



Multi-Agency Coordination Success Story

Presented by:

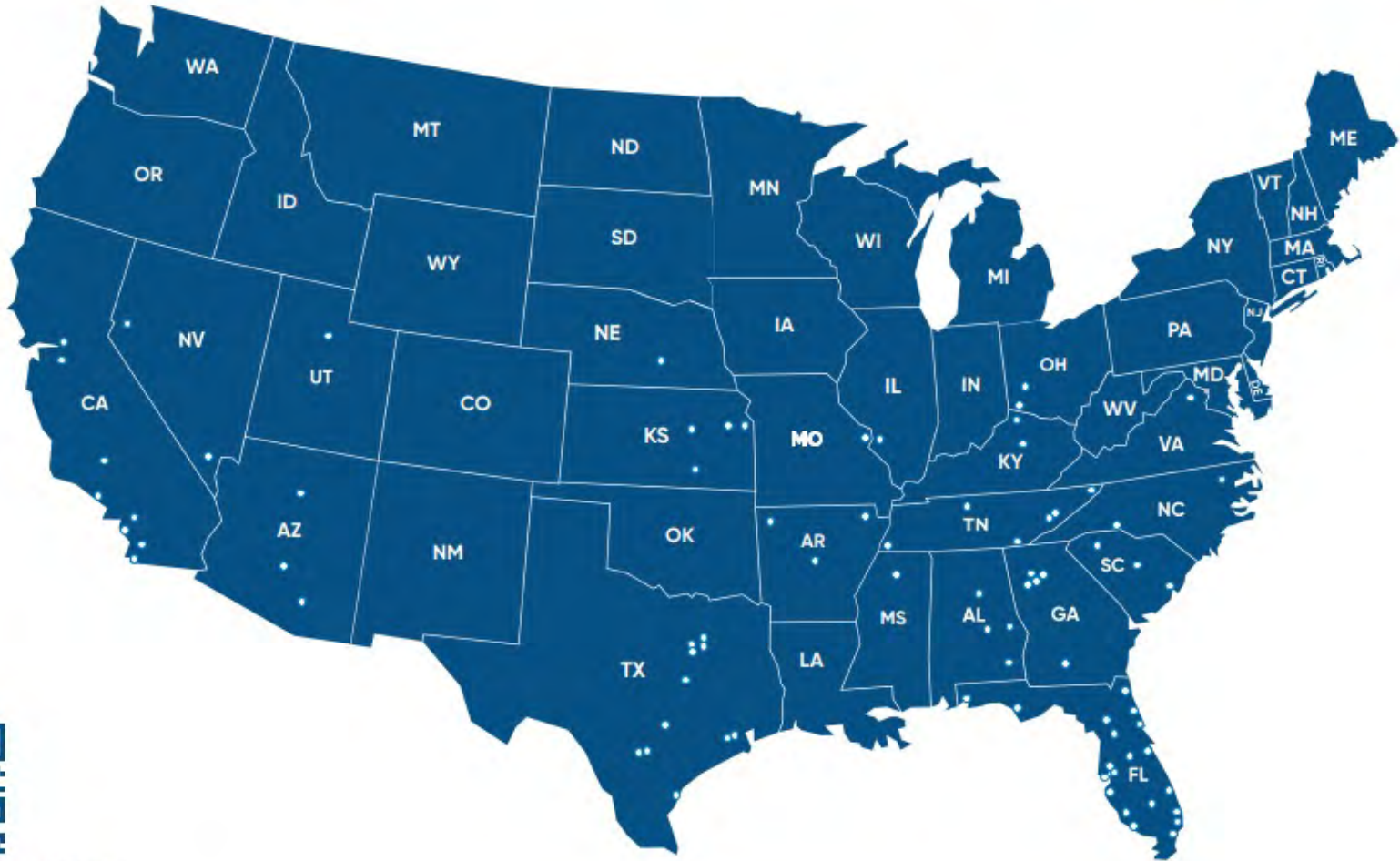
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FAMILY OF COMPANIES MAP

Updated April 2023



Learn more at teamUES.com

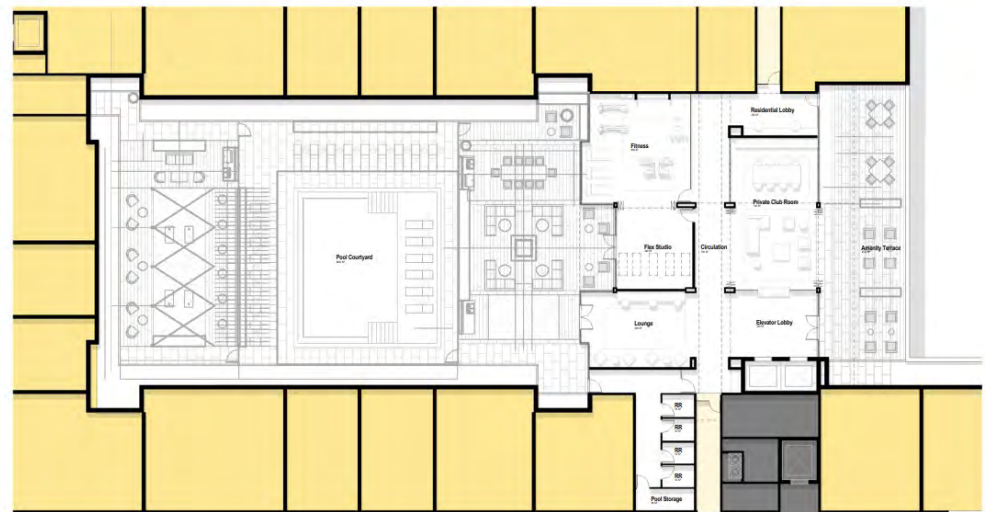
PROJECT – BEMISTON PLACE

- \$85,000,000 re-development in Clayton, Missouri
- Geotechnical services
- Environmental due diligence
- Asbestos/LBP
- MDNR
Brownfields/Voluntary
Cleanup Program (B/VCP)
- Housing and Urban
Development (HUD)
National Environmental
Policy Act (NEPA) EA



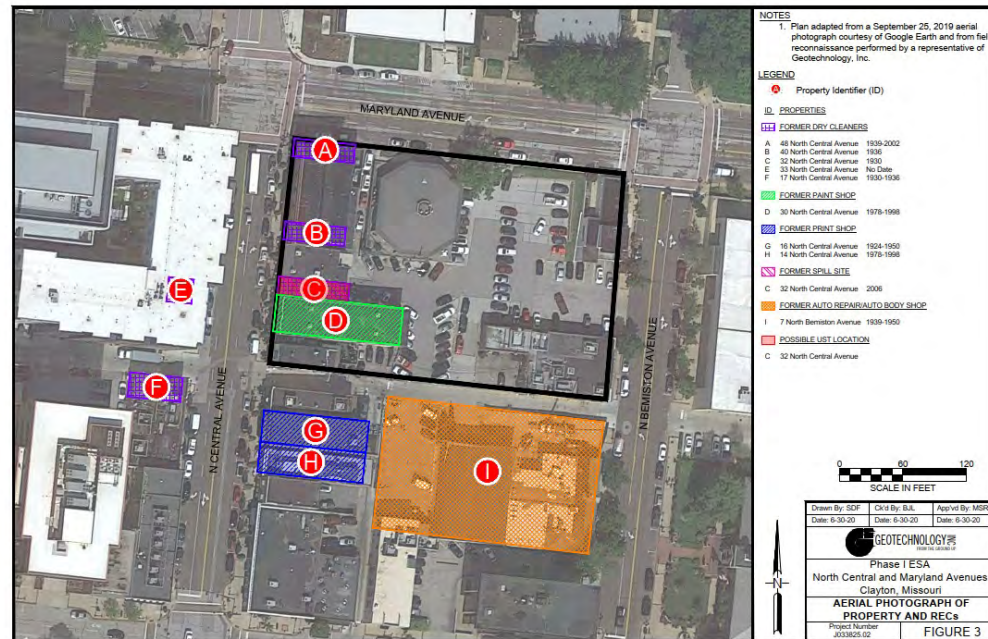
DEVELOPMENT PLAN

- 8-story, mixed-use development
- 237 Residential units
- 10,000 Square feet of commercial/retail
- 3-level parking garage
- Renovation of a historic building



INITIAL ENVIRONMENTAL DUE DILIGENCE

- Phase I Environmental Site Assessment (ESA)
- Asbestos Containing Material (ACM) Survey
- Lead-Based Paint (LBP) Survey
- Limited Phase II Environmental Sampling and Testing (EST)



ACM and LBP SURVEY

- ACM surveys on all structures
- LBP Survey on the historic structure (Shanley Building)
- Estimated \$50,000-\$150,000 in abatement costs



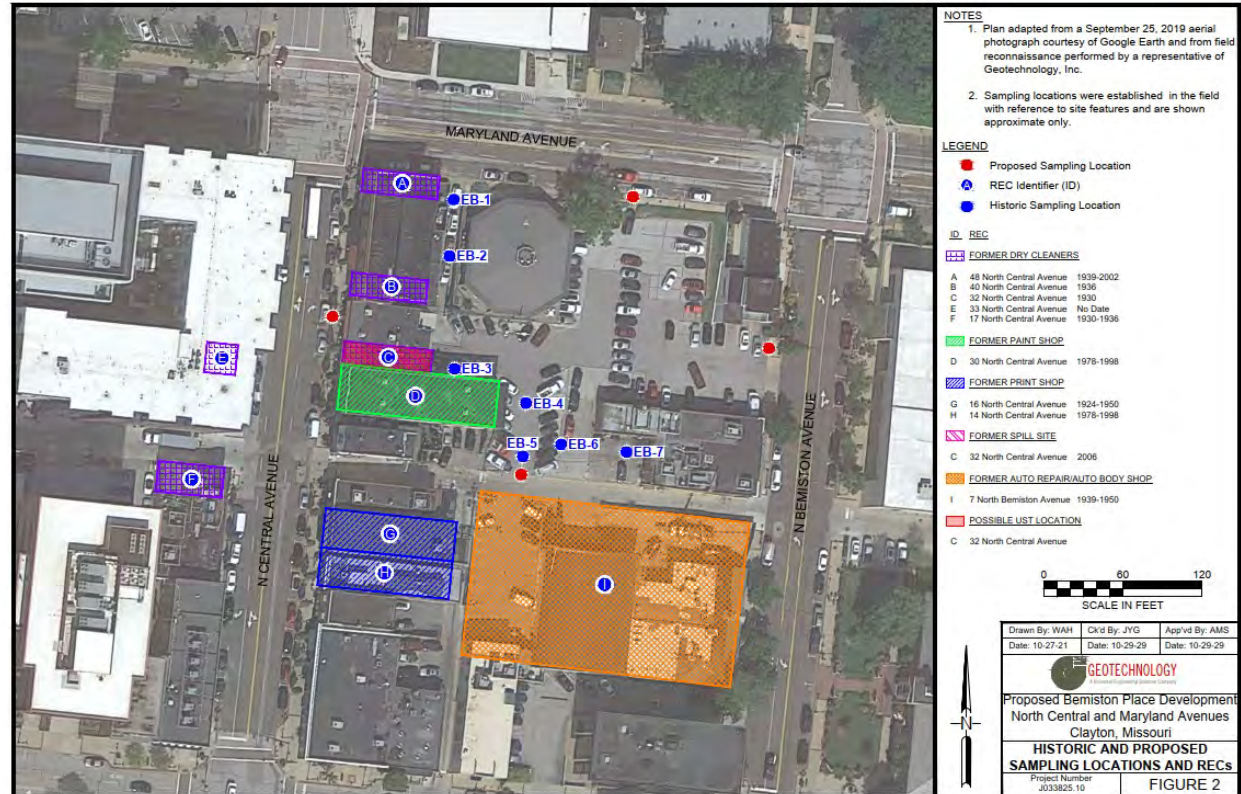
LIMITED PHASE II EST

- Soil and groundwater analysis
- Strong petroleum odors in some soil samples
- Results below residential risk-based target levels



MDNR B/VCP

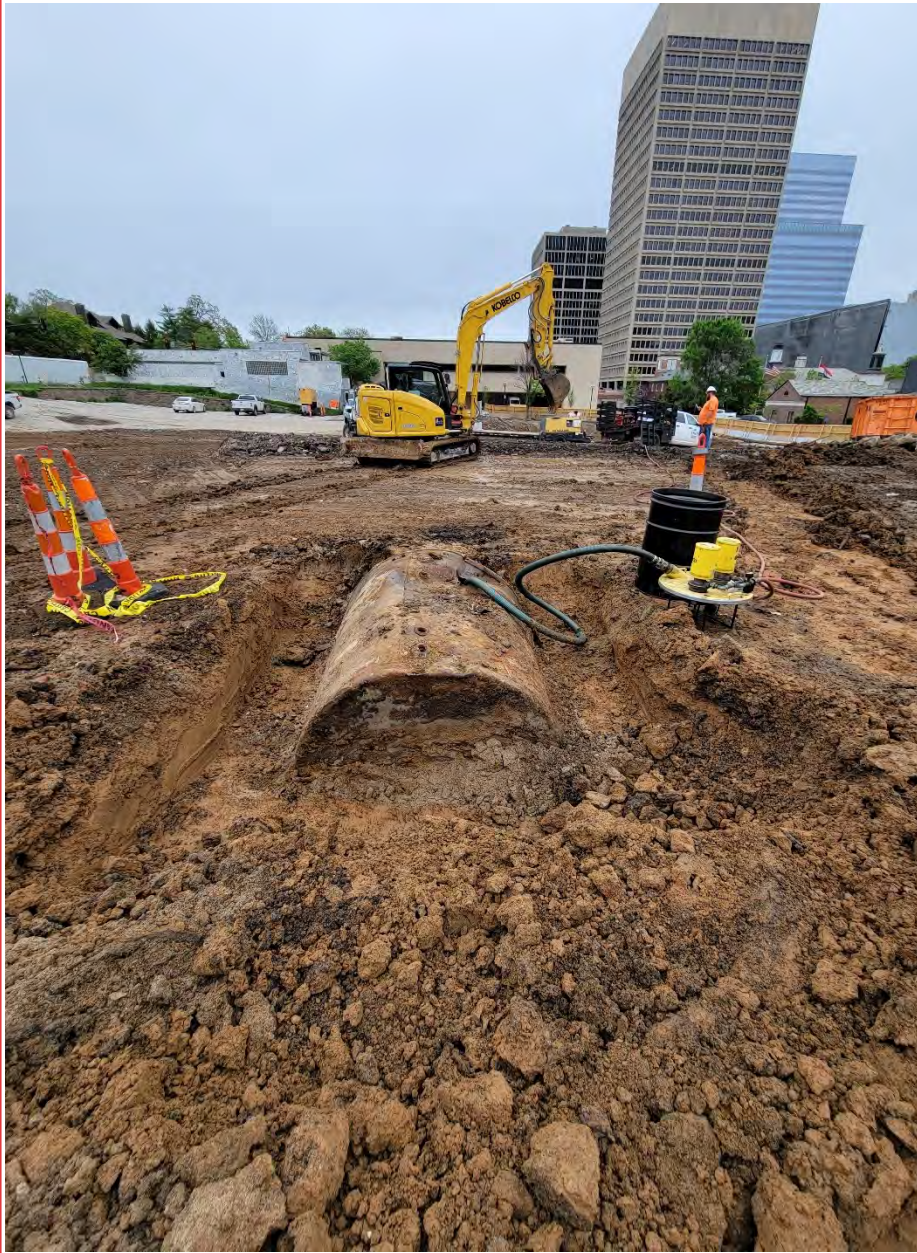
- HUD required a COC be obtained
- RAP and Tier 1
- Impacted soil removal
- Address Data Gaps



MDNR B/VCP Continued

- Additional site characterization to address data gaps
- Quarterly groundwater monitoring





HUD NEPA ENVIRONMENTAL ASSESSMENT

- HUD Loan
- Updated Phase I ESA
- Part 50 HUD Environmental Review Online System (HEROS)
 - Review of Statutes, Executive Orders and Regulations
 - Environmental Assessment Factors



HUD NEPA MITIGATION MEASURES

- Contamination and Toxic Substances
- Historic Preservation (Section 106)
- Noise Abatement and Control (Noise Control Act of 1972/Quiet Communities Act of 1978)



HUD NEPA HISTORIC PRESERVATION



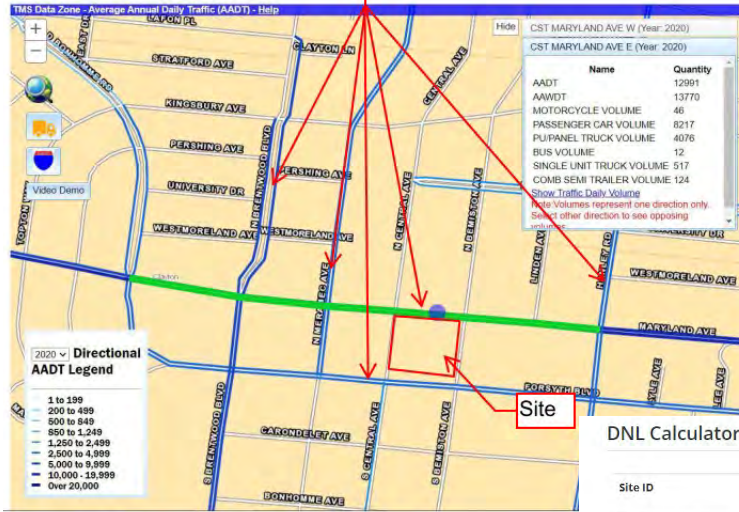
LOWER LEVEL 3/32"



UPPER LEVEL 3/32"

HUD NEPA NOISE ASSESSMENT

Streets Used For
DNL Calculation



AADT (2021) 9,250
 Construction Year (2025) 9,436
 Design Year (2035) 9,919
 Directional Distribution (E/W) 51% / 49%
 Peak Hour— 9.65 %
 Percent Trucks— 2.59 %
 Growth Rate — 0.50%

ADT
 9,250
 9,436
 9,919
 51% / 49%
 9.65 %
 2.59 %
 0.50% Assumed

Truck Distribution		
Class	AADT	%
4	24	9%
5	157	61%
6	28	11%
7	5	2%
8	19	7%
9	9	4%
10	2	1%
11	0	0%
12	0	0%
13	13	5%
Total	257	100%

Class	Icon	Description
Class 1		Motorcycles
Class 2		Passenger cars
Class 3		Four axle, single unit
Class 4		Buses
Class 5		Two axle, six axle, multi-trailer
Class 6		Three axle, single unit
Class 7		Four or more axle, single unit
Class 8		Four or less axle, single trailer
Class 9		S-trailor semitrailer
Class 10		Six or more axle, single trailer
Class 11		Five or less axle, multi-trailer
Class 12		Six axle, multi-trailer
Class 13		Seven or more axle, multi-trailer

DNL Calculator

Site ID:

Record Date:

User's Name:

Road # 1 Name:

Road #1 Vehicle Type: Cars Medium Trucks Heavy Trucks

Effective Distance:

Distance to Stop Sign:

Average Speed:

Average Daily Trips (ADT):

Night Fraction of ADT:

Road Gradient (%):

Vehicle DNL:

Airport Noise Level:

PROJECT CONCLUSION





GEOTECHNOLOGY

A Universal Engineering Sciences Company

