

PAPER PAPER EVERY WHERE



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PRESENTATION

- The City of Tigard/Gartrell Group
- The Challenge
- Tigard GIS Environment
- Tigard Document Management System
- The Solution
- The Gritty Details
- Next Steps



THE CITY OF TIGARD

- Population: 48,695
- Incorporated 1961
- Lots of traffic
- Departments
 - Public Works
 - Community Dev.
 - Police
 - Administration
 - Library



THE GARTRELL GROUP

Increasing Location Intelligence

- Design, Development, and Integration of Mapping Systems
- GIS Hosting and Infrastructure-As-A-Service
- GIS Strategy



www.gartrellgroup.com

 @GartrellGroup

THE CHALLENGE

- create a straightforward, automated, and scalable solution to retrieve electronic documents using a map-based interface



REQUIREMENTS

- Documents must be retrieved from the City's document management system
- Must adhere to existing security/policy measures for accessing documents
- Must use the City's existing web-based mapping application
- Minimal staff intervention (automation)

WHAT ARE SPATIAL HOOKS?

- Large percentage of documents are tied to a location
- For example:
 - Permits=TLID
 - Leases=Address
 - Assets=Asset ID

THE GAP...BUILD A BRIDGE

Mapping

Documents



THE GAP...BUILD A BRIDGE

Mapping → Enterprise Integration ← Documents



TIGARD GIS ARCHITECTURE

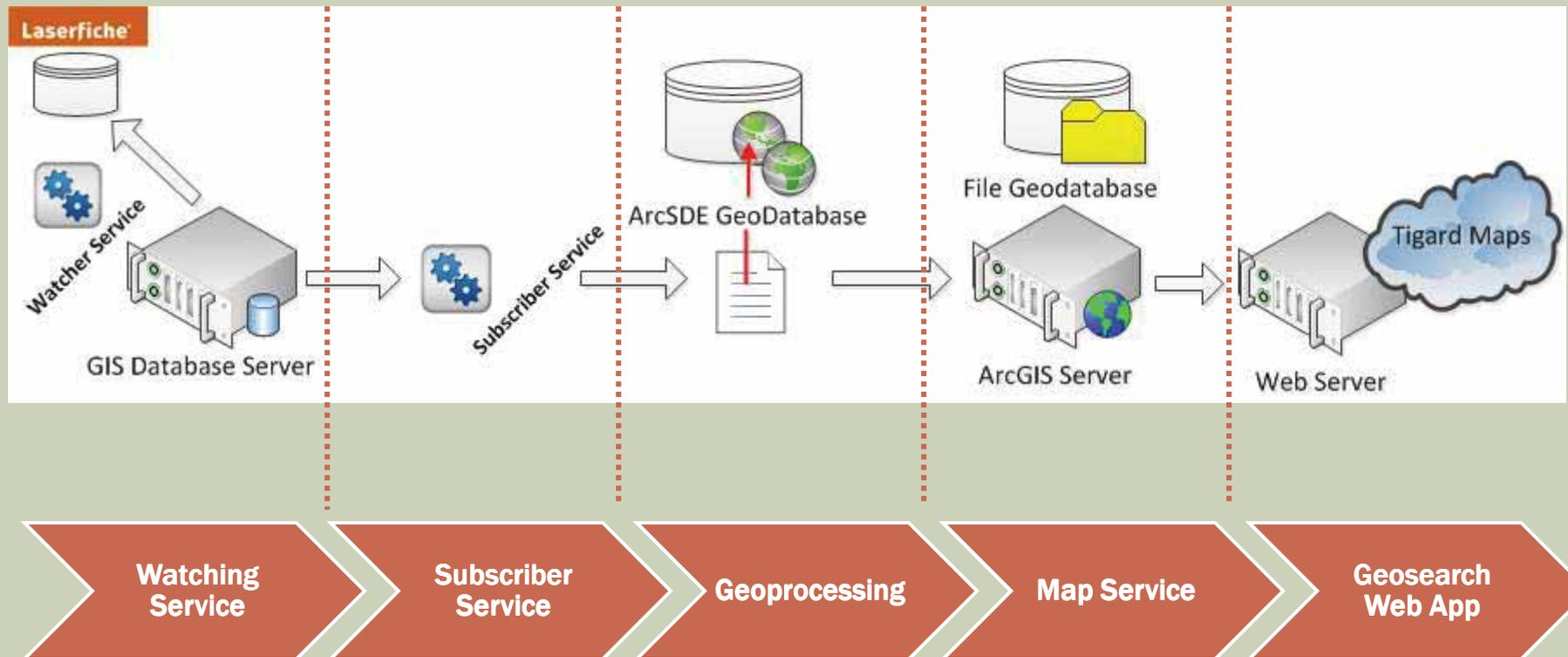
- ArcGIS Server 10.0
- Primary Web Mapping: MapOptix (GeoNorth)
- MultiMap
- Flex
- ArcGIS Online
- Integrate with nearly all the major business systems

LASERFICHE (DMS)

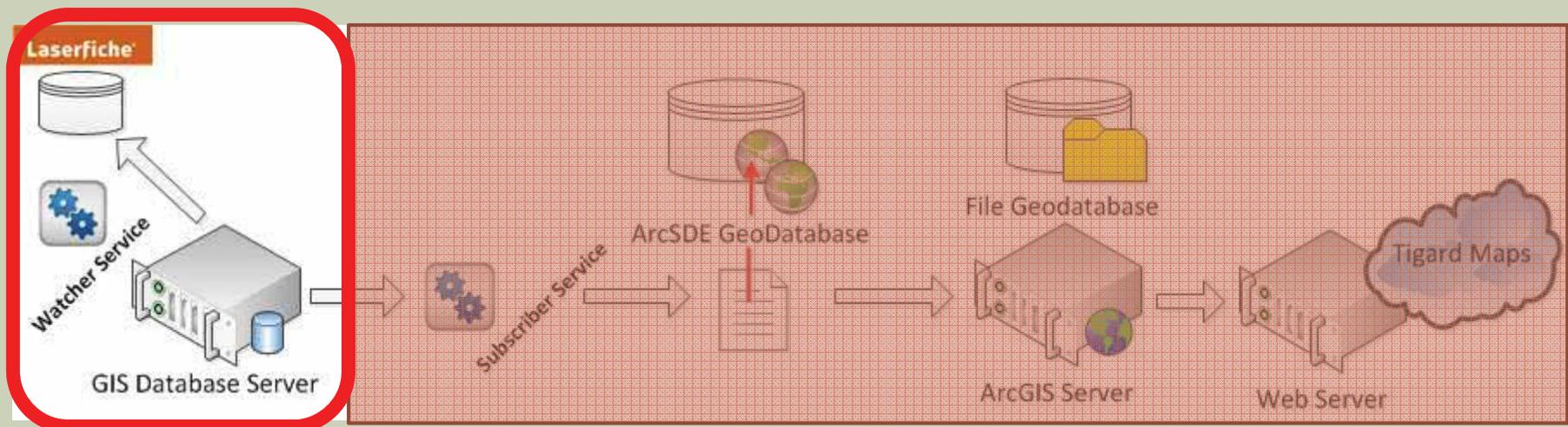
- Document Management System
- Originally implemented under Records Division
- Defacto 'enterprise' DMS
- Laserfiche SDE allowed backend integration

Laserfiche®

THE SOLUTION DIAGRAMMATIC VIEW

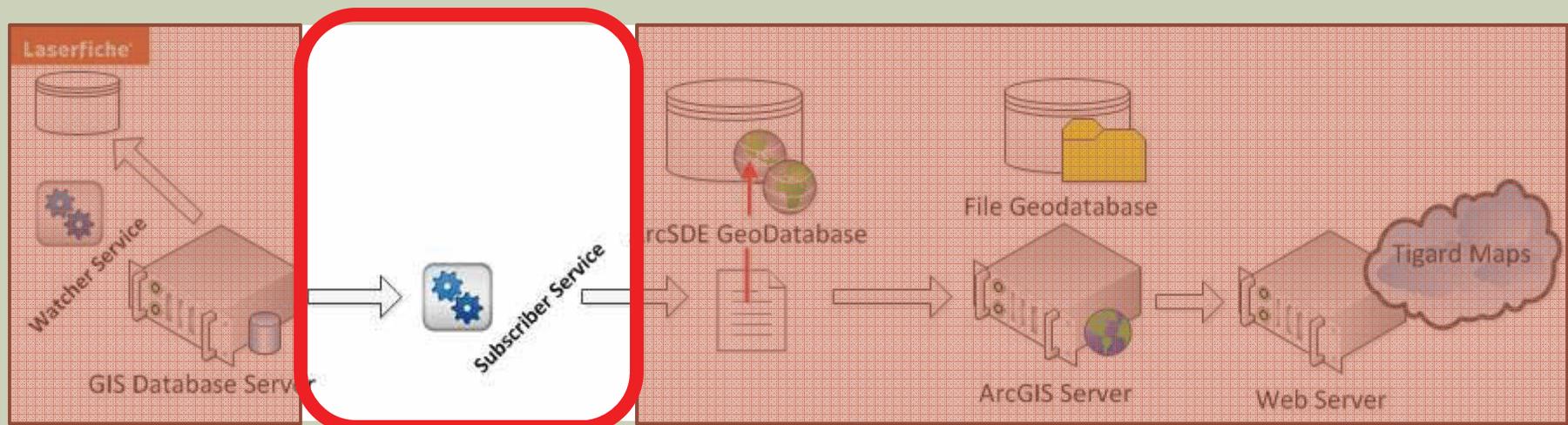


WATCHING SERVICE



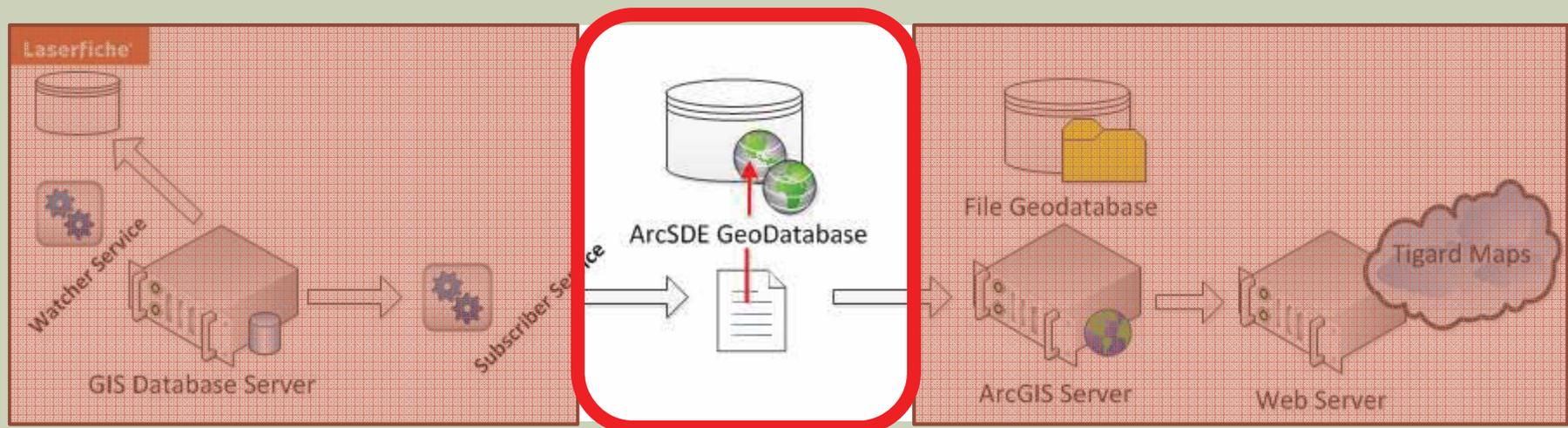
- Monitors all activity on folders in Laserfiche
Tracks last Laserfiche ASN process and starts from this point if service is stopped and started
- Can monitor specific activity types
- Uses nservicebus to simply access to MS Message Queue (MSMQ)
- Written in C#

SUBSCRIBER SERVICE



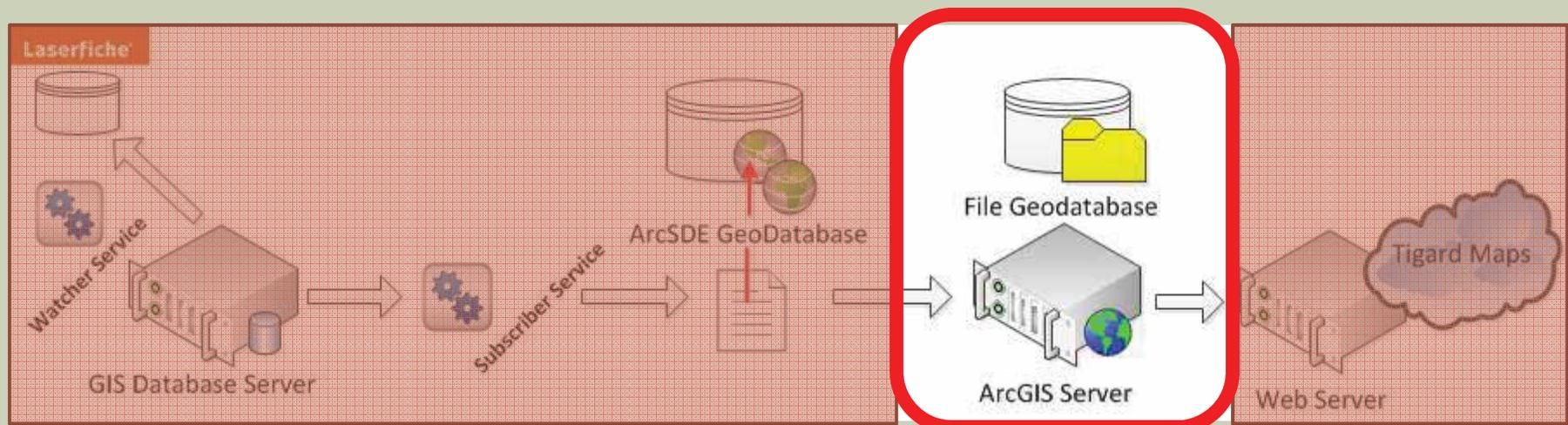
- Filters activity by Laserfiche folder
- Interrogates Laserfiche template
- Forward parameters to Python script for geoprocessing

GEOPROCESSING



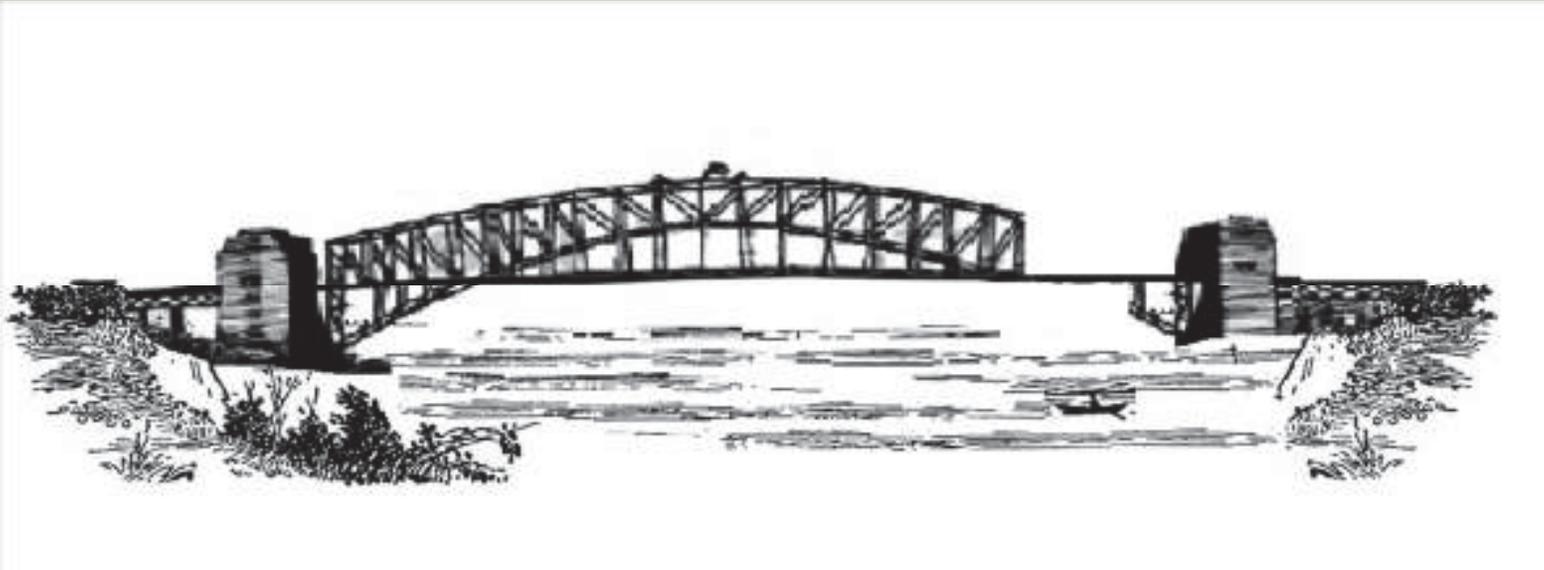
- Searches for feature in source feature class based on ID field and ID parameter passed by subscriber service
- Checks if feature already exists in index, if not copies feature to appropriate index
- Sets flags in Laserfiche index feature class indicating presence/absence of a particular document type
- Executed by Python script

ARCGIS SERVER MAP SERVICE



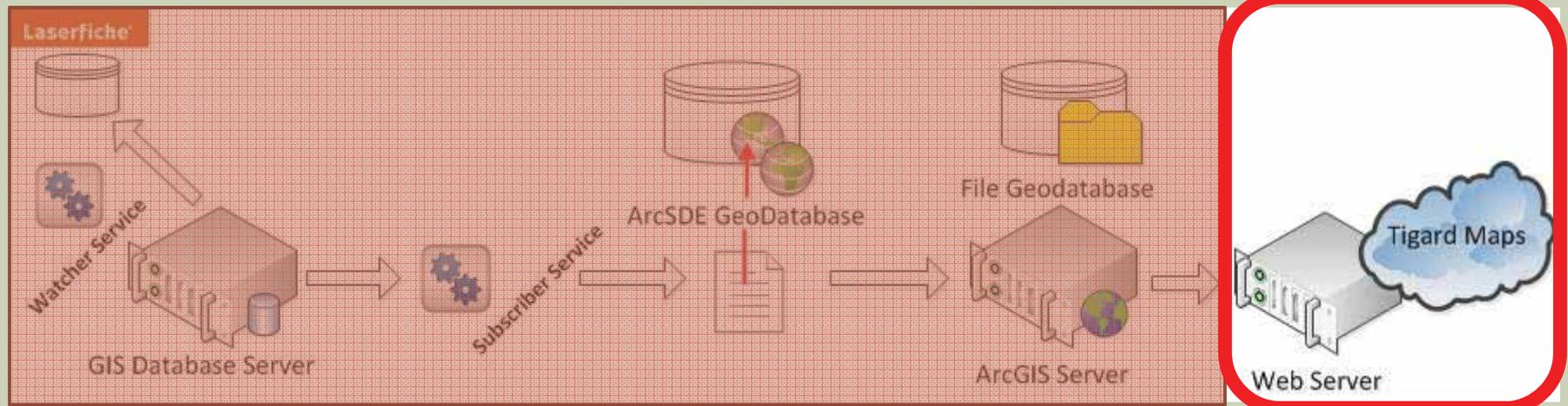
- Create MXD definition queries, publish to ArcGIS Server
- Defined structure within MXD
- Can add on additional document types

IS OUR BRIDGE BUILT YET?



- Almost....
- Need web application tools to connect features to Laserfiche
- Understand end user experience

GEOSEARCH FUNCTION



- Used with built in tools of MapOptix (by GeoNorth)
- Operation involves geosearch
- Simple yes/no interrogation
- User presented with results.
- Hyperlinks initiate call to WebLink

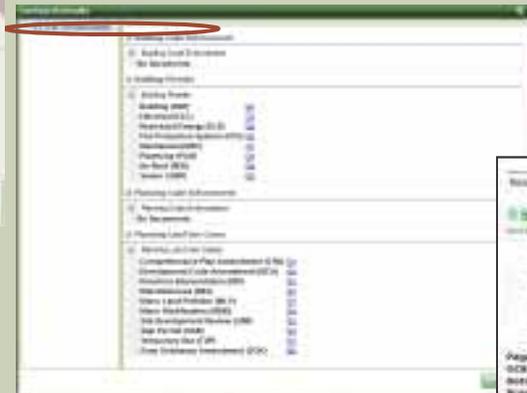
GEOSEARCH FUNCTION

Dropdown menu)



1

Geosearch Results (off Tax lot)



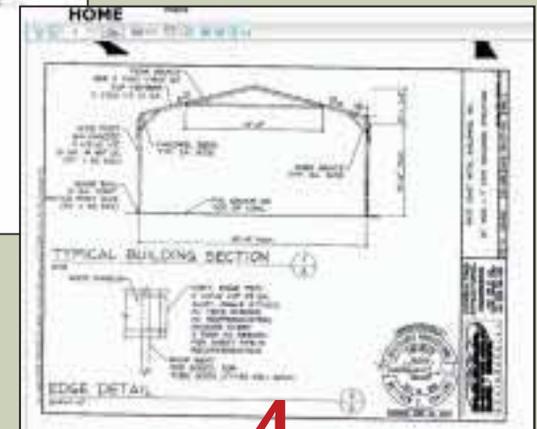
2

WebLink, listing of documents



3

Opened document (PDF)



4

NEXT STEPS

- **Add additional document types**
- **Expose specific document types to public**
- **Tackle historic documents**

QUESTIONS?

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