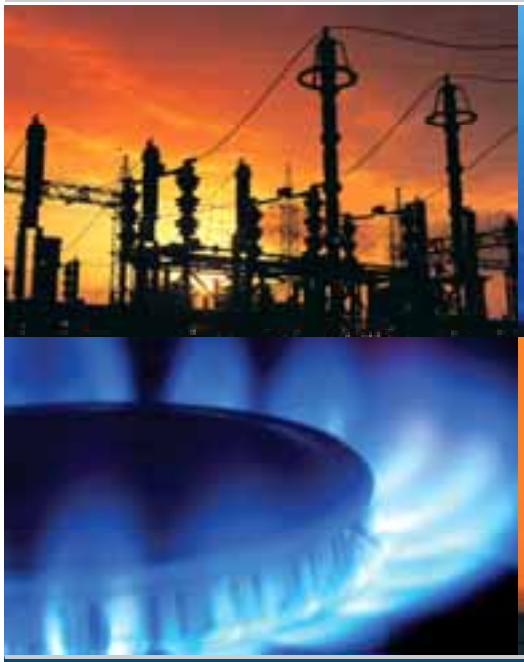
ConEd's One Call & Pipeline Patrol Applications for Damage Prevention and Emergency Response



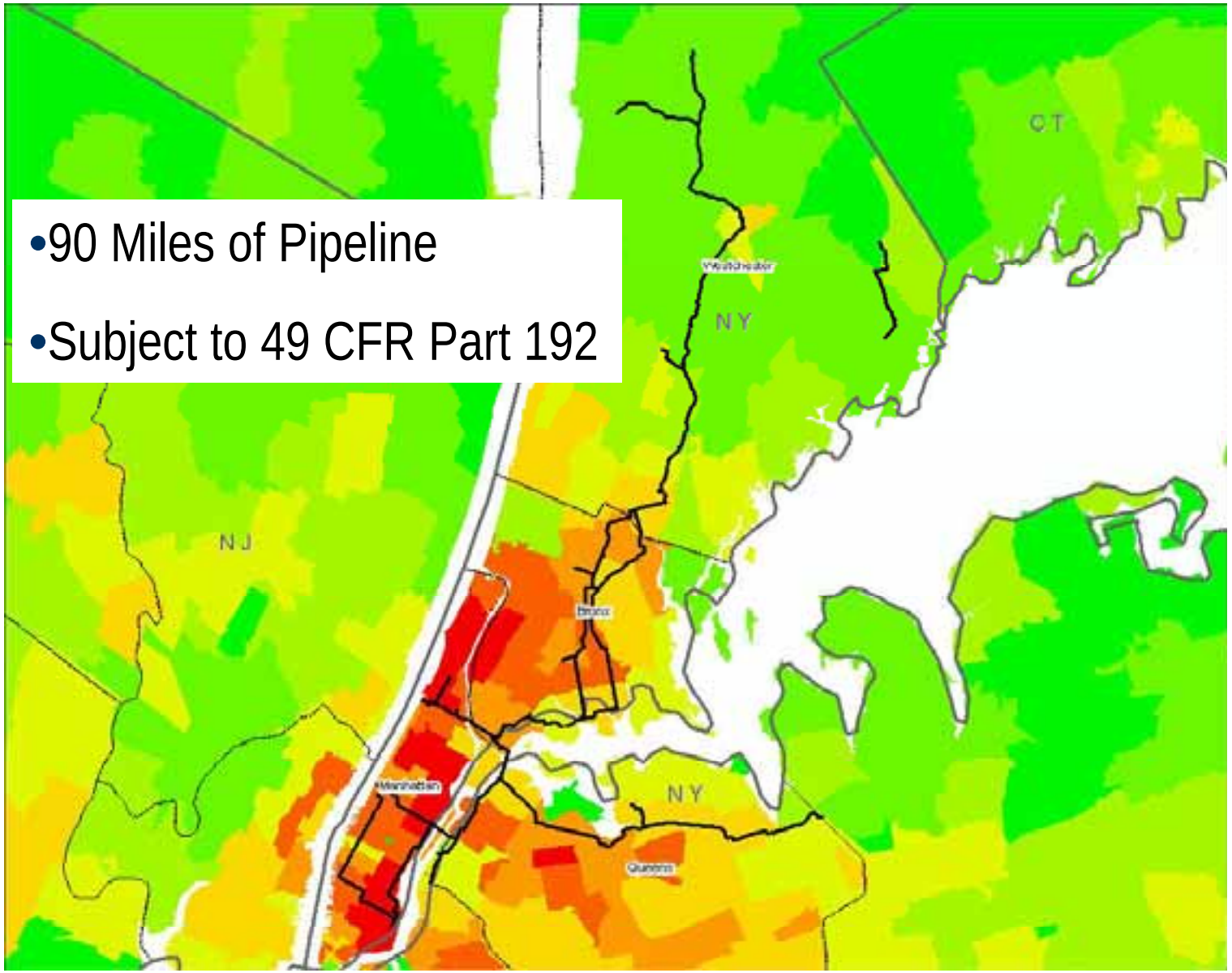
ConEdison

Germanischer Lloyd

Highlights

- Transmission Operating Environment
- Mechanical Damage
- PIIMS Overview
- Addressing Mechanical Damage Threats via the One Call and Pipeline Patrol applications
  - Prevention
  - Emergency Response

High Population Density



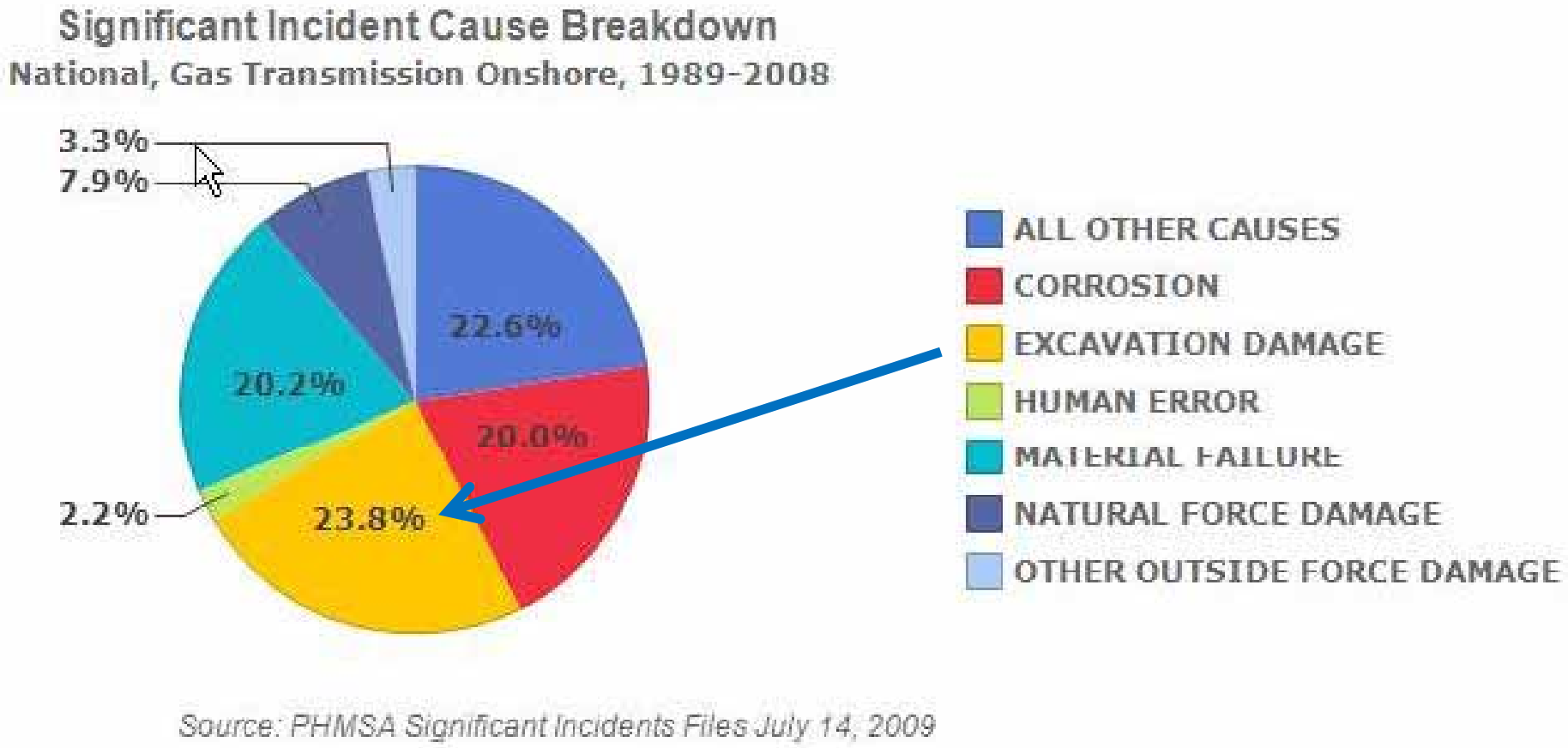
- 90 Miles of Pipeline
- Subject to 49 CFR Part 192

Significant Built-up Infrastructure

Mechanical Damage

Consequences

Pipeline Incident Statistics



Source: PHMSA Significant Incidents Files July 14, 2009

Integrity Management

conEdison

NY

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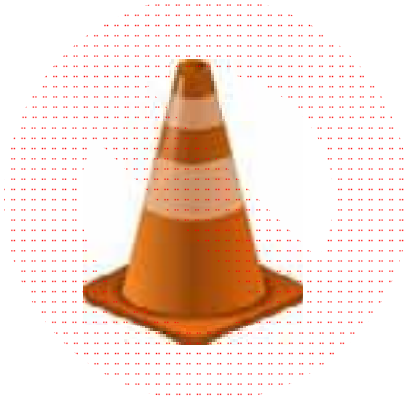
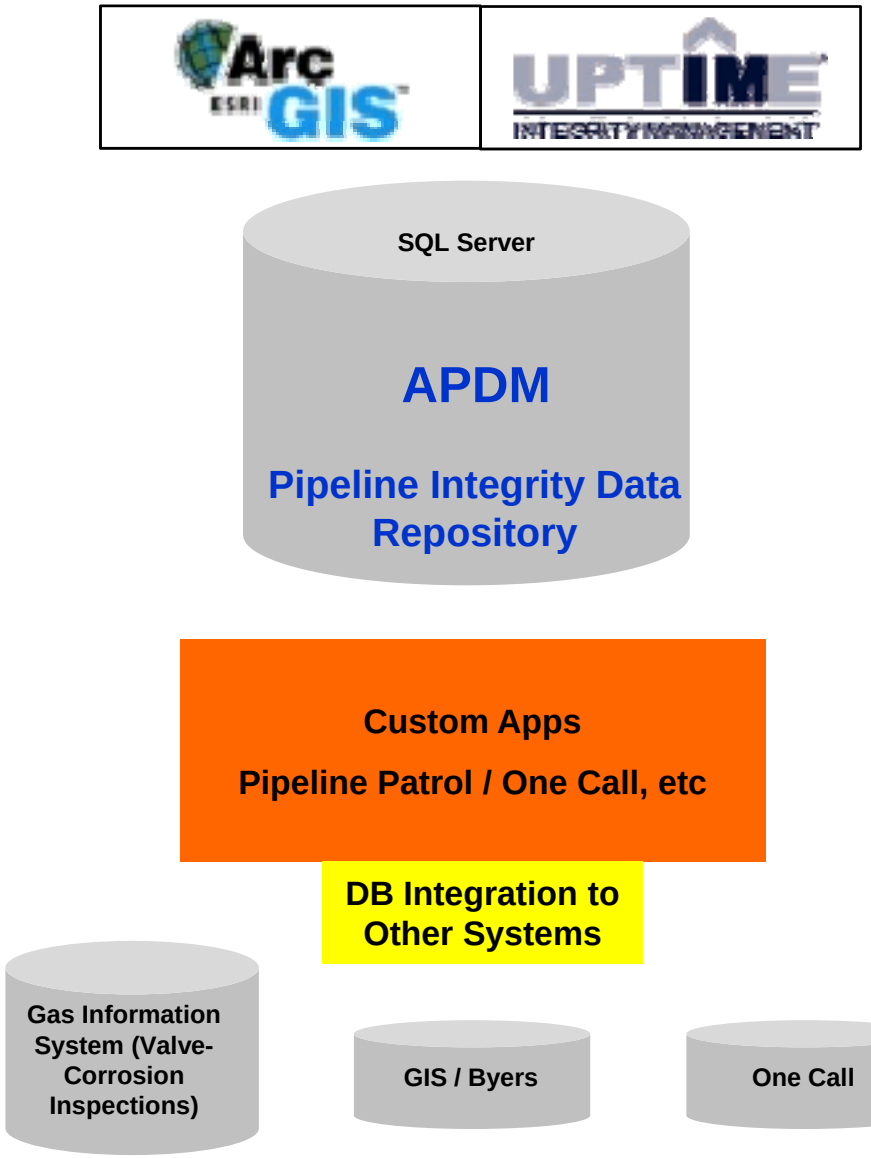
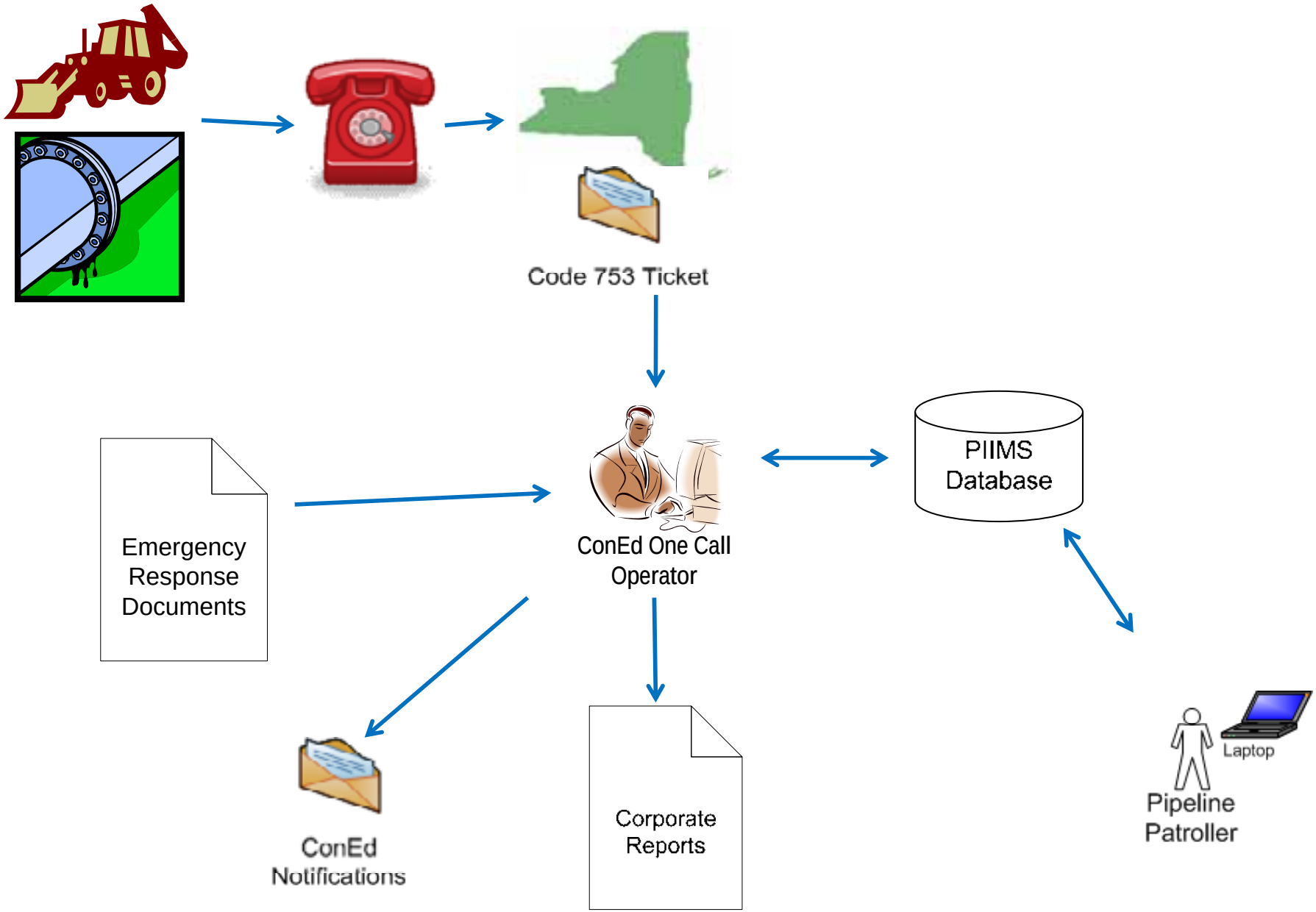


Solution Overview – Pipeline Integrity Information System (PIIMS)



One Call Workflow



Incoming One Call Tickets

Location

Type

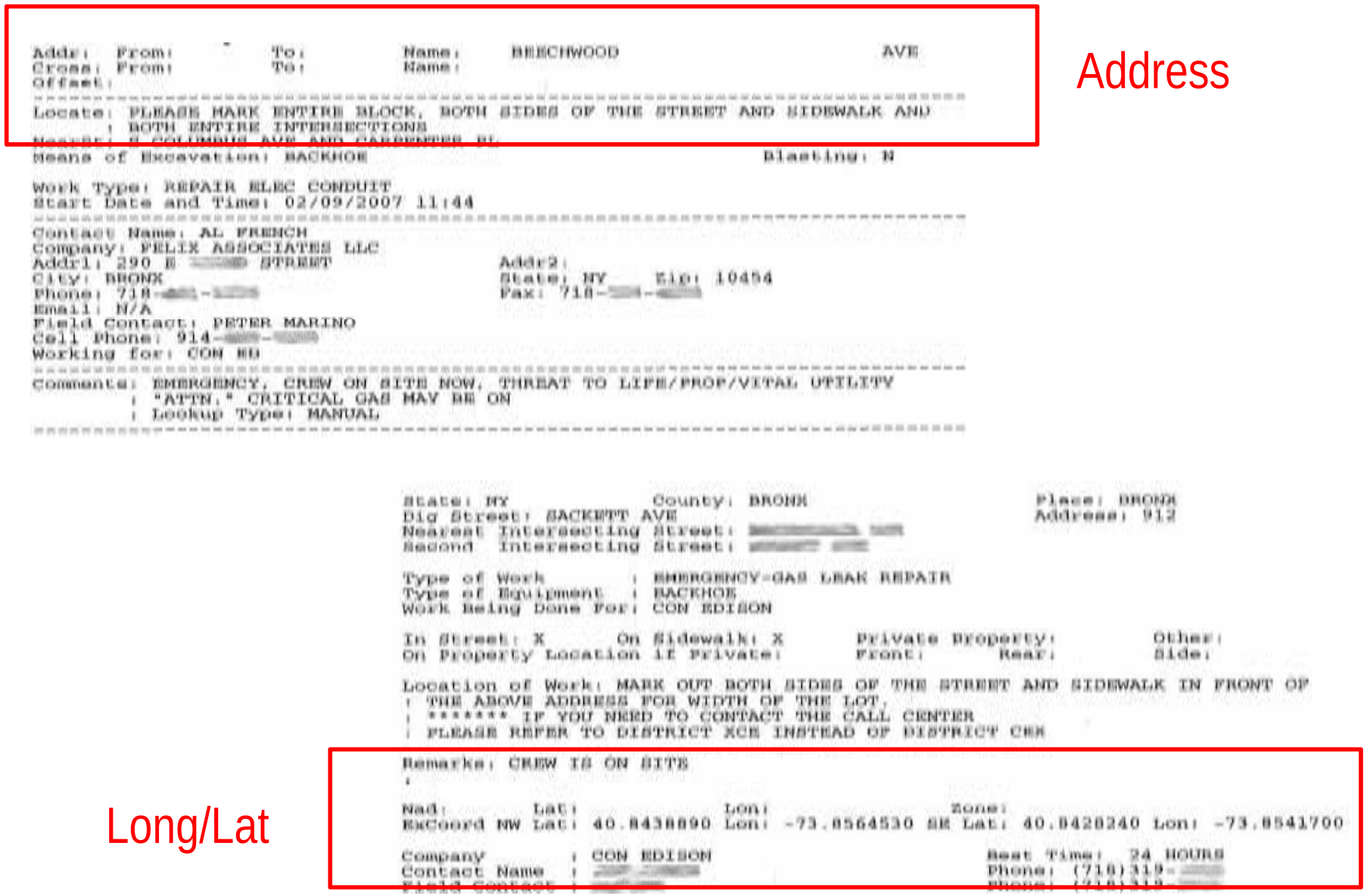
Contact

```
NYCLI ONE CALL

Send To: CEX              Seq No:    36

Ticket No: 70400597       EMERGENCY

Start Date:  2/09/07   Time:  4:00 PM                  Lead Time: 0

State: NY              County: BRONX                  Place: BRONX
Dig Street: SACKETT AVE                               Address: 912
Nearest Intersecting Street:
Second  Intersecting Street:

Type of Work       : EMERGENCY-GAS LEAK REPAIR
Type of Equipment  : BACKHOE
Work Being Done For: CON EDISON

In Street: X      On Sidewalk: X      Private Property:        Other:
On Property Location if Private:      Front:      Rear:        Side:

Location of Work: MARK OUT BOTH SIDES OF THE STREET AND SIDEWALK IN FRONT OF
: THE ABOVE ADDRESS FOR WIDTH OF THE LOT.
: ******* IF YOU NEED TO CONTACT THE CALL CENTER
: PLEASE REFER TO DISTRICT XCB INSTEAD OF DISTRICT CEX

Remarks: CREW IS ON SITE
:

Nad:        Lat:              Lon:                Zone:
ExCoord NW Lat: 40.8438890 Lon: -73.8564530 SE Lat: 40.8428240 Lon: -73.8541700

Company        : CON EDISON                    Best Time:  24 HOURS
Contact Name   :                               Phone: (718)319-
Field Contact  :                               Phone: (718)319-
Caller Address:                          Fax Phone: (718)518-

Email Address :

Additional Operators Notified:
CABLNYC01   - CABLEVISION OF NEW Y    CEX       - CONSOLIDATED EDISON
XCB         - EMPIRE CITY SUBWAY C

Original Call Date:  2/09/07   Time:  3:51 PM    Op: nytsma

Notice History:

Date/Time              Notice ID              Description
2007/02/09 03:55:20PM  NYC20070209000498      Received for Member: CEX
2007/02/09 04:26:07PM  NYC20070209000498      Assigned to NAVARRO WESLEY for CEX
                                                 by TPRYCE
                                              19-1
2007/02/09 04:39:50PM  NYC20070209000498      Note entered by TPRYCE
                                              manfac 20" st trans
```

Locator Information Varies

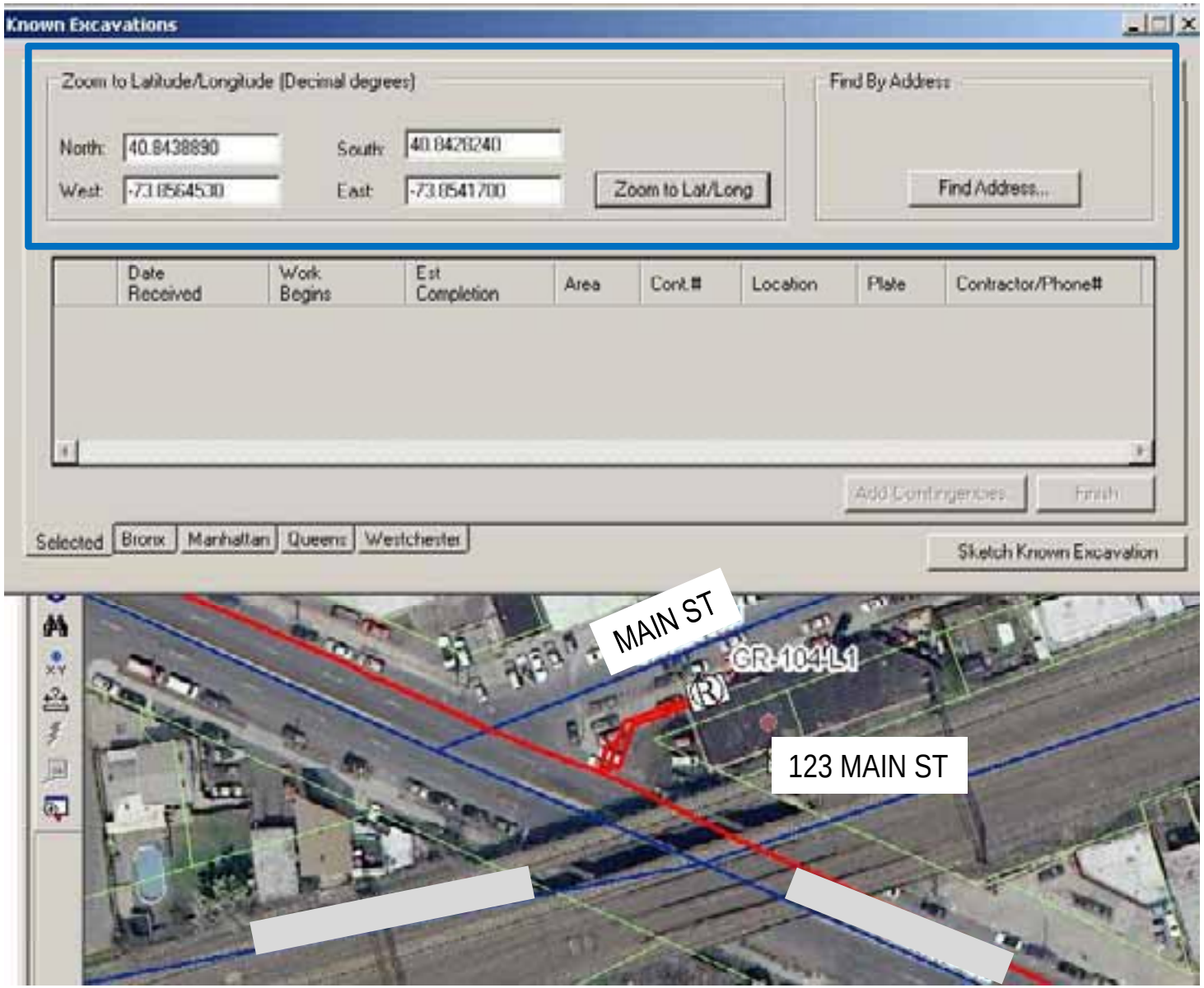
Address

Long/Lat

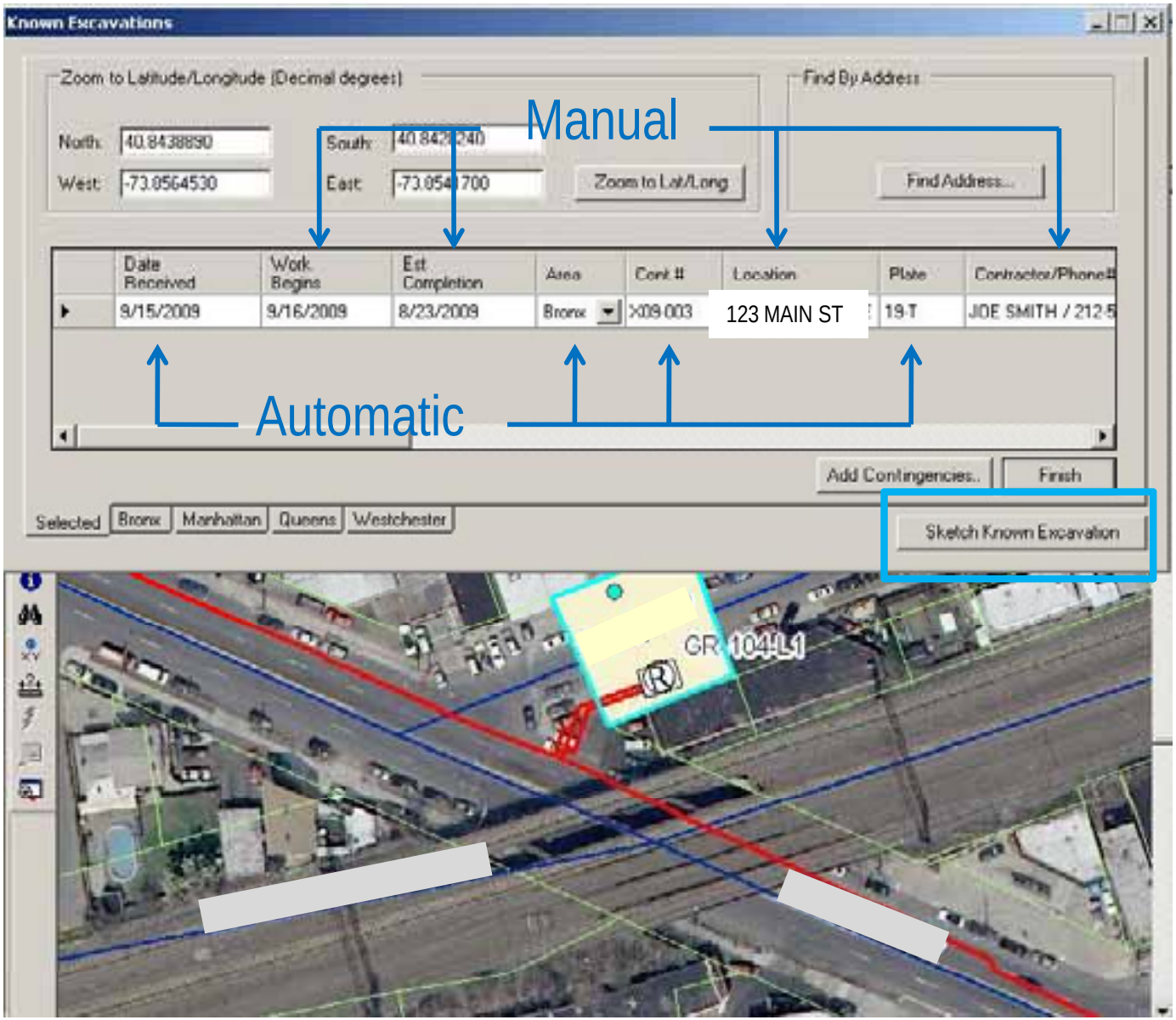


```
Addr:  From:          To:          Name:     BEECHWOOD                    AVE
Cross: From:          To:          Name:
Offset:
-------------------------------------------------------------------------------
Locate: PLEASE MARK ENTIRE BLOCK, BOTH SIDES OF THE STREET AND SIDEWALK AND
      : BOTH ENTIRE INTERSECTIONS
Near:  E COLUMBUS AVE AND CARPENTER PL
Means of Excavation: BACKHOE                          Blasting: N

Work Type: REPAIR ELEC CONDUIT
Start Date and Time: 02/09/2007 11:44
-------------------------------------------------------------------------------
Contact Name: AL FRENCH
Company: FELIX ASSOCIATES LLC
Addr1: 290 E [redacted] STREET                Addr2:
City: BRONX                                   State: NY    Zip: 10454
Phone: 718-[redacted]                         Fax: 718-[redacted]
Email: N/A
Field Contact: PETER MARINO
Cell Phone: 914-[redacted]
Working for: CON ED
-------------------------------------------------------------------------------
Comments: EMERGENCY, CREW ON SITE NOW, THREAT TO LIFE/PROP/VITAL UTILITY
        : "ATTN." CRITICAL GAS MAY BE ON
        : Lookup Type: MANUAL
-------------------------------------------------------------------------------

State: NY              County: BRONX                    Place: BRONX
Dig Street: SACKETT AVE                                 Address: 912
Nearest Intersecting Street: [redacted]
Second  Intersecting Street: [redacted]

Type of Work          : EMERGENCY-GAS LEAK REPAIR
Type of Equipment     : BACKHOE
Work Being Done For: CON EDISON

In Street: X      On Sidewalk: X      Private Property:      Other:
On Property Location if Private:      Front:      Rear:      Side:

Location of Work: MARK OUT BOTH SIDES OF THE STREET AND SIDEWALK IN FRONT OF
: THE ABOVE ADDRESS FOR WIDTH OF THE LOT.
: ******* IF YOU NEED TO CONTACT THE CALL CENTER
: PLEASE REFER TO DISTRICT XCE INSTEAD OF DISTRICT CES

Remarks: CREW IS ON SITE
:

Nad:        Lat:                  Lon:                  Zone:
ExCoord NW Lat: 40.8438890 Lon: -73.8564530 SE Lat: 40.8428240 Lon: -73.8541700

Company          : CON EDISON                          Best Time:  24 HOURS
Contact Name     : [redacted]                          Phone: (718)319-[redacted]
Field Contact    : [redacted]                          Phone: (718)319-[redacted]
```

Locate Ticket in GIS



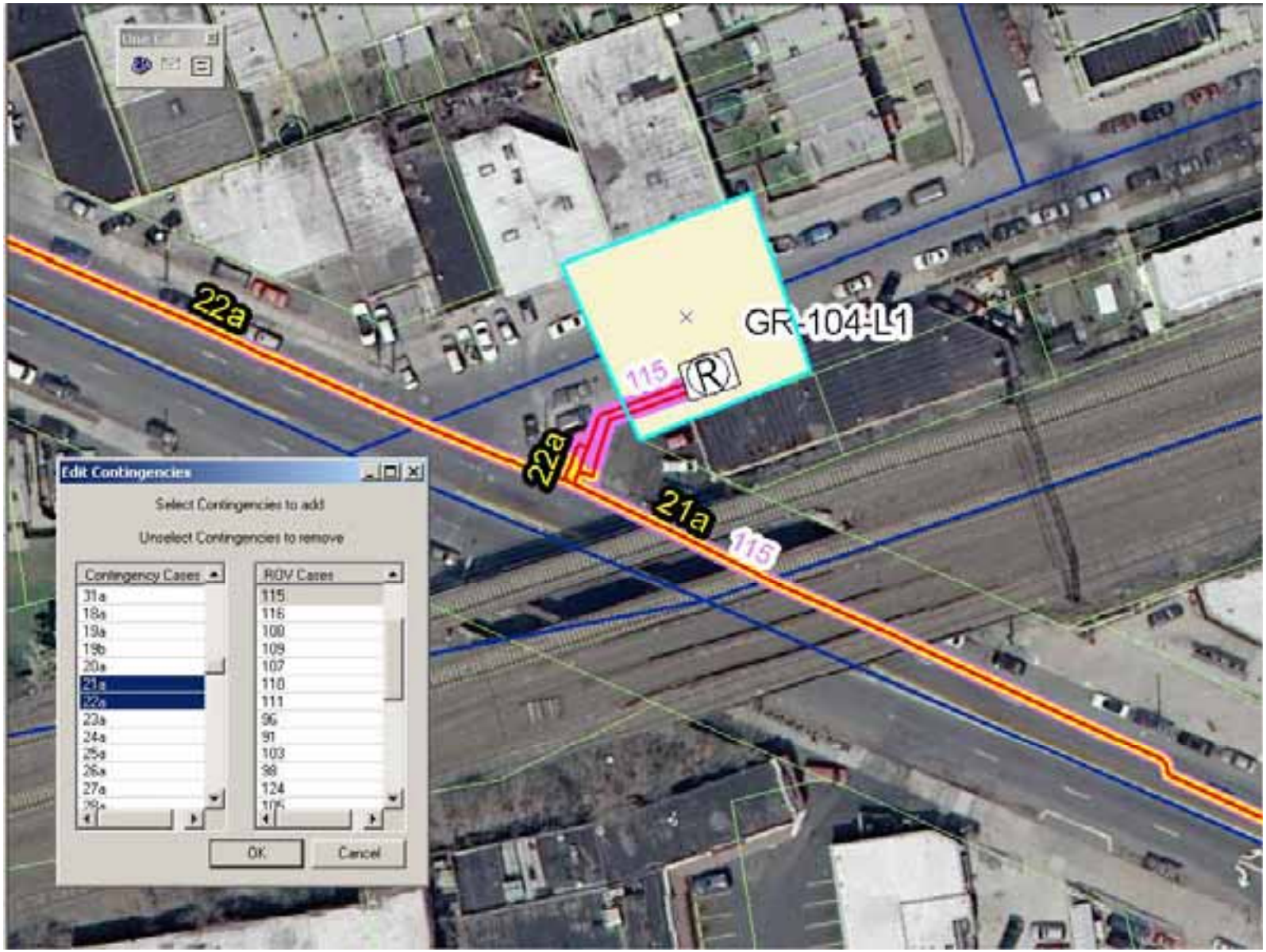
Sketch Known Excavation



Emergency Response Documents

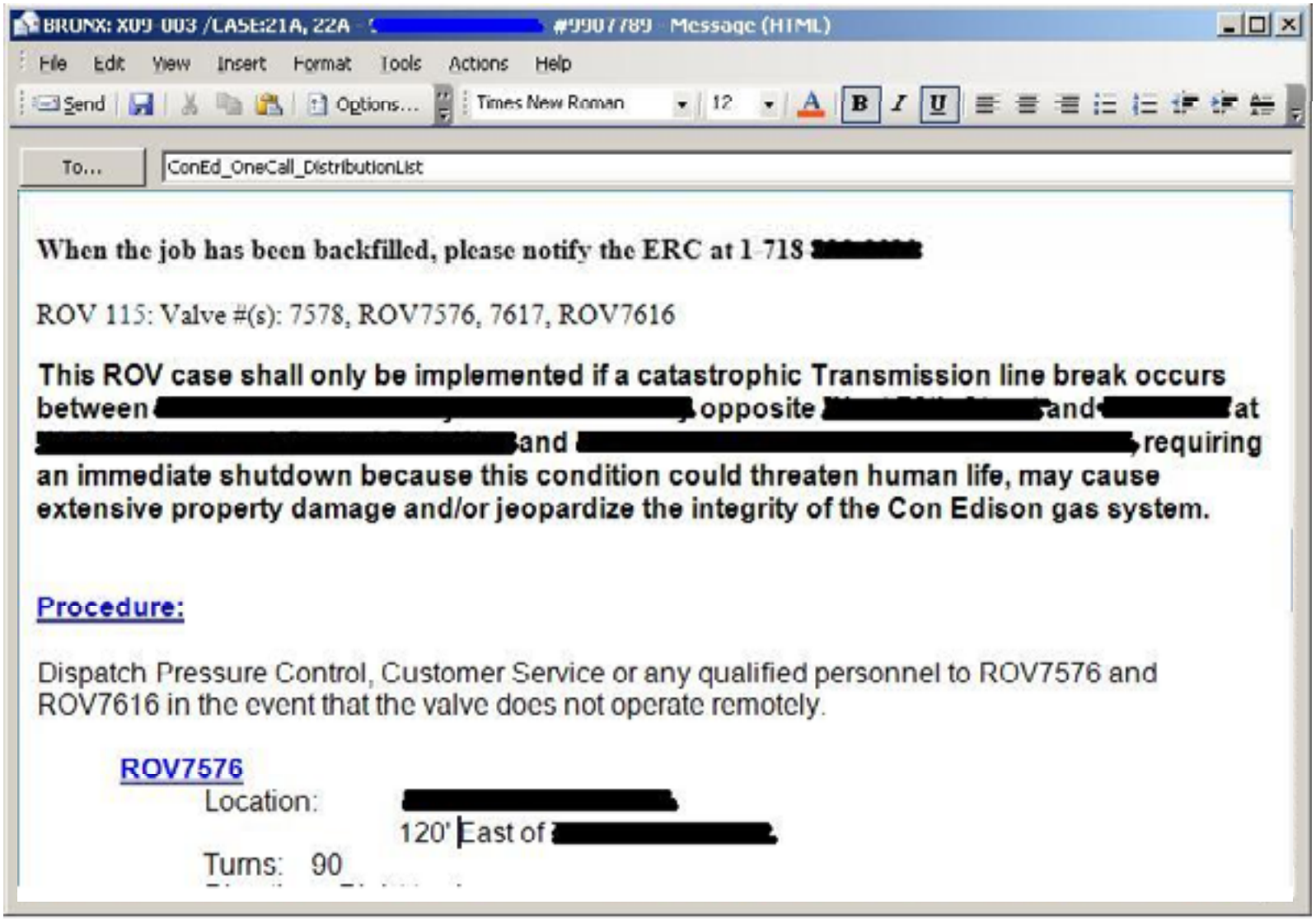
Spatially Enabled Contingency/ROV Cases

Linking Contingency/ROV Cases

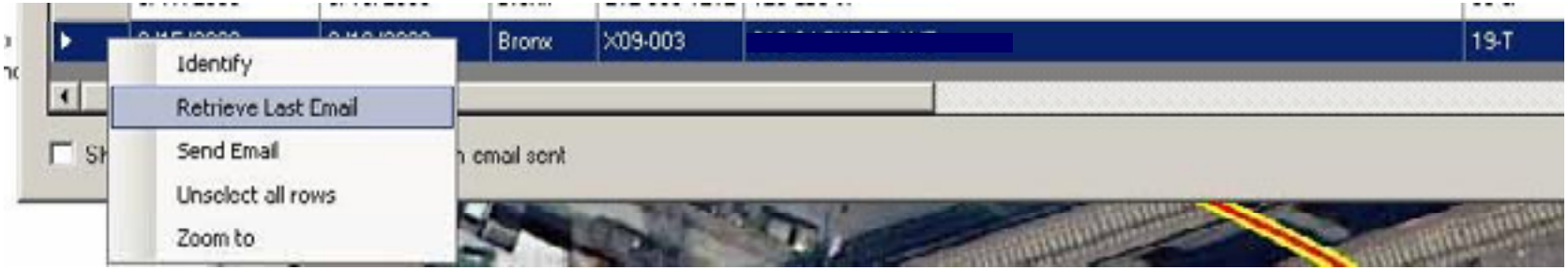


Emergency Document Hyperlink

Send E-mail


BRONX: X09 003 /CASE:21A, 22A [redacted] #990789 Message (HTML)
File Edit View Insert Format Tools Actions Help
Send Options... Times New Roman 12
To... ConEd_OneCall_DistributionList
When the job has been backfilled, please notify the ERC at 1-718 [redacted]
ROV 115: Valve #(s): 7578, ROV7576, 7617, ROV7616
This ROV case shall only be implemented if a catastrophic Transmission line break occurs between [redacted] opposite [redacted] and [redacted] at [redacted] and [redacted] requiring an immediate shutdown because this condition could threaten human life, may cause extensive property damage and/or jeopardize the integrity of the Con Edison gas system.
Procedure:
Dispatch Pressure Control, Customer Service or any qualified personnel to ROV7576 and ROV7616 in the event that the valve does not operate remotely.
ROV7576
Location: [redacted]
120' East of [redacted]
Turns: 90

Send / Retrieve E-mail Notification

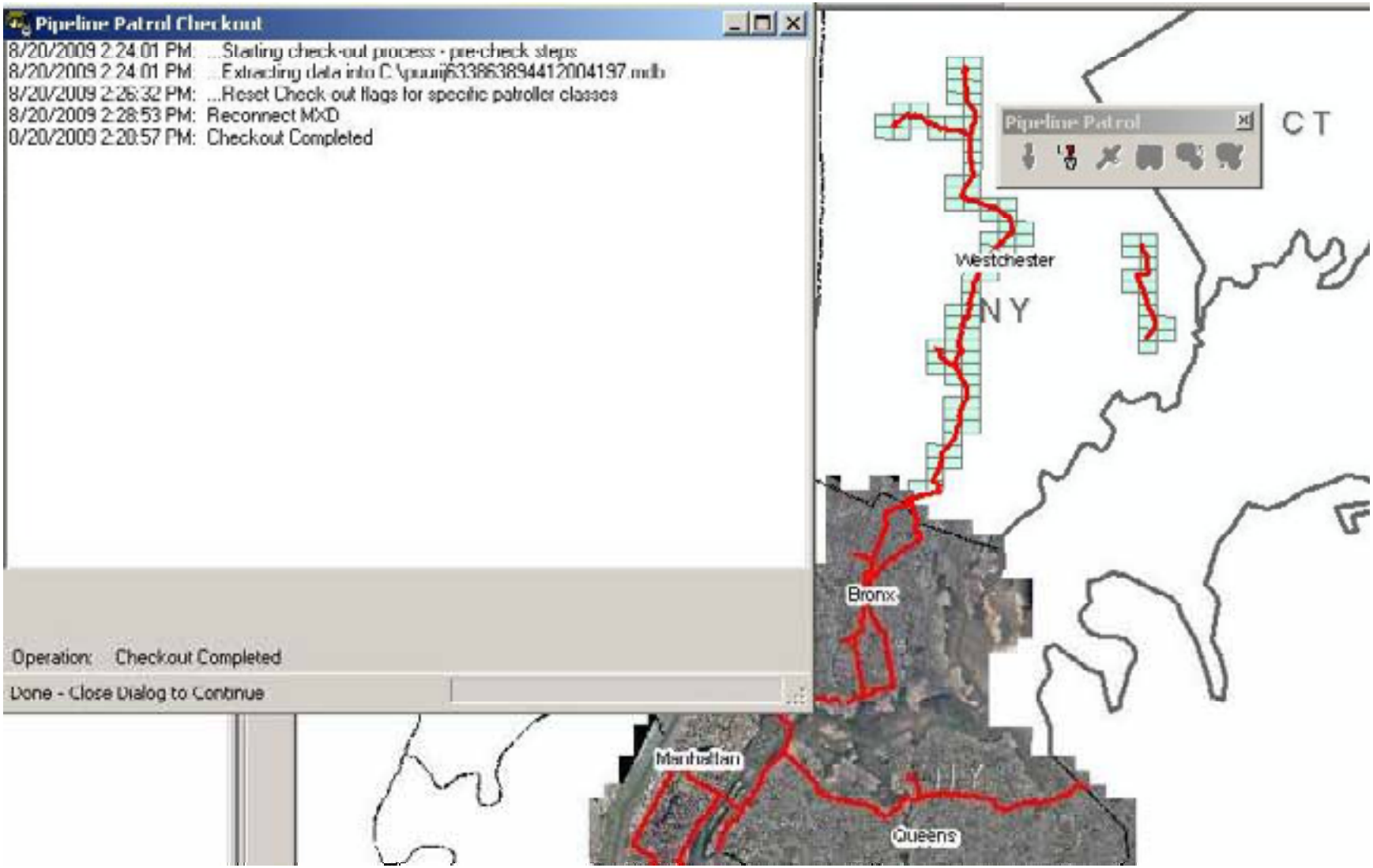


- Excavation Status Change
- E-mail chain as .msg file(s) on disk
- Hyperlinked to Known Excavation

Pipeline Patrol

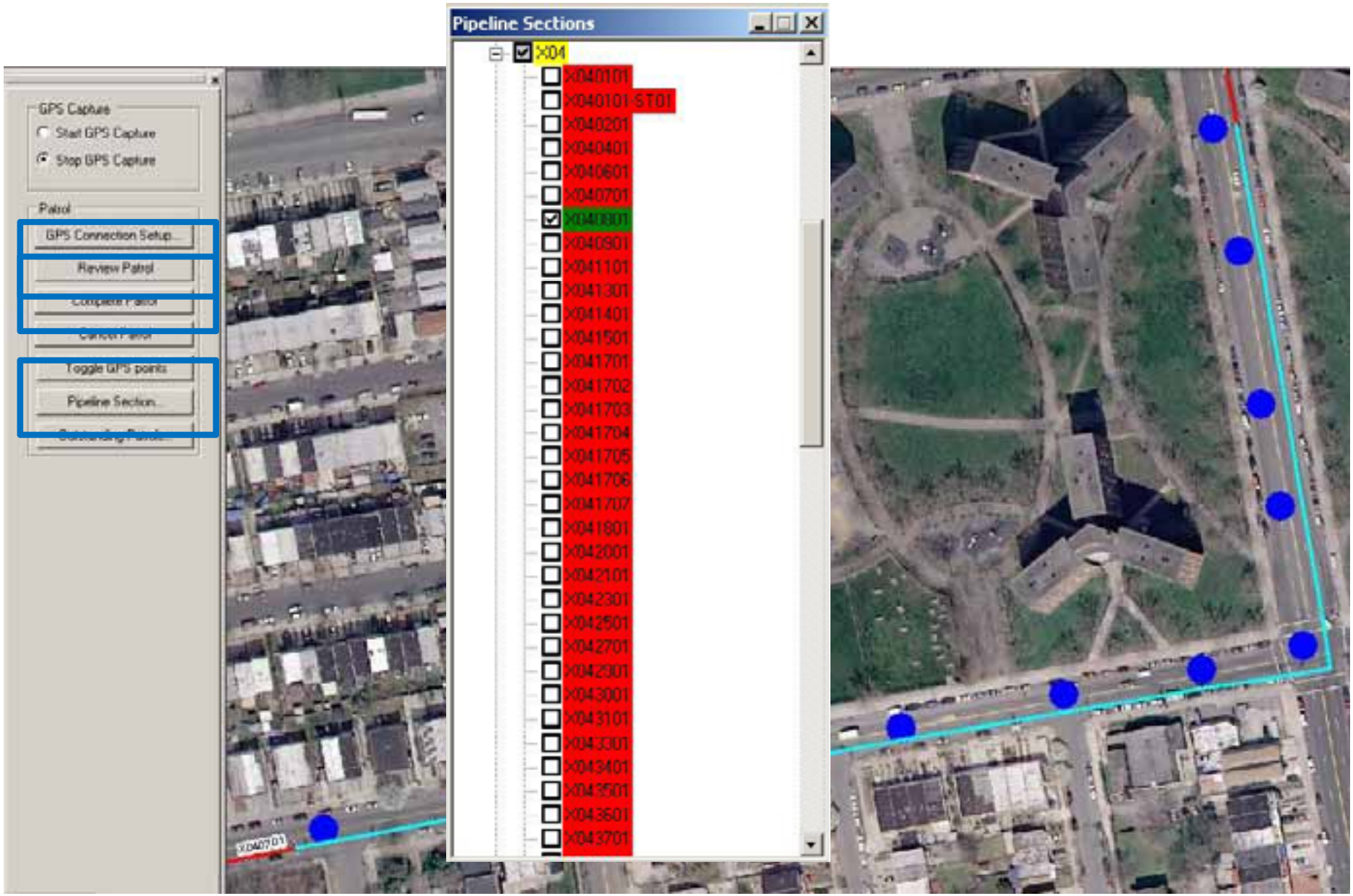
- Monitor construction activity in the field
- Automatically document patrolled segments
- Create ‘Findings’ of unrecorded excavations
- Patrol Frequency
  - Manhattan - daily
  - All other - weekly

Pipeline Patrol Checkout

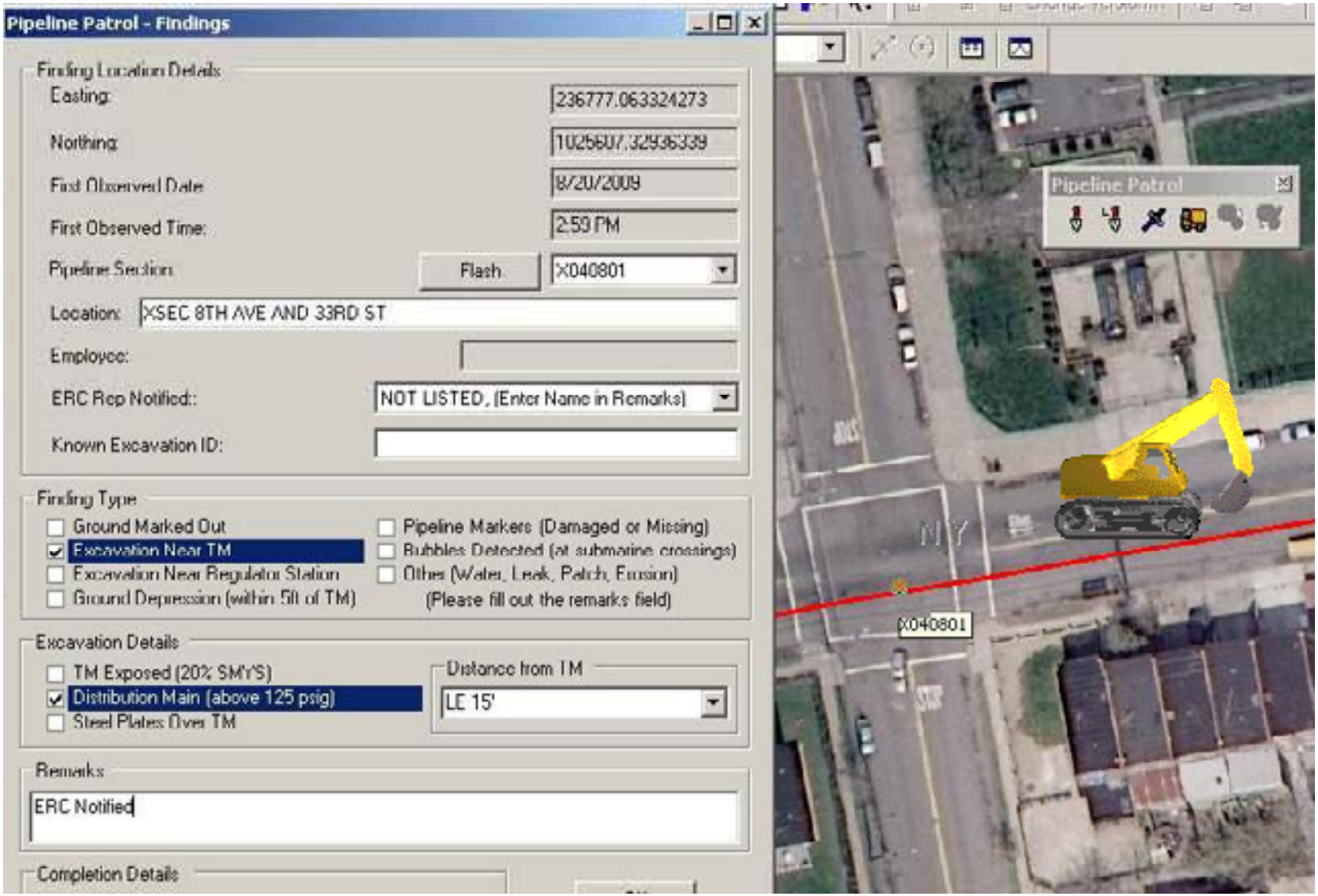


Patrolling the Lines with GPS

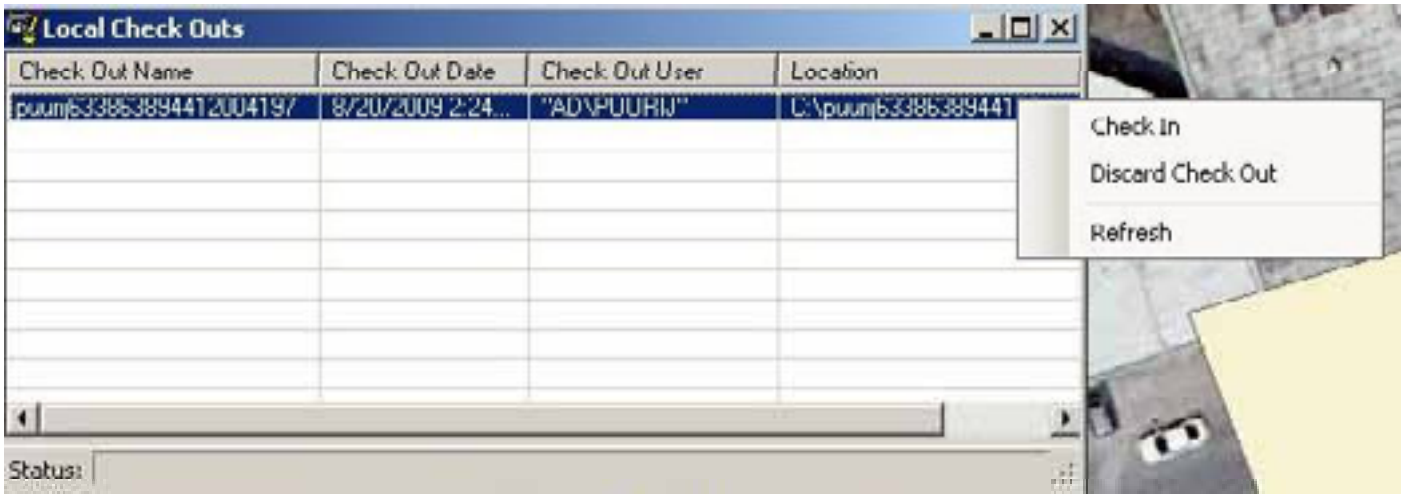
Completing the Patrol



“Finding” Encountered



Pipeline Patrol Check-In

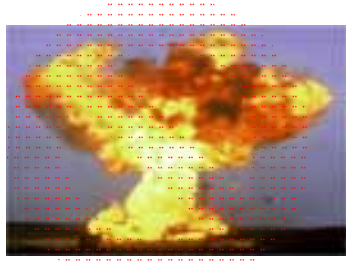


- Findings
- Patrolled Sections
- GPSLog

Pipeline Patrol Desktop Admin

- Administrator Mode
- Corporate Compliance Reports
- Street Repaving – Clear Findings

Conclusion



49 CFR 192

One Call

Pipeline Patrol

Thank you for your attention!