

# San Francisco Public Works Revolutionizes Asset Management with Open Spatial's Munsys Solution



## CUSTOMER

### San Francisco Public Works

San Francisco Public Works manages, designs, constructs, maintains and repairs the city's buildings and infrastructure. Projects include roadway design, sewer replacement, streetscape improvements, facilities upgrades and maintenance. San Francisco Public Works currently has \$5.6 billion in active projects.

The City of San Francisco serves a population of 860,000\* and covers 46.87 square miles.

\* U.S. Census Bureau 2015 estimate

## CHALLENGES

- Complex information systems not connected
- Disconnect between work order and asset management system and service work performed in the field
- Duplicate work orders
- Lack of access to data in the field
- Tedious and time-consuming process transferring GIS information to work orders

## RESULTS/INNOVATIONS

- Single, seamless engineering/GIS dataset in Oracle Connected with Maximo CMMS  
Engineers in the field have accurate real-time access to infrastructure data
- Employees in other city departments can query and view engineering data
- Asset Registry updated nightly
- Projects completed in-house resulting in value to taxpayers
- Improved workflow and turnaround time on infrastructure projects
- Elimination of orphan and duplicate work orders
- Allows engineers to access GIS data using programs they already know

## SOLUTION



San Francisco Public Works dramatically modernized its wastewater asset database using Open Spatial's Munsys in a multi-phase project that connected and consolidated separate sources of information stored in GIS, AutoCAD, Oracle and IBM Maximo.

SF Public Works in 2004 began using the Munsys utilities solution built on Oracle and Autodesk Map 3D software to streamline the management of asset information. The Oracle database serves as SF Public Works' master data storage hub and includes the city's base maps containing information on 180,000 parcels, 3,500 miles of roadways, 29,000 pipes, storm drains, and more.

## The benefit is a tightly integrated design and engineering process

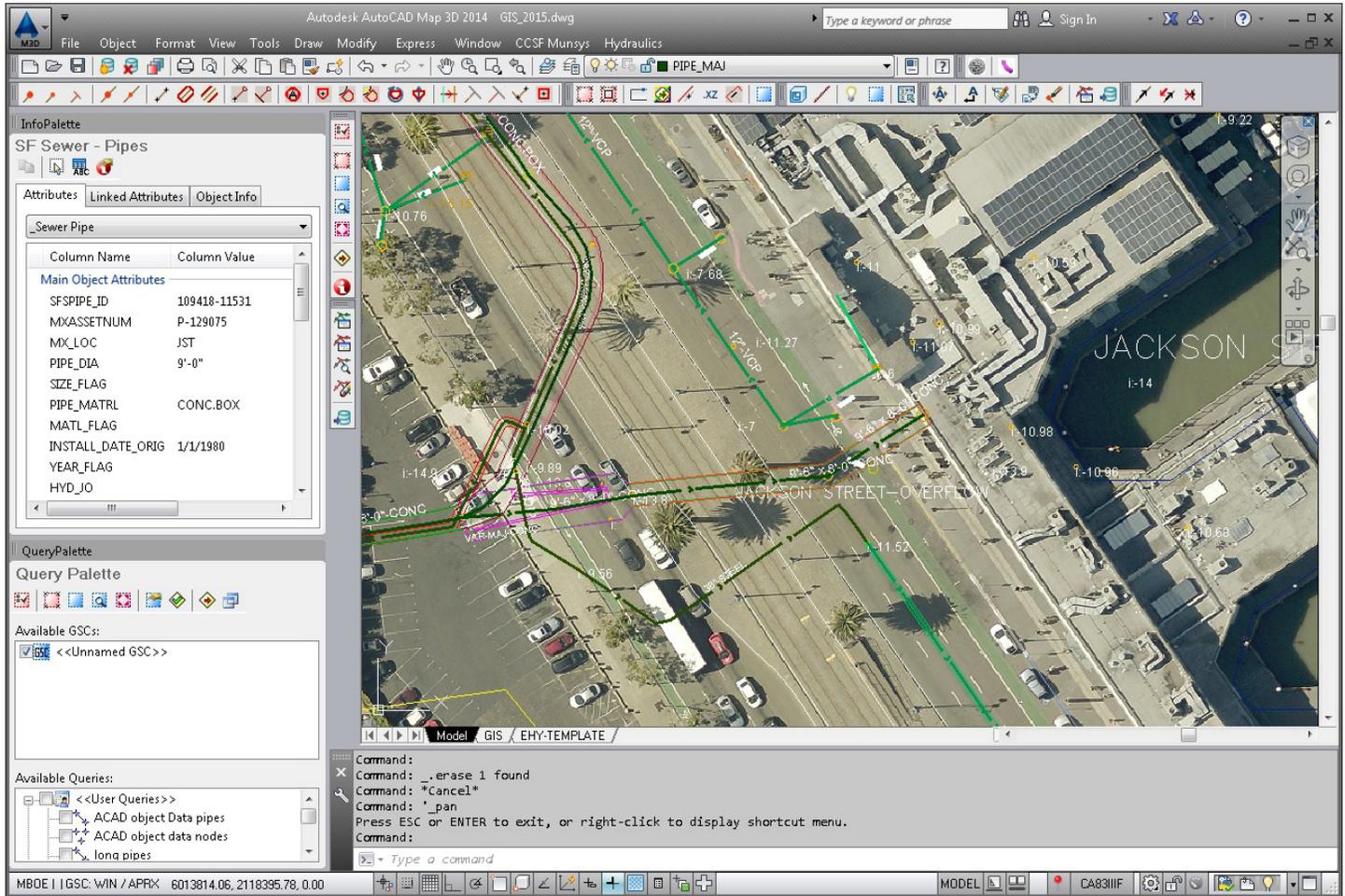
The innovative Munsys solution was purchased to integrate the design process with maintenance of the GIS database and engineering workflow. Bridging the gap between CAD and GIS, Munsys allows drafters and engineers to build and edit a master inventory that accurately reflects the assets and what is happening in the field.

"The benefit is a tightly integrated design and engineering process," said John Seagrave, GIS coordinator with SF Public Works.

Munsys seamlessly connects asset information, locations, and records from work orders and other jobs as a single source available to departments throughout the city. This shared source of up-to-date reference data, managed by each appropriate group, resolves workflow issues and helps address challenges such as duplicate work orders and lack of access to data in the field.

Munsys Query delivers a cost-effective application for city engineers to quickly open Autodesk, a program they already know, and connect to the database, specify an area of interest, and click a single icon to get a fully attributed base drawing. What previously took days can now be done in minutes.

The Munsys solution helps expedite work such as inspecting and replacing sewers, clearing storm drains, and draining flooded intersections. City engineers can identify vulnerable areas using GIS, asset data, and location information from incoming calls to respond swiftly and mitigate flood damage to nearby properties.



Knowing what is where, and connecting that with inspections and repairs improves our efficiency on a daily basis, and allows us to use that information for future planning and system modeling.

“SF Public Works has created a powerful solution that ensures we have an accurate database driven inventory of our underground assets that is used by multiple departments. Knowing what is where, and connecting that with inspections and repairs improves our efficiency on a daily basis, and allows us to use that information

for future planning and system modeling. For example, we have data from years of records being used to assess conditions and prioritize repairs. The information continues to improve as system and maintenance information is captured based on the single master database. It is all integrated by design,” said Seagrave.

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