houses, apartments, outbuildings, commercial.	Collect as a closed polygon with building to the right. Buildings must have one side of 20' or greater to be compiled. Do not capture temporary structures such as construction trailers, mobile homes or sheds.
2	PL_BLDG_DWELLING_UC	13	13	0	0	Building Under Construction. Polygon enclosing all buildings under construction.	Collect as closed polygon with the approximate building to the right. Buildings Under Construction must have one side of 20' or greater to be compiled.
3	PL_BLDG_DWELLING_RUIN	14	14	0	0	Building Ruins Polygon enclosing all buildings in ruins.	Collect as closed polygon with the approximate building to the right. Building Ruin must have one side of 20' or greater to be compiled.
4	PL_BUILDING_VOIDS	34	34	0	0	Artificial polygon created when building is fully encompassing of an open area.	Programmatically defined in ArcGIS by Pinnacle.
5	PL_UTIL_OHD_TRANS_TWR	12	12	0	0	Transmission Tower: Large structure for supporting power lines across long distances.	Collect tower legs as a closed polygon with the interior of the tower to the right.
<mark>6</mark>	PL_STRC_MISC	<u>16</u>	<mark>16</mark>	0	0	Miscellaneous Structure: Tall cylindrical feature such as silos, tanks, and towers.	Collect as a closed polygon with the miscellaneous tall structure to the right.

LAYER	COLOR	LINETYPE	THICKNESS
PL_BLDG_DWELLING	13	Continuous	0
PL_BLDG_DWELLING_UC	13	HIDDEN2	0
PL_BLDG_DWELLING_RUIN	13	HIDDEN2	0
PL_BLDG_VOIDS	13	Continuous	0
PL_UTIL_OHD_TRANS_TWR	12	Continuous	0
PL_STRC_MISC	<mark>137</mark>	Continuous	<mark>0</mark>



MISCELLANEOUS_STRUCTURE (Point)

Properties

Feature Dataset STRUCTURE
Topology/Network: n/a
Feature Class MISCELLANEOUS_STRUCTURE
Topology/Network: n/a

Description

These points depict the apparent center or base of a cell tower, radio antenna, industrial smokestack, tall flagpole, or transmission towers not captured as a polygon that are visible in the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Point			S	ArcMap	Internal geometry (assigned by ArcMap)
ANGLE	Double		0			R	ArcMap	Assigned by Pinnacle, this attribute contains the angle of rotation for the tower point symbol.
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
FEATURE_SUBTYPE	Integer		1	Y	0	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the Feature subtype (see domain list for values).
LAYER	String	254				R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254				R	AutoCAD	AutoCAD Linestyle



			Default			System, Required,		
Name (Alias)	Туре	Length	Value	Domain	Index	Optional	Data Source	Description
THICKNESS	Double	19				R	AutoCAD	Weight of feature

CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
0	PL_STRC_MISC	16	16	0	0	Miscellaneous Structure: Miscellaneous tall features not identified as one of the following types.	Place point at center of base of structure. Feature not captured as a polygon.
1	PL_CELL_TOWER	17	17	0	0	Freestanding tall cell towers	Place point at center of base of structure. Feature not captured as a polygon.
2	PL_RADIO_ANTENNA	18	18	0	0	Freestanding tall radio antenna	Place point at center of base of structure. Feature not captured as a polygon.
3	PL_SMOKESTACK	19	19	0	0	Freestanding tall industrial smokestack	Place point at center of base of structure. Feature not captured as a polygon.
4	PL_FLAGPOLE	20	20	0	0	Freestanding tall flagpole	Place point at center of base of structure. Feature not captured as a polygon.
5	PL_UTIL_OHD_TRANS_TWR	21	21	0	0	Freestanding transmission power/pole, not captured as a structure.	Place point at center of base of structure. Feature not captured as a polygon.

AutoCAD Unique Attributes

LAYER	COLOR	LINETYPE	THICKNESS
PL_STRC_MISC	137	Continuous	0
PL_CELL_TOWER	137	Continuous	0
PL_RADIO_ANTENNA	137	Continuous	0
PL_SMOKESTACK	137	Continuous	0
PL_FLAGPOLE	137	Continuous	0
PL_UTIL_OHD_TRANS_TWR	12	Continuous	0



BARRIER (Line)

Properties

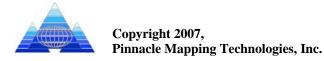
Feature Dataset STRUCTURE Type: Polyline Topology/Network: n/a

Feature Class BARRIER

Description

This feature class includes man-made barriers such as walls and fences.

Name (Alias)	Туре	Length	Default Value	Domain	Index	System, Required, Optional	Data Source	Description
OBJECTID (FID)	Object ID	- g -	<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	0	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the Feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature



CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_STRC_FENCE	22	22	0	0	Property Fence: Commercial or residential fence meant to show distinction between adjacent properties.	Digitize centerlines of property line fences (metal, wood, or brick). Do not capture fence lines parallel to highways or streets. Do not differentiate between fence and gate. If gate closes across road, pull fence across road. Digitize at ground level (where possible).
2	PL_STRC_MISC_RETWALL	23	23	0	0	Retaining Wall: Fixed structure retaining earth. Structure can be concrete or other man-made surface.	Digitize centerline of walls. Retaining wall has precedence over fences. Digitize "top" of wall at ground level.

LAYER	COLOR	LINETYPE	THICKNESS
PL_STRC_FENCE	131	FENCELINE	0
PL_STRC_MISC_RETWALL	137	RETAINING	0

LAND USE FEATURE DATASET

The Land Use Feature Dataset consists of a feature class to depict groups of trees.

TREE_MASS (Polygon)

Properties

Feature Dataset LAND_USE Topology/Network: n/a
Feature Class TREE MASS

Description

Groups of trees and wooded/forest areas that are visible in the imagery.

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Polygon			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
SHAPE_AREA	Double		<not null></not 			S	ArcMap	Internal attribute with calculated area of the polygon (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 	Y		R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
CODE	Integer		1	Y	О	R	Pinnacle	Assigned by Pinnacle, this attribute is a code identifying the Feature subtype (see domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer



Name (Alias)	Type	Length	Default Value	Domain	Index	System, Required, Optional	Data Source	
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature

CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_VEGE_ TREELINE	24	24	0	0	Polygon indicating a tree line or edge of a forest	Outline/limits of an area of any single or group cluster with an area of 2 acres or greater diameter. Collect as a closed polygon with the trees to the right.

AutoCAD Unique Attributes

Layer	Color	LINETYPE	THICKNESS
PL_VEGE_TREELINE	90	TREELINE_L	0

Annotation (PL_TEXT)

Reference Scale	1:1,200						
Font Size	15						
Font Property of the Property	Arial Arial						
Color	<mark>7</mark>						
Vertical Alignment	Center						
HorizontalAlignment	Center						
Note: All other fields are default values generated by the ESRI Import CAD Annotation Tool							



Topology/Network: Topology

HYDROLOGY FEATURE DATASET

The Hydrology Feature Dataset consists of feature classes that depict water bodies and hydrology structures. Additionally, the water body graphics are tied to a drain network class to facilitate conflation of the data to the National Hydrographic Dataset (NHD) Reach Index Model.

Type: Polygon

HYDROLOGY_WATERBODY (Polygon)

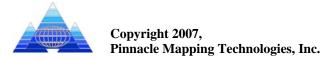
Properties

Feature Dataset HYDROLOGY
Feature Class HYDROLOGY _WATERBODY

Description

Visible double line hydrology and standing water bodies within the imagery.

			Default			System, Required,	la	
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Polygon			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
SHAPE_AREA	Double		<not null></not 			S	ArcMap	Internal attribute with calculated area of the polygon (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 	0		R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
NAME	Text	50	<null></null>			R (if provided)	City of Columbia	Common/Local Name for water body. Not intended for GNIS compatibility. Provided by the City of Columbia, MO.



Nov. (AP.)	T	Toronto	Default	Demois	T. J	System, Required,	Data Carres	Description
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
CODE	Integer			Y	O	R	Pinnacle	Assigned by Pinnacle, this attribute is a
								code identifying the Feature subtype (see
								domain list for values).
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature

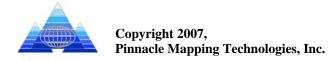
CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
1	PL_WATR_STREAM (USGS Equivalent: STREAM_RIVER – Perennial)	35	35	0	0	Defined by USGS classification based on the quad map for 1981. Water feature with an average width GREATER than 10' wide.	Contains water throughout the year, except for infrequent periods of severe drought. Collect as closed polygon along edge of water line with the water to the right.
2	PL_WATR_POND_PER (USGS Equivalent: POND_LAKE – Perennial)	26	26	0	0	Shoreline of lake or pond. Determination of actual feature type is subjective and assigned by USGS classification.	Contains water throughout the year, except for infrequent periods of severe drought. Collect as closed polygon along edge of water line with the water to the right.
3	PL_WATR_POND_INT (USGS Equivalent: POND_LAKE – Intermittent)	27	27	0	0	Shoreline of lake or pond. Determination of actual feature type is subjective and assigned by USGS classification.	Contains water for only part of the year, but more than just after rainstorms and at snowmelt. Collect as closed polygon along edge of water line with the water to the right.
4	PL_WATR_STREAM_AQUA (USGS Equivalent: CANAL_DITCH – Aqueduct)	28	28	0	0	Defined by USGS classification based on the quad map for 1981. An Aqueduct water feature with an average width LESS than 10' wide.	A structure designed to transport domestic or industrial water from a supply source to a distribution point, often by gravity. Collect as closed polygon along edge of water line with the water to the right.
5	PL_WATR_STREAM_UN (USGS Equivalent: CANAL_DITCH – Unspecified)	29	29	0	0	Defined by USGS classification based on the quad map for 1981. A unspecified Canal/Ditch water feature with an average width LESS than 10' wide.	Does not have to be known or specified for the feature to be shown. Collect as closed polygon along edge of water line with the water to the right.



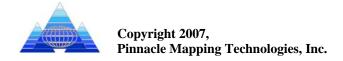
CODE	DESCRIPTION	Level	Color	Weight	Style	Description	Capture Rules
6	PL_WATR_STREAM_INT	30	30	0	0	Defined by USGS classification	Contains water for only part of the year,
	(USGS Equivalent:					based on the quad map for 1981. An	but more than just after rainstorms and at
	STREAM_RIVER -					intermittent Stream or River water	snowmelt. Collect as closed polygon
	Intermittent)					feature with an average width	along edge of water line with the water
						GREATER than 10' wide.	to the right.
7	PL_WATR_POND_NC	39	39	0	0	A pond or lake feature which is not	Collect as closed polygon along edge of
	(USGS Equivalent: None)					depicted on the quad map.	water line with the water to the right.

AutoCAD Unique Attributes

Mutoend emque mundutes											
Layer	Color	LINETYPE	THICKNESS								
PL_WATR_STREAM	160	HYDRO	0								
(USGS Equivalent:											
STREAM_RIVER – Perennial)											
PL_WATR_STREAM_INT	160	HYDRO	0								
(USGS Equivalent:											
STREAM_RIVER – Intermittent)											
PL_WATR_POND_PER	160	HYDRO	0								
(USGS Equivalent:											
POND_LAKE – Perennial)											
PL_WATR_POND_INT	160	HYDRO	0								
(USGS Equivalent:											
POND_LAKE – Intermittent)											
PL_WATR_STREAM_AQUA	160	HYDRO	0								
(USGS Equivalent:											
CANAL_DITCH – Aqueduct)											
PL_WATR_STREAM_UN	160	HYDRO	0								
(USGS Equivalent:											
CANAL_DITCH – Unspecified)											
PL_WATR_POND_NC	160	HYDRO	0								
(USGS Equivalent: None)											



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HYDROLOGY DRAIN (LINE)

Properties

Feature Dataset HYDROLOGY Feature Class HYDROLOGY_DRAIN **Topology/Network:** Topology

Description

The visible centerline of a hydrology feature (flowing or intermittent) within the imagery that is less than 10' wide. Additionally, centerline abstractions oriented in the direction of flow through all open water bodies captured in the hydrology_waterbody feature class. The resulting lines are designed to create a geographic network compatible with the National Hydrological Dataset (NHD) modeling standards for representing NHD drainage network.

Type: Polyline

			Default			System, Required,		
Name (Alias)	Type	Length	Value	Domain	Index	Optional	Data Source	Description
OBJECTID (FID)	Object ID		<not null></not 		Y	S	ArcMap	Internal object / feature ID number (assigned by ArcMap)
SHAPE	Geometry		Line			S	ArcMap	Internal geometry (assigned by ArcMap)
SHAPE_LENGTH	Double		<not null></not 			S	ArcMap	Internal attribute with calculated length of the polyline (assigned by ArcMap)
DATE_OF_PHOTOGRAPHY	Text	15	<null></null>			R	Pinnacle	This attribute contains 2002 for all of the original mapping features, and 2007 for all new compilation.
MAP_SCALE	Text	4	<not null></not 			R	Pinnacle	Assigned by Pinnacle, this attribute contains the targeted map scale of the compiled data. (e.g. 100)
UPDATE_DATE	Text	15	<null></null>			0		Reserved for future use, to reflect the feature capture date when data is added outside of the photogrammetric compilation process.
NAME	Text	50	<null></null>			R (if provided)	City of Columbia	Common/Local Name for stream features. Not intended for GNIS compatibility. Provided by the City of Columbia, MO.
NHD_FTYPE	Integer		0	Y	0	R	Pinnacle	Type of NHD network element. This attribute is a code identifying the Feature subtype (see domain list for values).



Name (Alias)	Туре	Length	Default Value	Domain	Index	System, Required, Optional	Data Source	
NHD_FCODE	Integer		<null></null>			O	NHD	Numeric value that encodes the type and values for a set of characteristics for an NHD feature. This five-digit code has two parts: the first three digits encode the feature type; the last two digits encode values for a set of characteristics associated with the feature.
PK_COM_ID	Long Integer	10	<not null></not 		PK	О	Pinnacle	Assigned by Pinnacle, this attribute is a unique identifier of each hydrology drain element in the network to support NHD modeling.
LAYER	String	254	<null></null>			R	AutoCAD	Name of AutoCAD Layer
COLOR	Long	9				R	AutoCAD	Color assigned in AutoCAD to the Layer
LINETYPE	String	254	<null></null>			R	AutoCAD	AutoCAD Linestyle
THICKNESS	Double	19				R	AutoCAD	Weight of feature

Feature Code Definitions (Domain)

COD	DESCRIPTION	Level	Color	Weigh	Style	Description	Capture Rules	
E				t				
1	PL_WATR_STREAM_INT (USGS Equivalent: STREAM_RIVER_INT- intermittent)	30	30	0	0	Defined by USGS classification based on the quad map for 1981. A stream feature with an average width GREATER than 10' wide.	Contains water for only part of the year, but more than just after rainstorms and at snowmelt. Collect the visible/apparent centerline of water oriented in the direction of flow.	
2	PL_WATR_STREAM_PHANTO M	31	31	0	0	A centerline abstraction to facilitate hydrologic modeling through all open (Polygon) bodies of water (Streams, Rivers, Lakes and Ponds).	Collect with shortest path through water polygon feature. Line should be oriented in the direction of flow.	
3	PL_WATR_STREAM_HIDDEN	32	32	0	0	Hidden Waterbody: A centerline abstraction of an underground culvert pipe, box culvert, or hidden water body (portion under a bridge). Used to facilitate hydrologic modeling between visible water bodies.	Collect centerline of the underground feature to maintain graphic connectivity and flow of hydrological model. Snap to the intermittent Stream_River or Artificial Path features at either end. Line should be oriented in the direction of flow.	



COD	DESCRIPTION	Level	Color	Weigh	Style	Description	Capture Rules
E 4	PL_WATR_STREAM_CONNEC T	33	33	0	0	Hydrographic Connector Used to maintain connectivity in locations where connection between features is not apparent.	Collect centerline of the hidden connector feature to maintain graphic connectivity and flow of hydrological model. Snap to the intermittent Stream_River or Artificial Path features at either end. Line should be oriented in the direction of flow.
5	PL_WATR_STREAM (USGS Equivalent: STREAM_RIVER – Perennial)	25	25	0	0	Defined by USGS classification based on the quad map for 1981. Water feature with an average width GREATER than 10' wide.	Contains water throughout the year, except for infrequent periods of severe drought. Collect the centerline of the stream feature.
6	PL_WATR_STREAM_NC	68	68	0	0	Water feature with an average width GREATER than 10' wide. Not classified by USGS.	Contains water throughout the year, except for infrequent periods of severe drought. Collect the centerline of the stream feature.

AutoCAD Unique Attributes

LAYER	COLOR	LINETYPE	THICKNESS
PL_WATR_STREAM_INT	160	HYDRO	0
(USGS Equivalent: STREAM_RIVER_INT- intermittent)			
PL_WATR_STREAM	160	HYDRO	0
(USGS Equivalent: STREAM_RIVER – Perennial)			
PL_WATR_STREAM_PHANTOM	160	HYDRO	0
PL_WATR_STREAM_HIDDEN	160	HYDRO	0
PL_WATR_STREAM_CONNECT	160	Continuous	0
PL_WATR_STREAM_NC	160	HYDRO	0

Hydrology_Annotation (PL_WATR_TEXT)

Reference Scale	1:1,200			
Font Size	<mark>10</mark>			
Font	Arial Arial			
Color	253			
Vertical Alignment	Baseline			
Horizontal Alignment	Left			
Note: All other fields are default values generated by the ESRI Import CAD Annotation Tool				



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