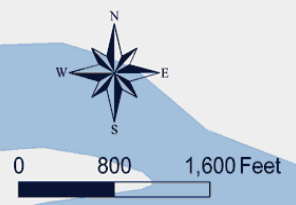
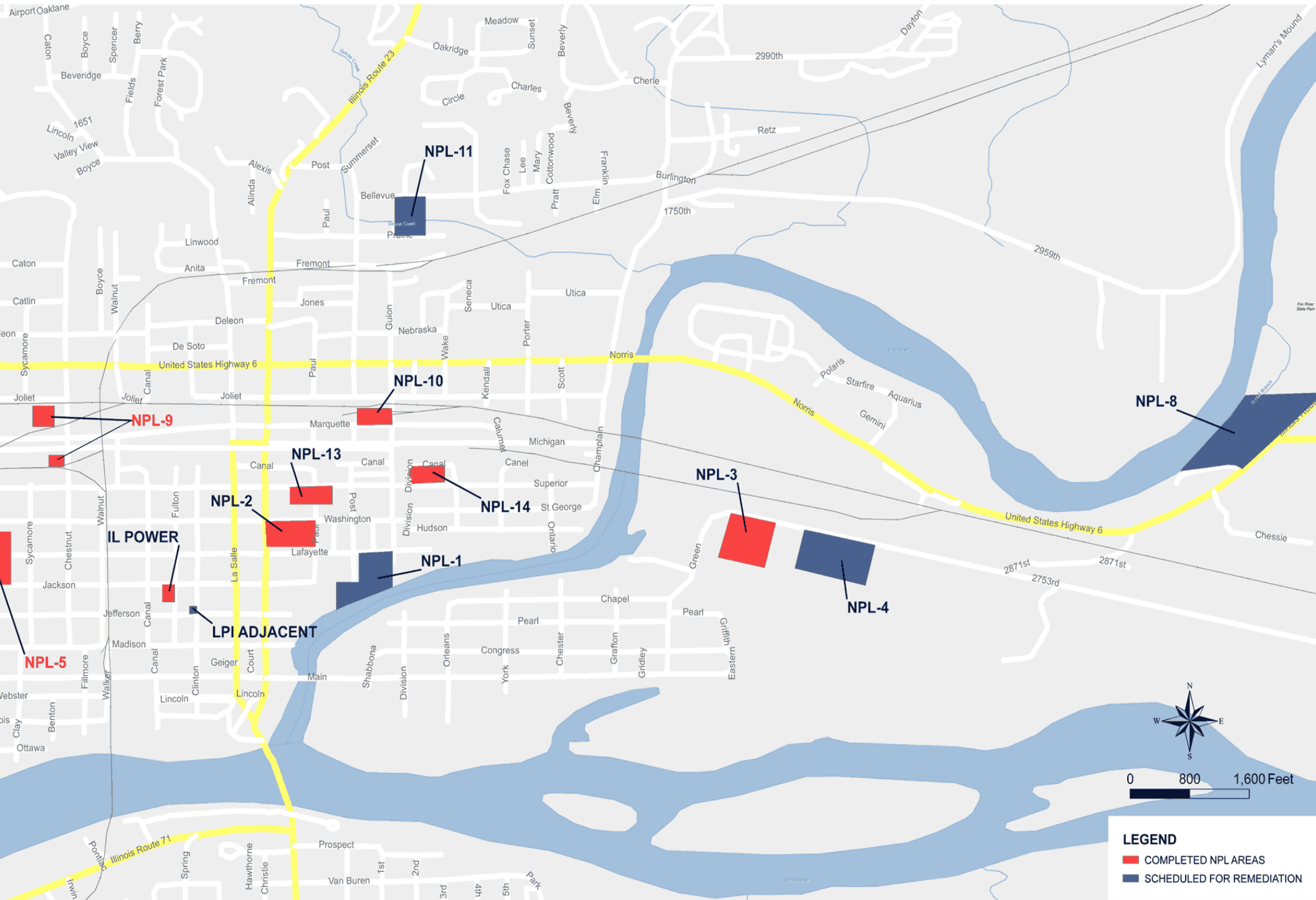


**Luminous Processes, Inc. (LPI)
Adjacent Area
Ottawa, Illinois**



**Community Meeting
March 25, 2009**



LEGEND	
■	COMPLETED NPL AREAS
■	SCHEDULED FOR REMEDIATION

Site History

- LPI Adjacent Area is one of a total of 16 areas in and around Ottawa that were contaminated with radium-226.
- The contamination came from two Ottawa companies that used radium sulfate paint in making glow-in-the-dark watch dials and aircraft instruments.
- Radium Dial operated from 1920-1932 and LPI operated from 1932-1978.



Site History (continued)

- The LPI building was demolished in 1985-1986 by the Illinois Emergency Management Agency (formerly known as the Illinois Department of Nuclear Safety).
- The building waste was disposed of at the Department of Energy Hanford Reservation in Richland, Washington.



Site History (continued)

- Between 1995 and 1997 U.S. EPA removed 40,000 tons of radium-contaminated soil from 12 of the 16 areas.
- The removal effort was incomplete and 7 areas were placed in the remedial program.



Remedial Sites

- NPL-1 - Guion and Lafayette Streets
- NPL-4 – Canal Road
- NPL-8 - Route 71 (Frontage Property and Landfill)
- NPL-9 - Chestnut and Marquette Streets
- NPL-11 - Bellevue Avenue
- Illinois Power Building - Jefferson and Fulton Streets
- LPI Adjacent - Clinton and Jefferson Streets



Summary of Cleanup Activities 2006 - 2007

- NPL-1, 9, 11, and Illinois Power Building
- Illinois EMA performed verification sampling
- Cleanup Cost ~ \$6.4 Million



Waste Excavated

Site	Special (tons)	Rad (tons)
NPL-1	4,013.23	6,502.94
NPL-9	4,005.11	808.83
IL Power	0	23.31
Total	8,909.34	7,371.07

- Total Spent to Date ~ \$42 Million



NPL-1

- Due to time and budget constraints, the cleanup was not completed.
- U.S. EPA plans to conduct additional site characterization in order to complete the cleanup work.



NPL-11

- Activities were planned for NPL-11 as well but due to time and budget constraints, the cleanup was never started.
- Re-evaluate cleanup plan which could include deed restrictions.



Remedial Actions (RA) Remaining

Site	Estimated RA Cost	Tentative Start
LPI	\$1.6 million	Spring 2009
NPL-1	TBD	2010
NPL-11	TBD	TBD
NPL-4	\$22 million	2011 (2 to 3 years)
NPL-8	\$58 million	2015 forward (multiple years)



LPI Adjacent Site Cleanup Specifics

Jeff Bierbrodt
Tetra Tech

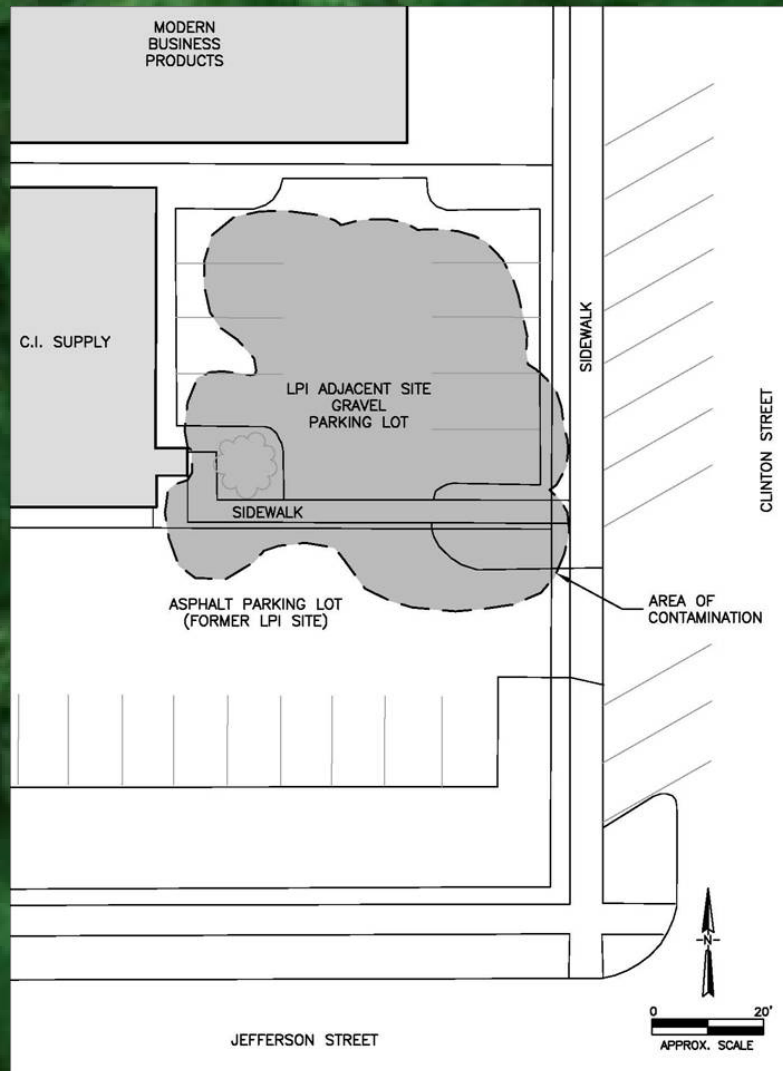


Planned Activities - LPI Adjacent Site

- Contaminated materials will be excavated and transported off-site to an out-of-state landfill permitted to receive radioactive waste.
- Current plans call for removal of 397 cubic yards of radium-226 impacted material.
- Approximately 390 cubic yards of non-radium impacted soil will be excavated and transported off-site to a local special waste landfill.



Work Methods



- Shaded area will be excavated down to bedrock (4 to 6 feet).
- Soil will be screened to determine if radioactive material is present.
- Radioactive soil will be packaged for shipment and shipped by rail.
- Remaining soil will be rescreened for radioactivity and if not radioactive sent to a local landfill as Special Waste.
- Soil will be excavated under wet conditions to suppress dust.



Work Methods



- Packaging will be similar to that pictured but smaller.
- Survey teams will use instruments and sampling to verify that radioactive material has been removed.
- The site will be restored using clean backfill that has been reclaimed from other site developments in Ottawa.
- Sidewalks and parking lot surfaces will be restored.



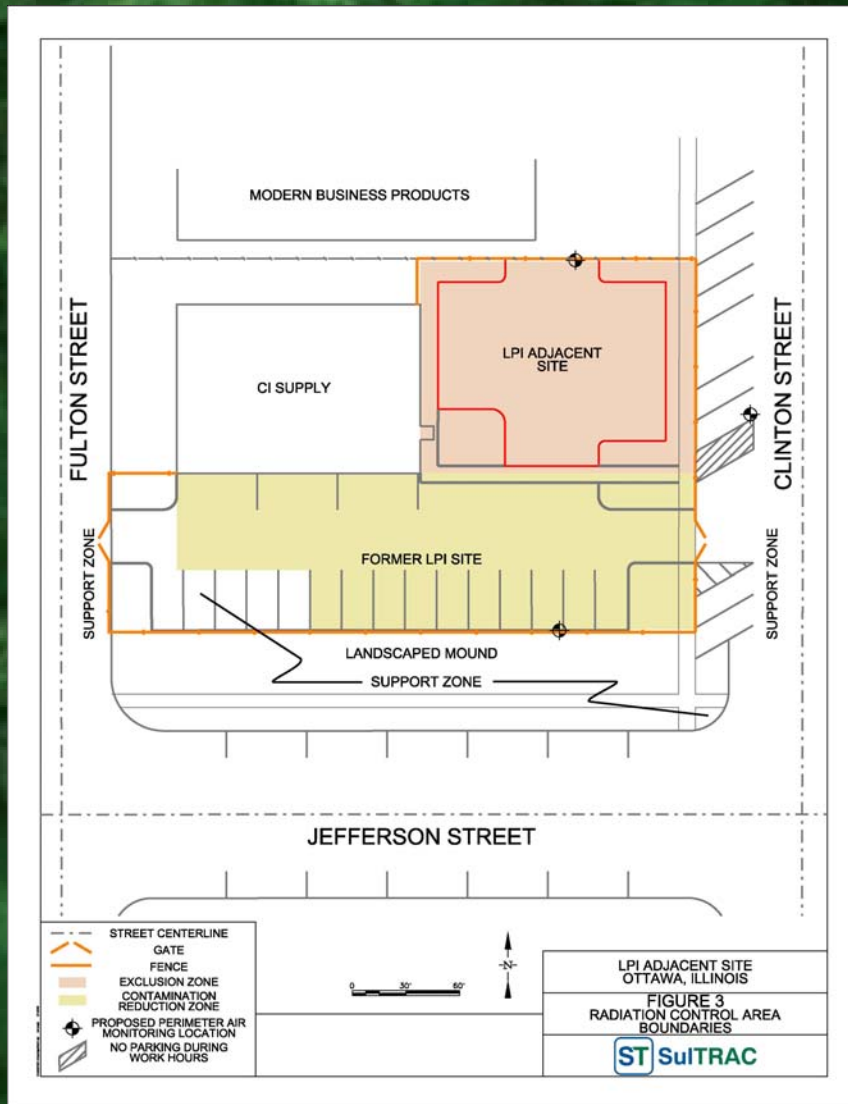
Work Methods



- Work will be performed under a Health and Safety Plan and a Radiation Protection Plan.
- Perimeter and personnel air monitoring will be conducted.
- Each piece of equipment, waste package, and transport vehicle will be screened for radiation.



Site Layout



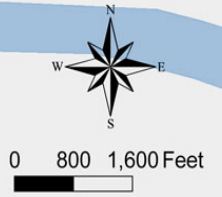
- Site will be bound with a temporary fence.
- Sidewalk on Clinton Street will be closed.
- Parking will be allowed but slightly limited on Clinton Street.
- City parking lots will be closed for 6 to 8 weeks (tentatively 4/20 to 5/29)





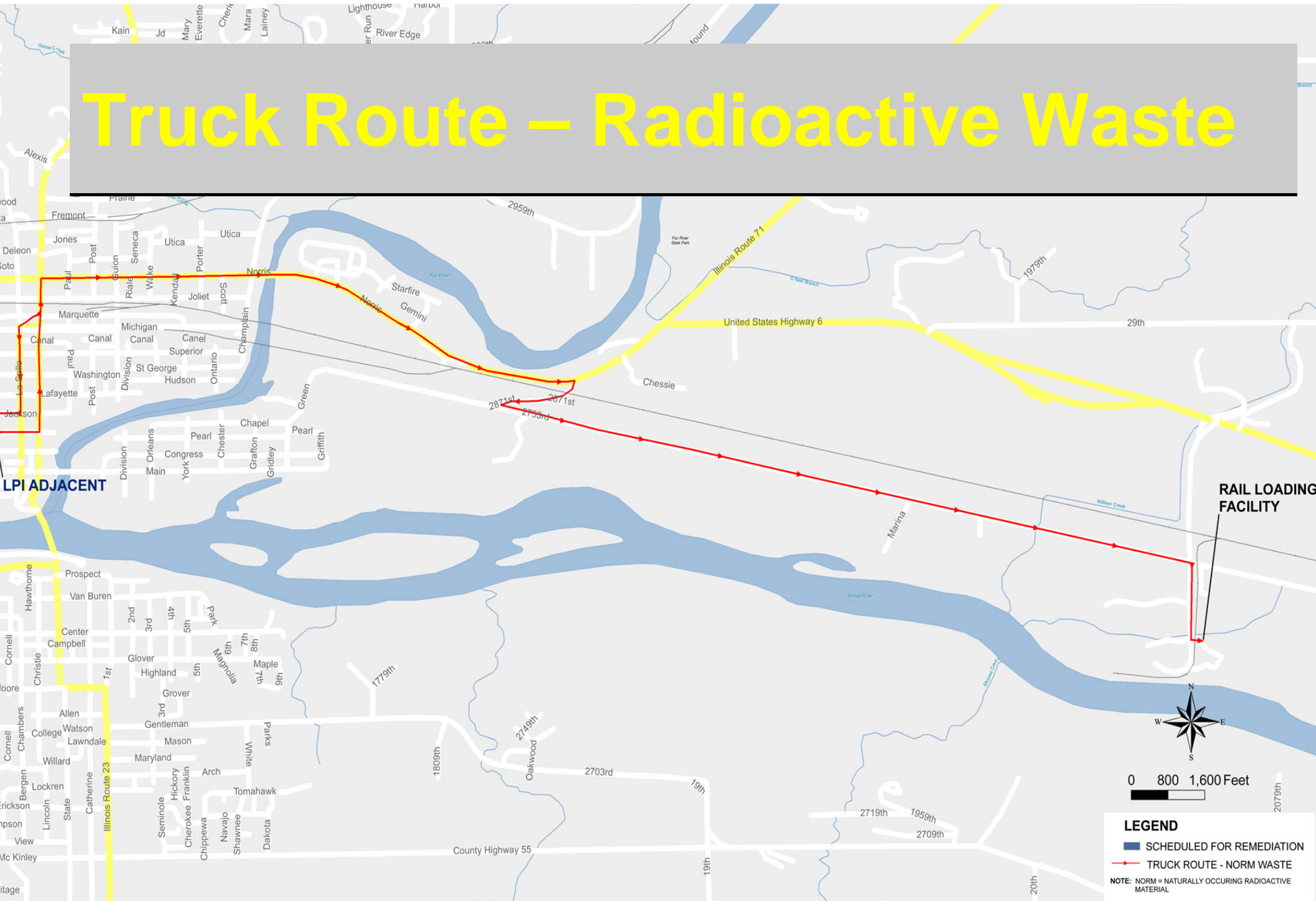
Truck Route – Radioactive Waste

LPI ADJACENT

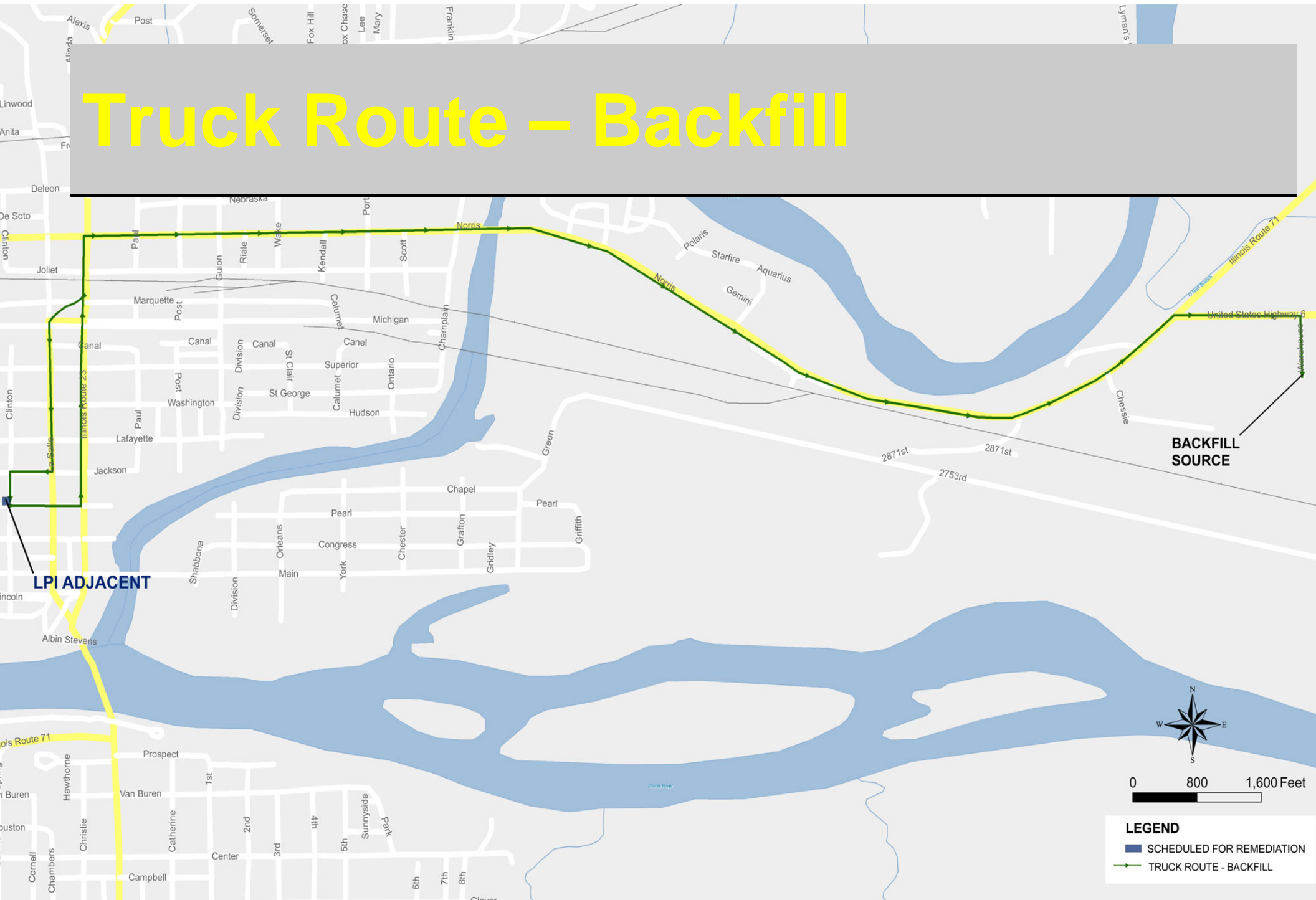
RAIL LOADING FACILITY



- LEGEND**
-  SCHEDULED FOR REMEDIATION
 -  TRUCK ROUTE - NORM WASTE
- NOTE: NORM = NATURALLY OCCURING RADIOACTIVE MATERIAL



Truck Route – Backfill



Questions?

