

**Stockyard to School Yard  
The Saga of Walworth Run  
Industrial Park and Max Hayes  
Technical High School**

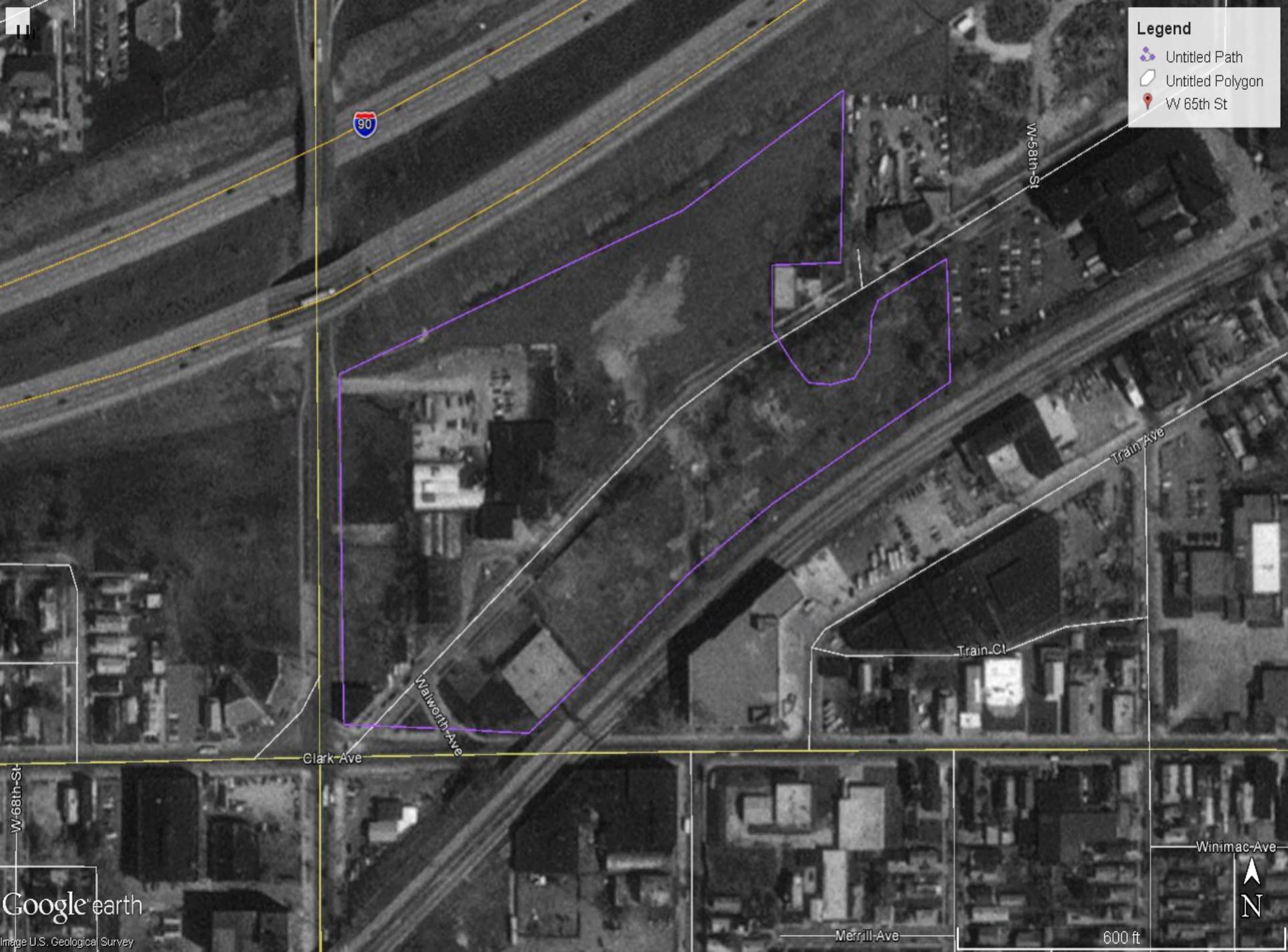
**Cleveland Municipal School District**

Investing in Neighborhoods and  
Technical Trades

# 1920's West Side Cattle Drive







**Legend**

- Untitled Path
- Untitled Polygon
- W 65th St



W-58th-St

Train Ave

Train Ct

Walworth Ave

Clark Ave

Winimac Ave

Merrill Ave

600 ft



Google earth

Image U.S. Geological Survey



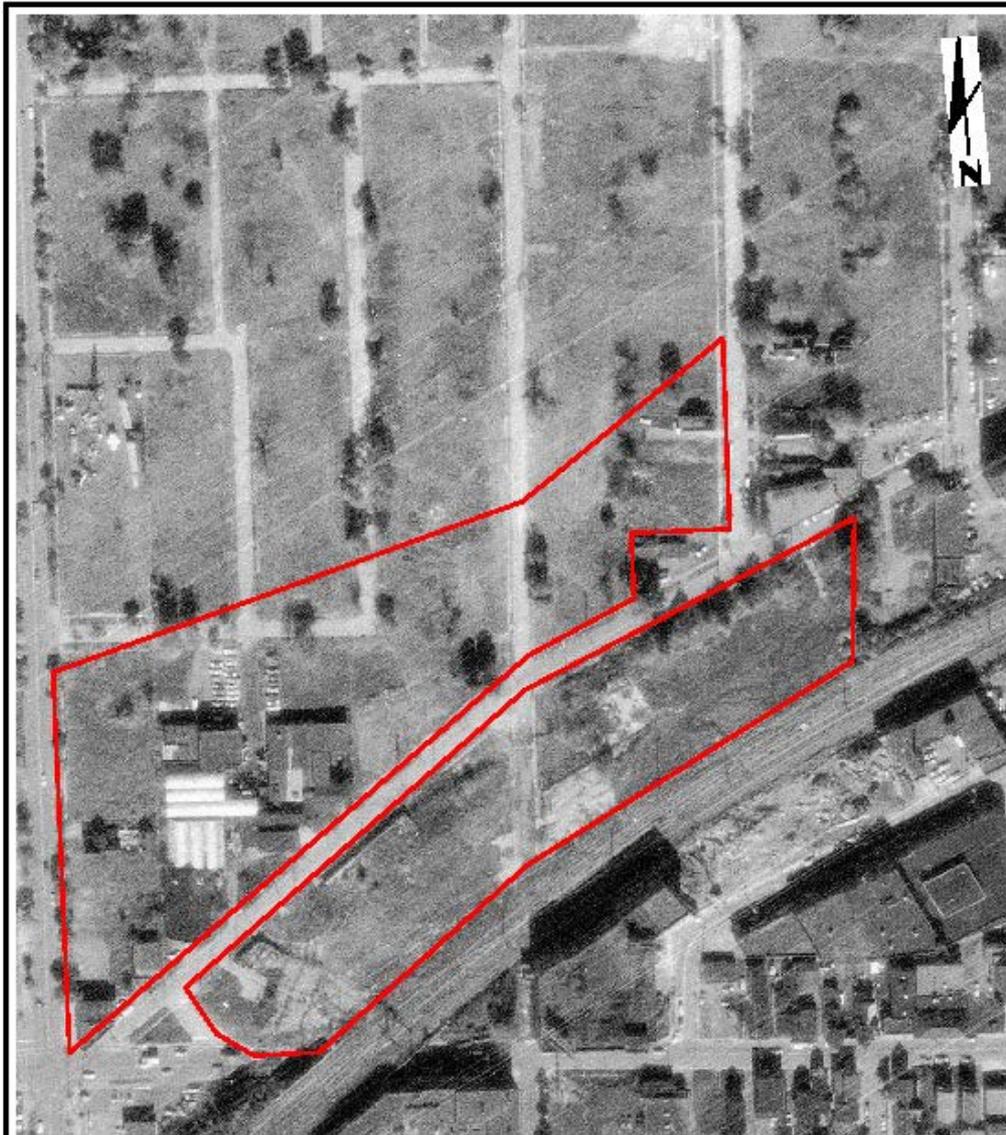
HULL & ASSOCIATES, INC.  
BEDFORD, OHIO

PHASE I PROPERTY ASSESSMENT  
PROPOSED MAX HAYES HIGH SCHOOL  
**AERIAL PHOTOGRAPHS**  
WEST 65TH STREET AND WALWORTH AVENUE  
CLEVELAND, OHIO

DATE: 1990

SCALE: 1:200

CMS/021



HULL & ASSOCIATES, INC.  
BEDFORD, OHIO

PHASE I PROPERTY ASSESSMENT  
PROPOSED MAX HAYES HIGH SCHOOL  
**AERIAL PHOTOGRAPHS**  
WEST 85TH STREET AND WALWORTH AVENUE  
CLEVELAND, OHIO

DATE: 10/74

SCALE: 1:200

CM8021

# STATE OF OHIO (ODOT)

- Retained the land for possible interchange
- Boehm Steel remained as a tenant
- ODOT began its drive to evict Boehm Steel
- Initial investigations performed (behalf of ODOT)
- Governor's Office stepped in
- In response to request from a local non-profit

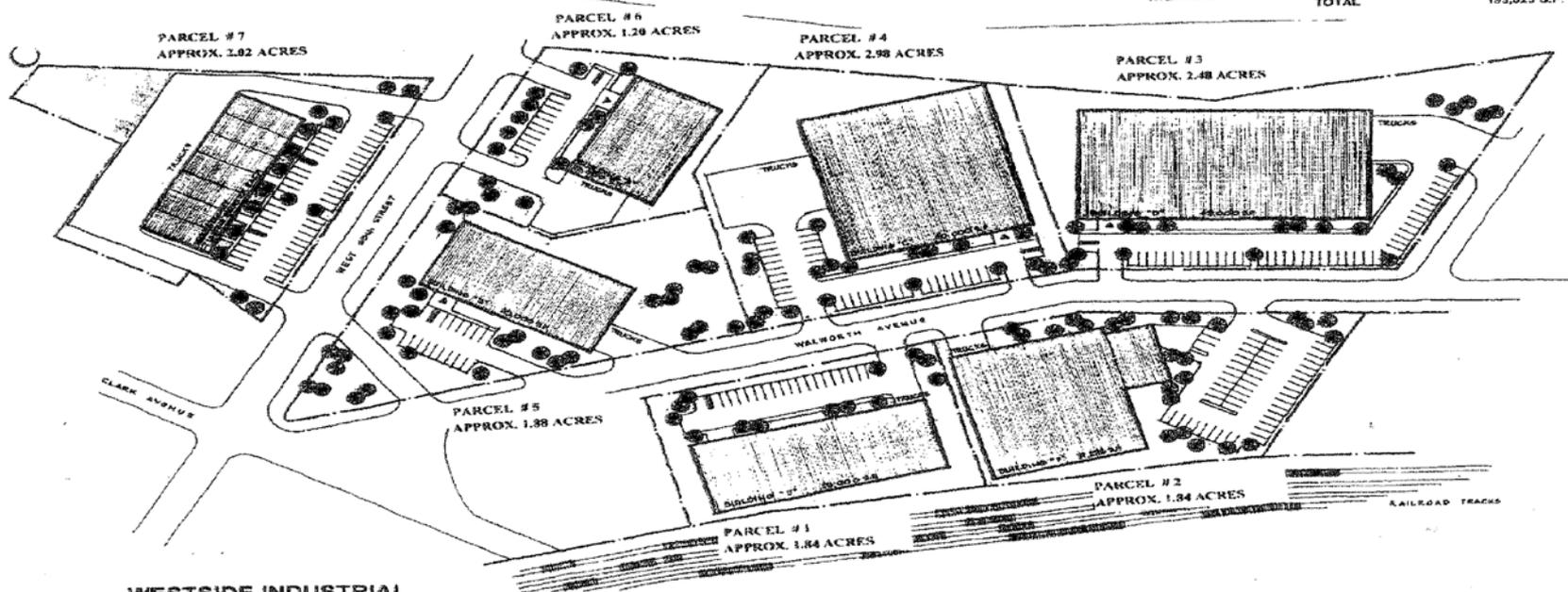
# Cleveland Development Public-Private Partners

- WIRE-Net (Westside Industrial Retention & Expansion Network) supported several investigations through the “Cleveland –West Side Economic Development Initiative”. Ohio EPA participated in this initiative.
- The Walworth Run property was identified as an ideal location for commercial and industrial development opportunities.

# Community Vision late 1990's

## WALWORTH RUN INDUSTRIAL PARK

SITE DATA:	
TOTAL ACREAGE APPROXIMATELY	14.5 ACRES
BUILDING DATA:	
BUILD TO SUIT	176,225 S.F.
FLEX BUILDING	16,800 S.F.
<b>TOTAL</b>	<b>193,025 S.F.</b>



WESTSIDE INDUSTRIAL  
RETENTION & EXPANSION  
NETWORK



WALWORTH INDUSTRIAL PARK  
SCALE: 1" = 100'

Donley's  
ENGINEERS & ARCHITECTS  
1000 N. 10th Street  
Wichita, KS 67202  
TEL: 316-261-1111  
FAX: 316-261-1112

# Walworth Run – VAP Chapter 1

- In 2000 a **NFA** was submitted for the 4.258 acre property located along I-90.
- An area of petroleum free-product remained on the property with no complete exposure pathways identified.
- 326 cubic yards of soil removed.



# Walworth Run – VAP Chapter 1

- Sept. 2001 **CNS** issued
- A Declaration of Land Use Restrictions was recorded that limited property:
  - Industrial land uses only
  - Prohibits construction of structures intended for routine human occupancy on part of the property
  - No excavation deeper than eight feet
  - Prohibits extraction of ground water.



# No Recess from Recession

- A different “stock market” drove an economic downturn in Cleveland after the CNS was issued.
- Development opportunities came to a stand still on Cleveland’s west side.



# Down the street at Americon-Ashbury '06 – '09



# Tough Times at Walworth High



# When the Going Gets Tough the Tough Get Going...

- Although West 65<sup>th</sup> and Walworth didn't attract industry, Cleveland Public Schools was drawn to the property.
- The School District purchased 13.8 acres to build a new technical training school for the west side community.

... So, how does one address a CNS that has **Building Occupancy Restrictions in an Environmental Covenant** ?

# COMMUNICATE, ENGAGE, INFORM

July 30, 2008

RE: WEST 65<sup>TH</sup> STREET  
AND WALWORTH RUN  
PROPERTY

Mr. Eugene Sanders  
Cleveland Metropolitan School District  
1380 East Sixth Street,  
Cleveland, OH 44114

Dear Mr. Sanders:

A July 24<sup>th</sup> Plain Dealer article indicated the school district is moving forward with plans to redevelop a West 65<sup>th</sup> Street property into a vocational school. In 2006, Ohio EPA provided the Cleveland Metropolitan School District grant technical assistance regarding the property located at West 65<sup>th</sup> and Walworth Run.

Ohio EPA reminds you and the Cleveland Metropolitan School District's school board that a number of parcels located at West 65<sup>th</sup> and Walworth Run are currently restricted to commercial or industrial use. Use of this property as a vocational school may void the Covenant Not to Sue currently in place on these parcels.

In 2006, Ohio EPA recommended the school district obtain a new No Further Action (NFA) letter for the property. A new NFA would need to show the property meets the Voluntary Action Program (VAP) standards appropriate for a vocational school in order to receive a Covenant Not to Sue.

I encourage you and the school board advance the work necessary to put together a new NFA letter for the property at West 65<sup>th</sup> Street and Walworth Run. I want to make sure Ohio EPA is in a position to review a request for a new Covenant Not to Sue in a timely fashion that will be in line with the school district's timetable to reuse the property.

We look forward to working with you on this project. Feel free to contact me if you have any questions. Ohio EPA would like to hear from you regarding the proposed timetable for this facility. My e-mail address is [Susan.Netzly@epa.state.oh.us](mailto:Susan.Netzly@epa.state.oh.us) or you may reach me by telephone at (330) 963-1201.

Sincerely,

Sue Netzly-Watkins, VAP Coordinator  
Division of Emergency and Remedial Response

SN-W/kss

cc: Amy Yersavich, VAP Manager, Ohio EPA, DERR, CO

ec: Steve Love, Supervisor, Ohio EPA, DERR, NEDO  
Rod Beals, Manager, Ohio EPA, DERR, NEDO

# SE

Sarah  
Ewing

## Summary of Phase I, Phase II & Remedial Activities

Max Hayes Career Tech High School

Ohio EPA CP Training  
October 27, 2015



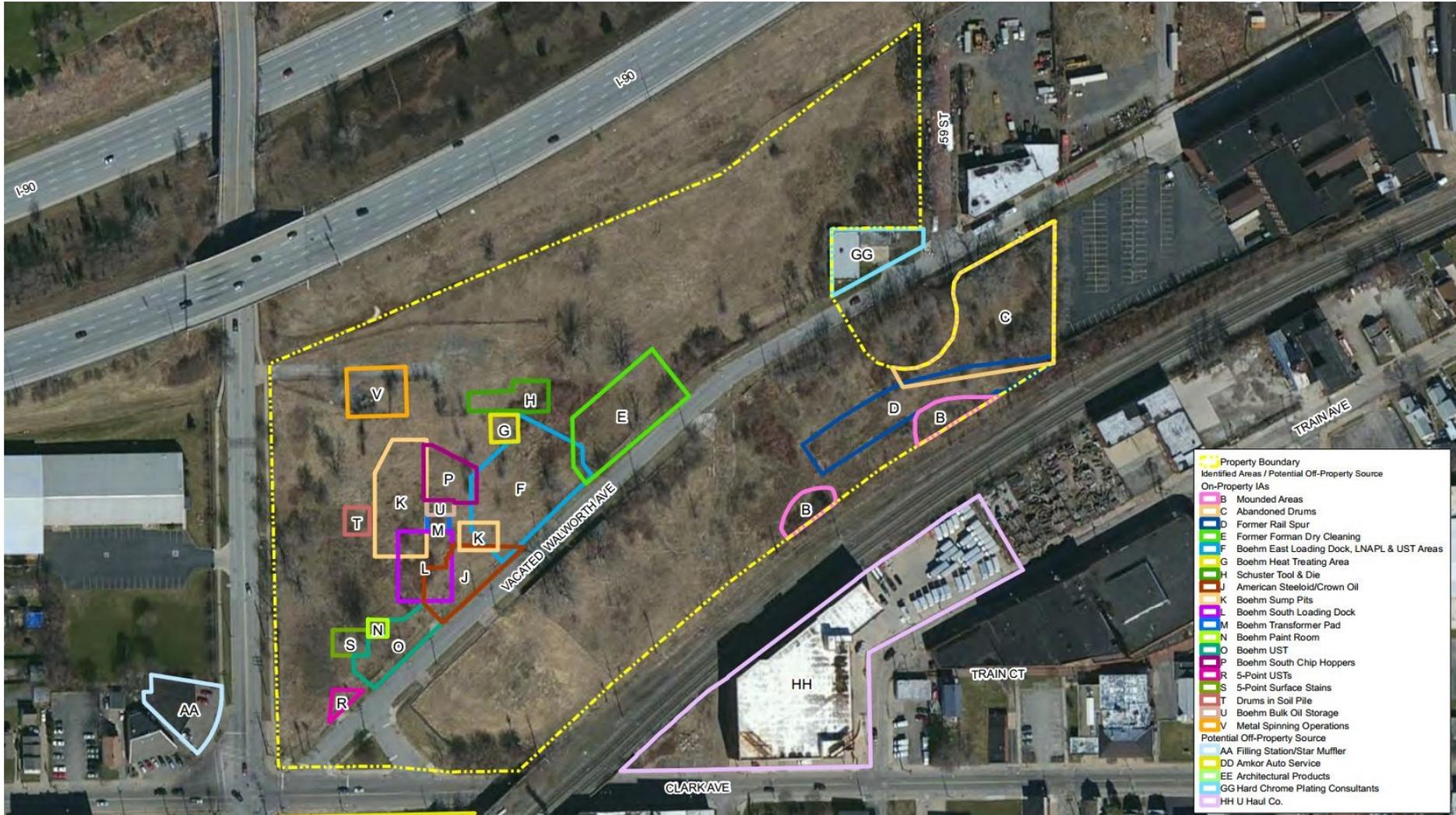
# PHASE I PROPERTY ASSESSMENT

## Phase I – September 2010

- Surplus of historical information
- Primarily vacant
- Former church building only remaining structure
- No Build Restrictions
- Some potential IAs were previously eliminated based on industrial use scenario



# PHASE I PROPERTY ASSESSMENT



# PHASE II INVESTIGATION ACTIVITIES

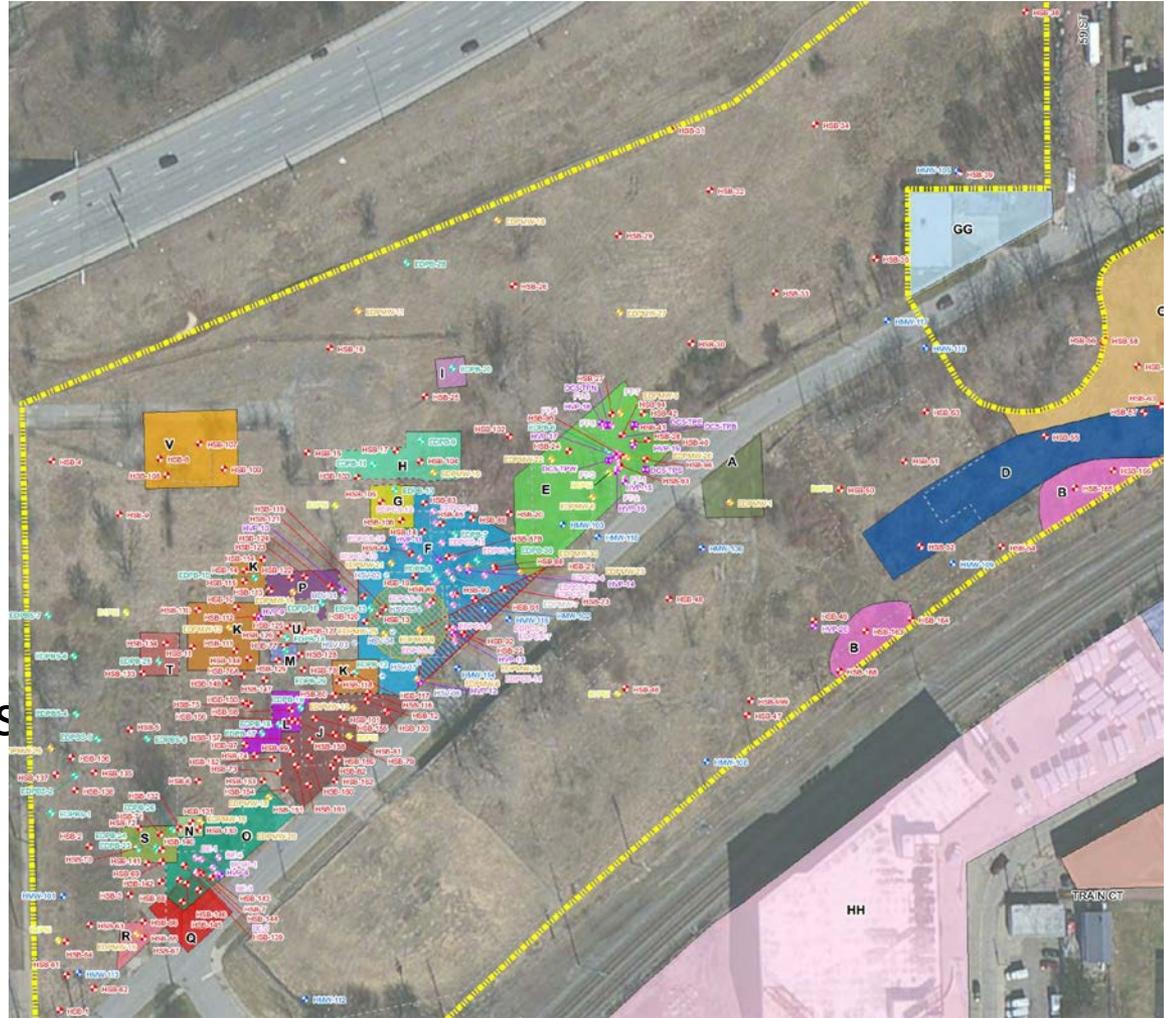
## VAP-Certified Data (2000-2006)

- ~140 soil samples
- Groundwater results
- Shallow soil gas

## 2011 Phase II Activities

- ~68 soil borings
- Install & sample wells

## Develop RAP



# PRELIMINARY DATA EVALUATIONS/DISCUSSIONS

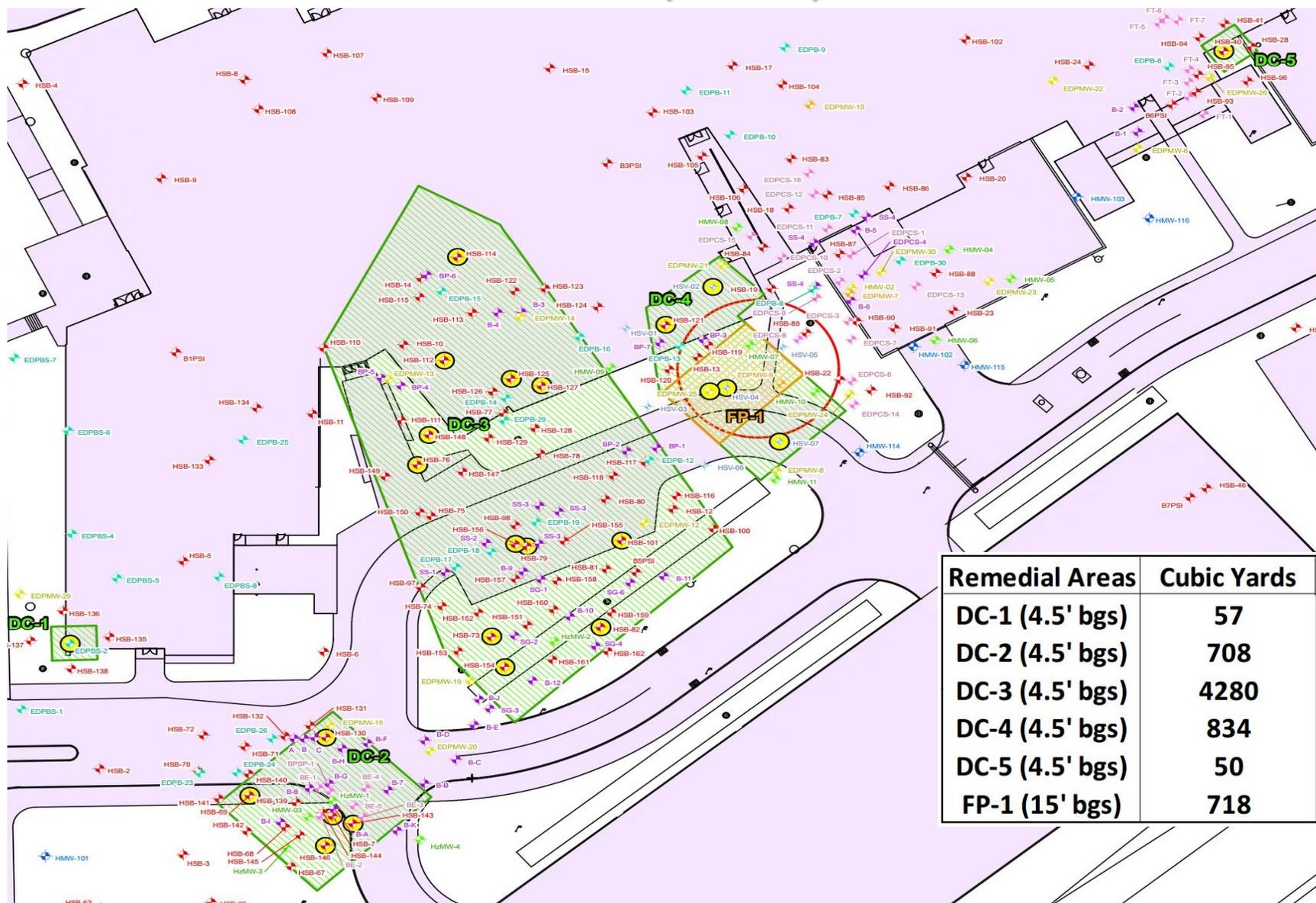
## Preliminary Risk Evaluations

- All available VAP-Cert soil data, recent GW data, soil vapor
- Restricted Residential (4-foot POC)
- 1 EU: entire 13.8 acres as school
- Maximum concentrations & 95% UCLs for “driver” COCs
  - (PAHs, arsenic)
- No Build Restrictions / Free Product
- Assume Walworth Avenue vacated



Photo credit: Google Images

# REMEDIAL ACTION PLAN (2012)



Remedial Areas	Cubic Yards
DC-1 (4.5' bgs)	57
DC-2 (4.5' bgs)	708
DC-3 (4.5' bgs)	4280
DC-4 (4.5' bgs)	834
DC-5 (4.5' bgs)	50
FP-1 (15' bgs)	718

# PROJECT DEVELOPMENTS

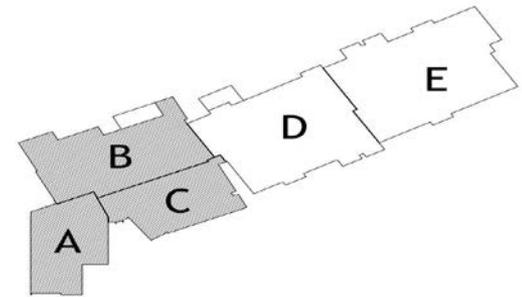
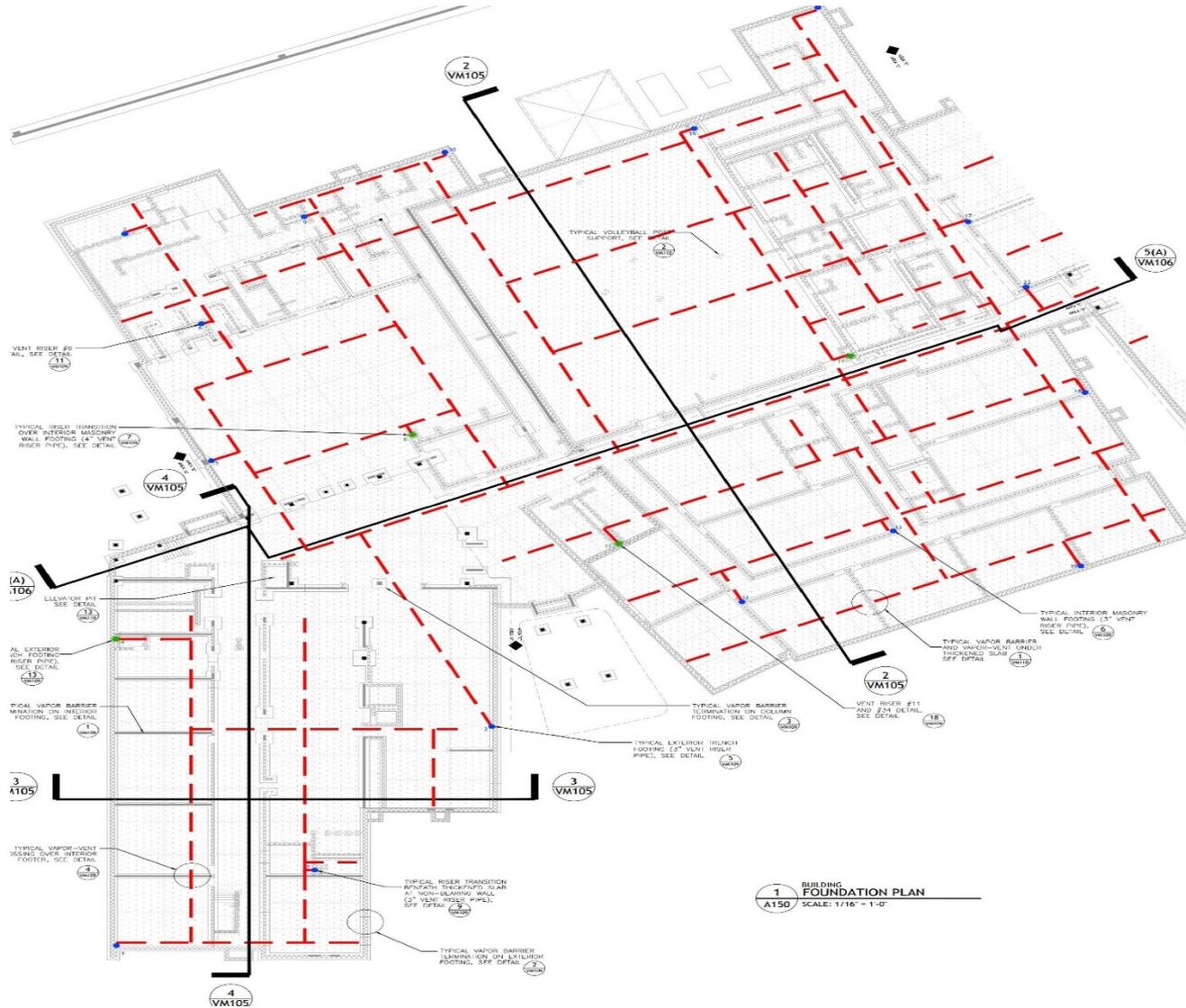
IA pathway FAILS based on pre-remedial soil gas (J&E model)

Hull Engineers retained by CMSD's architect to design VMS

- Geo-Seal® Barrier = primary
- Vapor-Vent™ = secondary
- Based available guidance
  - LA Dept of Building & Safety
  - ITRC Vapor Intrusion



# VMS DESIGN



### NOTES

-  CMU ON CMU
-  BRICK ON CMU
-  METAL PANEL ON CMU
-  METAL PANEL ON METAL STUDS
-  CMU PARTITIONS
-  GYP BOARD AND STUD PARTITION
-  GEOCOMPOSITE VENTING STRIP
-  VAPOR BARRIER
-  3" PVC VENT RISER
-  4" PVC VENT RISER

1 BUILDING FOUNDATION PLAN  
A150 SCALE: 1/16" = 1'-0"

# REMEDIAL ACTIVITIES

Summer 2013: Site cleared,  
remedial activities commenced

Not all excavation areas were  
pre-delineated; soil data  
collected during excavation

Excavation of “DC” Areas DC-1  
through DC-4 proceeded  
without much surprise

- Risk evaluations were completed as needed, 95% UCLs re-calculated
- extents were expanded based on data



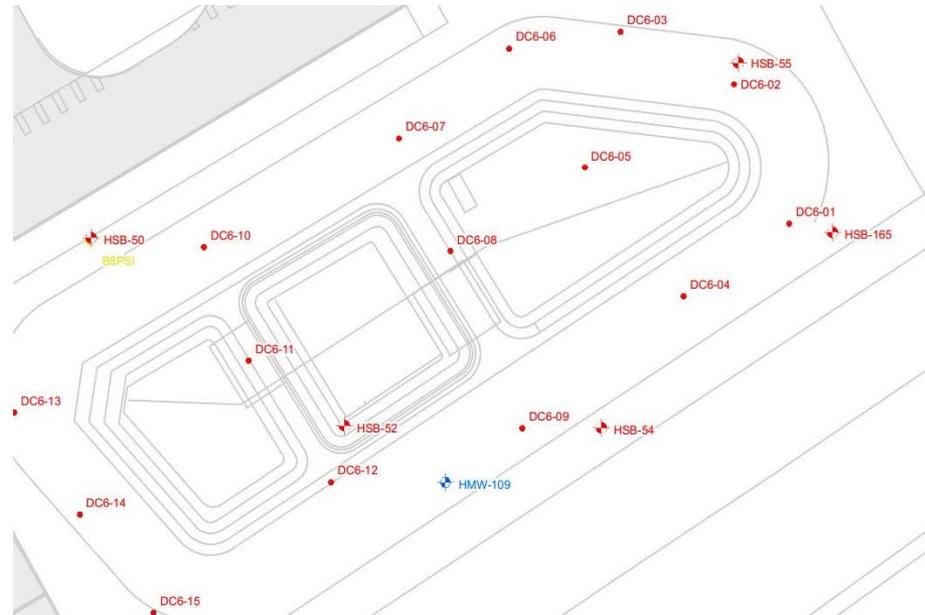
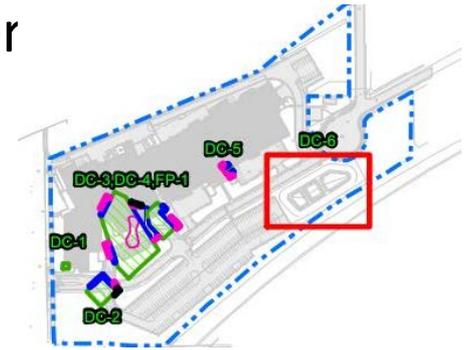


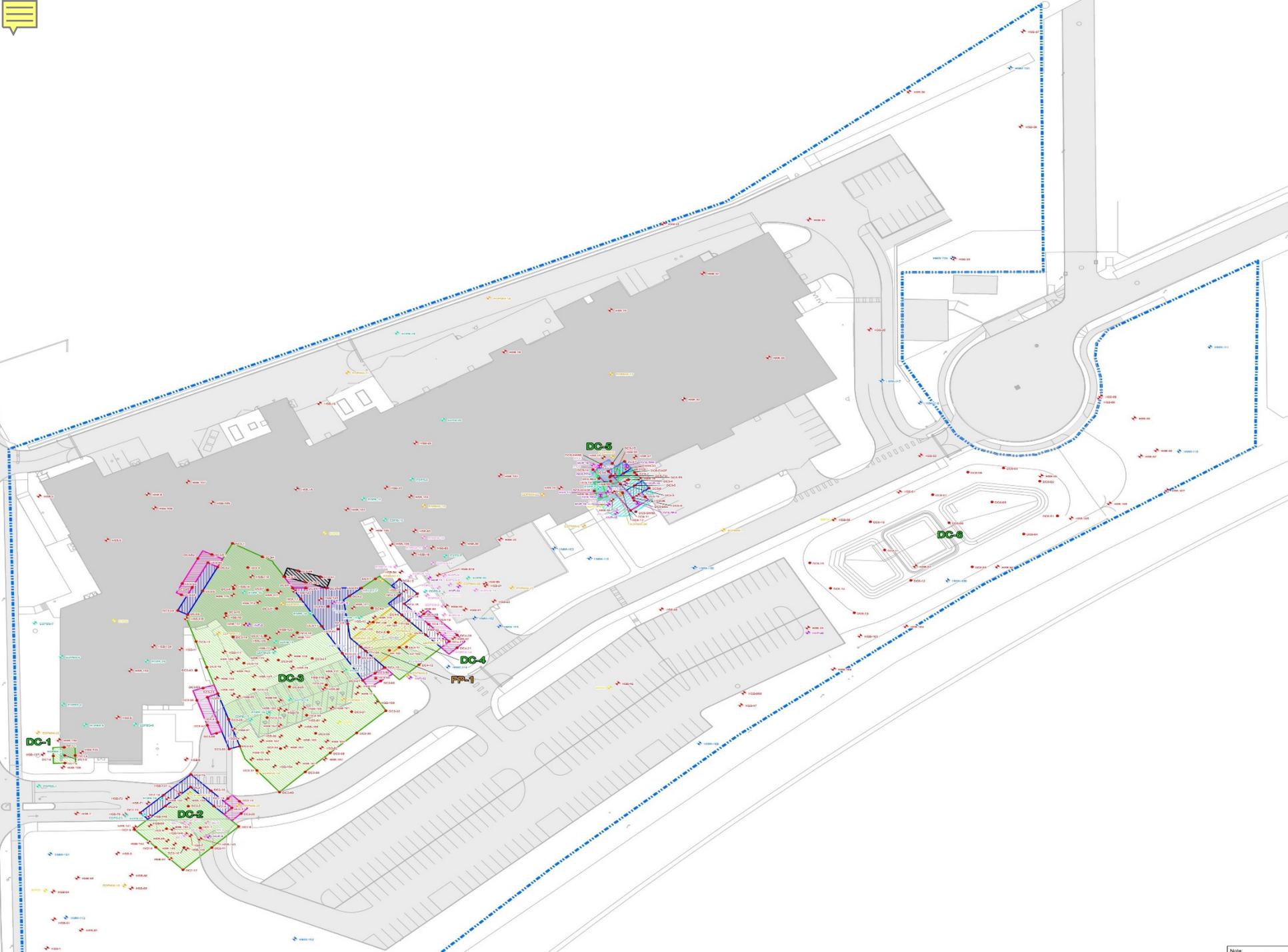


# REMEDIAL ACTIVITIES: RETENTION BASIN -- DC-6

Excavation of retention basin area south of former Walworth to plan grade

- No IAs in this area
- Strong odors, sampled, no COCs above applicable standards
- Excavated & disposed of off-Property





# Performed CP Visit in April 2014

- Building only half-constructed
- Only half the floor poured
- VMS not installed yet beneath half of building
- Told by CM that “VMS install not a priority”
- Assured that it would be installed
- Just on their schedule, not ours
- Also told “school will open August 2015”

# VAP Rules Change on August 1, 2014

- Original plan had been to submit NFA Letter well before that date
- VMS install deferred; so now we will submit after that date
- Sarah told to re-run risk...without the VI piece complete (not an easy feat)
- CP holds breath



# Fall of 2014

- Sarah calls CP
- Good news
- We pass DC risk under new rules
- Much celebrating
- But we still don't know VI risk numbers for MCA



# Late Fall of 2014

- CP convinces CMSD that TA “strongly advised”
- TA of EVERYTHING
- Rationale
- CMSD agrees (CP is thankful for that)
- Hull assembles all the documents
- Submitted in one big, fat package to Ohio EPA
- March 2015: VMS installed! Sample!!



# REMEDIAL ACTIVITIES: VMS

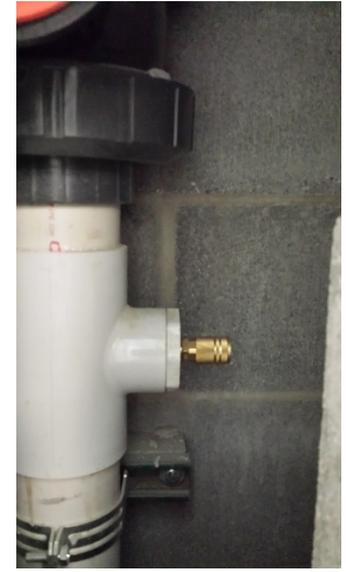
March 2015 Sampled Interior Risers

- Selected 6 riser locations
  - Biased locations to historical VOCs,
  - Spatially distributed,
  - Riser valves CLOSED 48 hrs prior,
  - 24-hr sampling period

TCE reported at  $800 \mu\text{g}/\text{m}^3$

- < proposed J&E SSVIA trigger level of  $1,600 \mu\text{g}/\text{m}^3$
- > Ohio EPA AF-based SSVIA trigger level of  $70 \mu\text{g}/\text{m}^3$

Active construction: VMS not finished  
- no wind turbines, sample ports  
glued



# REMEDIAL ACTIVITIES: VMS

TA discussions = “multiple lines of evidence”

May 2015 - Sampled Indoor air:

- 12 locations consistent with LEED cert
- Adequate spatial coverage
- Areas receptors would frequent  
(*e.g.*, classrooms, cafeteria, gym)
- Biased toward elevated TCE in risers

TCE = NON-DETECT in Indoor Air!

Detections associated with Building Material MSDS Sheets (naphthalene, trimethylbenzene, benzene)



# REMEDIAL ACTIVITIES: VMS

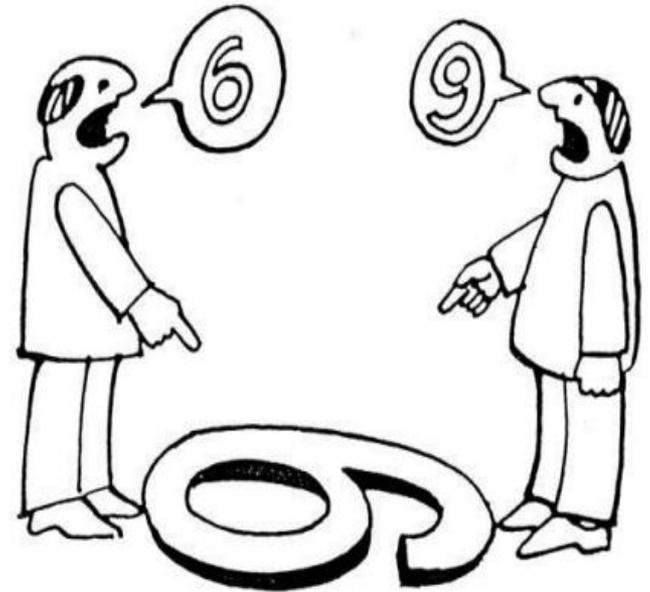
Where do we go from here??

- No need to further assess indoor air
- TCE remains in sub-slab
- Artificially “inflate” concentrations from closing valves?
- CMSD wants to ensure safety

June 2015 – Re-Sampled Interior Risers

- Same 6 risers re-sampled
  - 4-hour sample interval
  - Valves left open
  - This time all wind turbines installed
  - Individually certified canisters

TCE below all trigger levels!



# O&M OBLIGATIONS

VMS O&M obligations include:

- Semi-annual visual inspections (spring & fall):
  - Rooftop wind turbines to ensure unobstructed movement
  - Interior riser valves to ensure they remain in “open” position
- Annual sub-slab vent riser sampling (winter) from 6 selected risers in building Sections D & E
  - If SSVIA standard exceeded (AF-based), re-sample affected riser within 30 days
  - If confirmed exceedance, notify Ohio EPA
  - Indoor air sampling if necessary
- Annual reporting to Ohio EPA



Photo credits: clevelandmetroschools.org

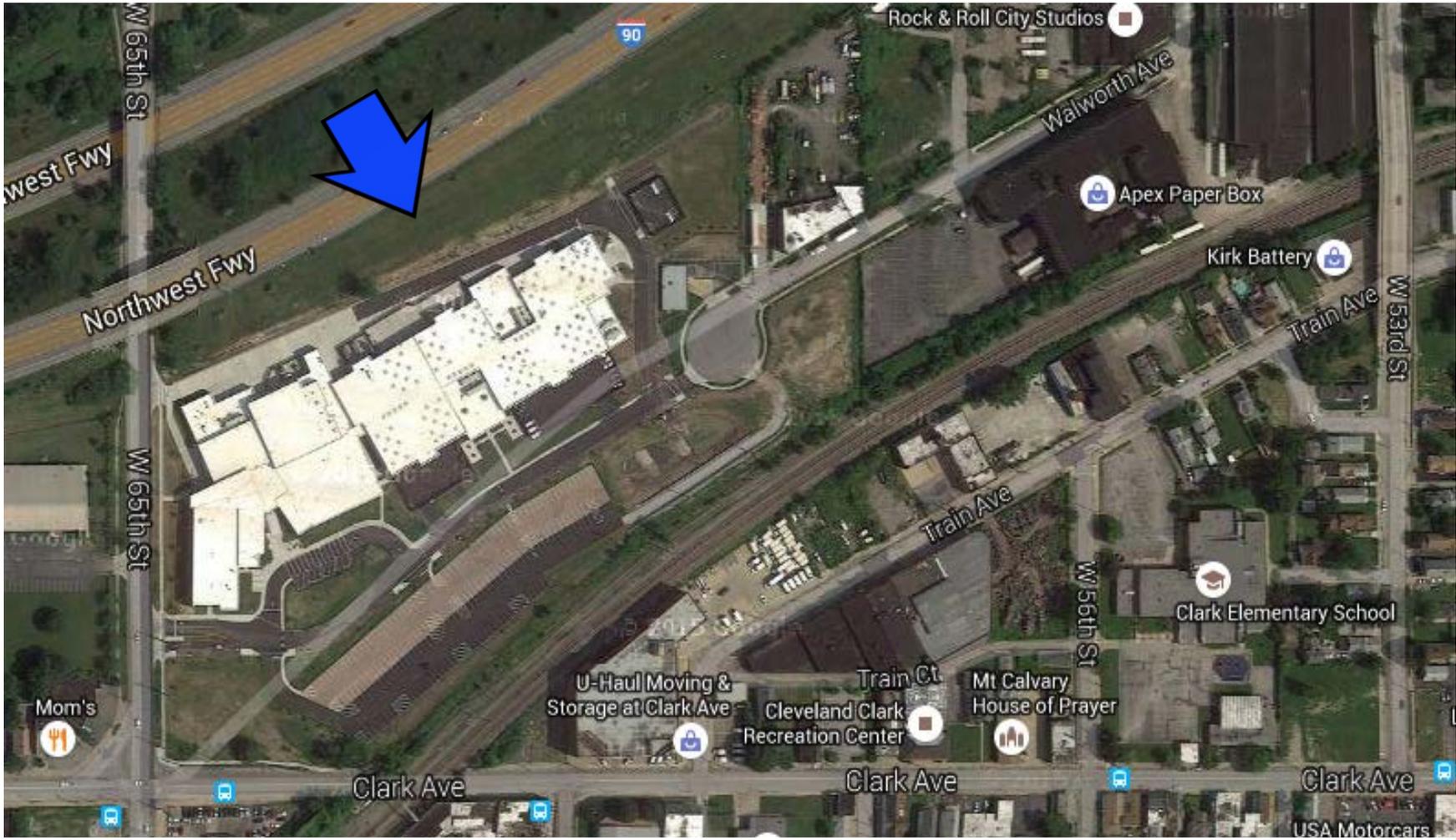
# Communicate - VAP Chapter 2

- 2011 Ohio EPA provided grant technical assistance to the Cleveland Public Schools for a Phase I review of an expanded Walworth Run development project.
- 2014-15 Ohio EPA is asked to provided review and comment on the draft NFA and the VI engineered controls designed into the school building. School starts August 2015.

# ENGAGE & INFORM – VAP Chapter 2

- Hull and Associates, HzW and Ohio EPA had many telephone conversations to discuss the details of the engineering controls that were installed at the new Max Hayes School.
- Ohio EPA identified data needed to verify the engineering controls were effective in preventing vapor intrusion.
- The consultants and Cleveland Public Schools addressed Ohio EPA's requests and demonstrated the controls are effective.

# Chapter 2: The New Max Hayes



# LESSONS LEARNED NOW THAT SCHOOL'S IN SESSION

- **Do your homework**

- The 2015 draft NFA was reviewed ahead of the school opening.
- Ohio EPA received the final NFA on August 6<sup>th</sup>. *It's being reviewed by the Agency.*
- Cleveland Public High School students are attending this brand new facility.

- **Turn homework in on time**

- The up front information sharing between Cleveland Public Schools, consultants and Agency resulted in the project moving forward to meet the school district's needs.
- Although the 2001 CNS is effectively voided (remedial excavations went below 8 feet and the current use of the property is not industrial) the property is seeking a new CNS.

# Closing

- Ohio EPA was great
- CMSD was great
- When indoor air sampling proposed, CP very reluctant due to possible interferences
- Turning point: CMSD attorney intones during a meeting with Ohio EPA...
- “The students may not learn here, but they will be safe.”



Photo credit: Cleveland.com