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data SOLUTIONS journal
LAND INFO

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Client Solutions

D.G. Smyth & Company:

USING BUILDING FOOTPRINTS & AERIAL PHOTOS FOR PIPELINE ANALYSIS

LAND INFO, a provider of digital geospatial information across the world, supports a wide variety of client projects. D.G. Smyth & Company, a recent first-time client to the company, offers an excellent example use of feature extraction from DOQQ aerial photos.

D.G. Smyth is a successful land surveyor in Texas. Since 1956, the company has conducted boundary and land surveys for government, oil & gas, and utility projects. D.G. Smyth came to LAND INFO with the need to identify properties adjacent to an environmental waste pipeline across the county. Working with LAND INFO Account Manager, Matthew Burcham, D. G. Smyth purchased color infra-red DOQQ aerial photos and corresponding building footprints *(see above right)*. LAND INFO extracted the building footprints from the photography and delivered the layer in a separate vector file. This enabled D.G. Smyth to turn the footprint layer on and off, depending on its analysis needs.

D.G. Smyth imported the imagery and building footprints into AutoCad. It then overlayed multiple layers of proprietary data which included the actual pipeline location. Much of this internal data was collected by D.G. Smyth surveyors in the field.

Building footprints extracted from color infra-red aerial photos

The combined dataset allowed D.G. Smyth to identify residents and properties that needed to be legally notified about the pipeline.

"The imagery and services we received from LAND INFO was great," commented D.G. Smyth, the founder of his namesake company. "It was a very useful tool for our project."

LAND INFO offers feature extraction from any DOQQ. The company offers full coverage of the USGS library. Available feature layers include hydrology, roads, shorelines, building footprints, and custom features. Lines and polygons represent linear features such as roads, and structures. Points are used to represent buildings, wells, cell towers, and other features.

(more info...)

GEOdata News

MEXICO

GEOSPATIAL DATA ADDED TO GLOBAL ARCHIVE

LAND INFO International has added nationwide coverage of 1:50,000 and 1:250,000 scale topographic maps and 3 arc-second digital elevation models (DEM) for Mexico. Extracted road, hydrology, and feature layers are also available. The digital datasets are fully geo-referenced to accomodate use with GPS, GIS, and engineering applications. LANDINFO.com now offers special discounts on select Mexico datasets.

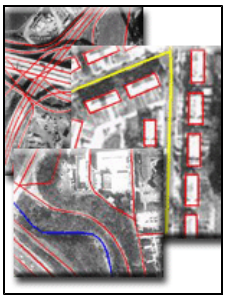
LAND INFO color scans the paper topographic maps to produce a high resolution, digital image. Latitude and longitude coordinates are then assigned to each map. This enables engineers, GIS project managers, and other end users, to overlay other geospatial data on top of the base topographic map. For example, oil & gas engineers may overlay satellite photos and proprietary

1:50,000 scale topographic maps are available for Mexico

GEOdata News

Feature Extraction from USA DOQQ Aerial Photos

LAND INFO offers feature extraction from digital orthophoto quarter quads (DOQQ) aerial photography. This includes extracting hydrology, roads, shorelines, building footprints, and other features as a separate vector layer. This allows a user to more effectively visualize land use, manage various assets, and monitor environmental impact.

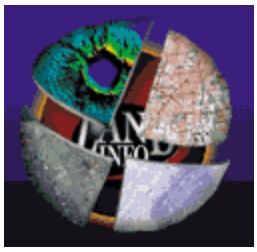


LAND INFO offers the most recent panchromatic and color infra-red USGS imagery available. This is aerial photography that has been scanned to a one-meter resolution and ortho-rectified. LAND INFO's Quick DOQQ Aerial Photos, compressed versions of standard USGS DOQQ's, are shipped within five business days. All feature extraction layer orders include the original DOQQ photo. Contact a LAND INFO representative to learn more about feature extraction layers ***(more info...)***

pipeline data on top of the topographic map for analysis purposes.

LAND INFO offers a variety of derivative products based on the Mexico topographic maps, including digital elevation models (DEM) and extracted feature layers. Production is now complete for 3 arc-second DEMs based on 1:200,000 scale topographic maps. The DEM dataset is created by extracting the contour elevation data from the source map. This contour data is then formatted to create a 3D interpretation of the land area. Extracted feature layers, such as roads and waterways, are produced through a similiar process.

(more info...)



- *Aerial & Satellite Imagery*
- *Feature Extraction Services*
- *3D Terrain Maps*
- *Geospatial Services*

LAND INFO International, LLC

LAND INFO International provides digital geospatial information of the world, including satellite imagery, 3D models, and topographic maps. LAND INFO provides clients with the world's largest database of digital topographic and geospatial services & products ...so clients can spend time analyzing the data, not gathering it. The company markets to civil engineers, government planners, project managers, and other international professionals for a variety of GIS, remote-sensing and land-use applications. Please visit the website www.LANDINFO.com to learn more about these products and services.

Contact LAND INFO today at 1-800-949-5080 *(+1 303-369-6800)* to learn more about our complete geospatial solutions.

Satellite Imagery - Aerial Photography - DEMs - Topo Maps - Feature Extraction Layers

Send feedback about this DSJ issue to Steve Ebner at sebner@LANDINFO.com.

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