

Former Coyne Textile Brownfield Cleanup

South Side Revitalization Leverages Multiple Remedial Technologies



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Presentation Summary

- Site History
- Project Goals
- What was done
- Remedy Description
- Challenges and Solutions
- Impact to the Community



Site History

- 120,000 square foot industrial laundry facility
- Founded in 1929
- Operated until bankruptcy in 2015
- On-Site chemicals included:
 - Petroleum based fuel oil
 - Chlorinated solvents for dry cleaning
- Low-Income Area



Project Goals



Different By **Design™**



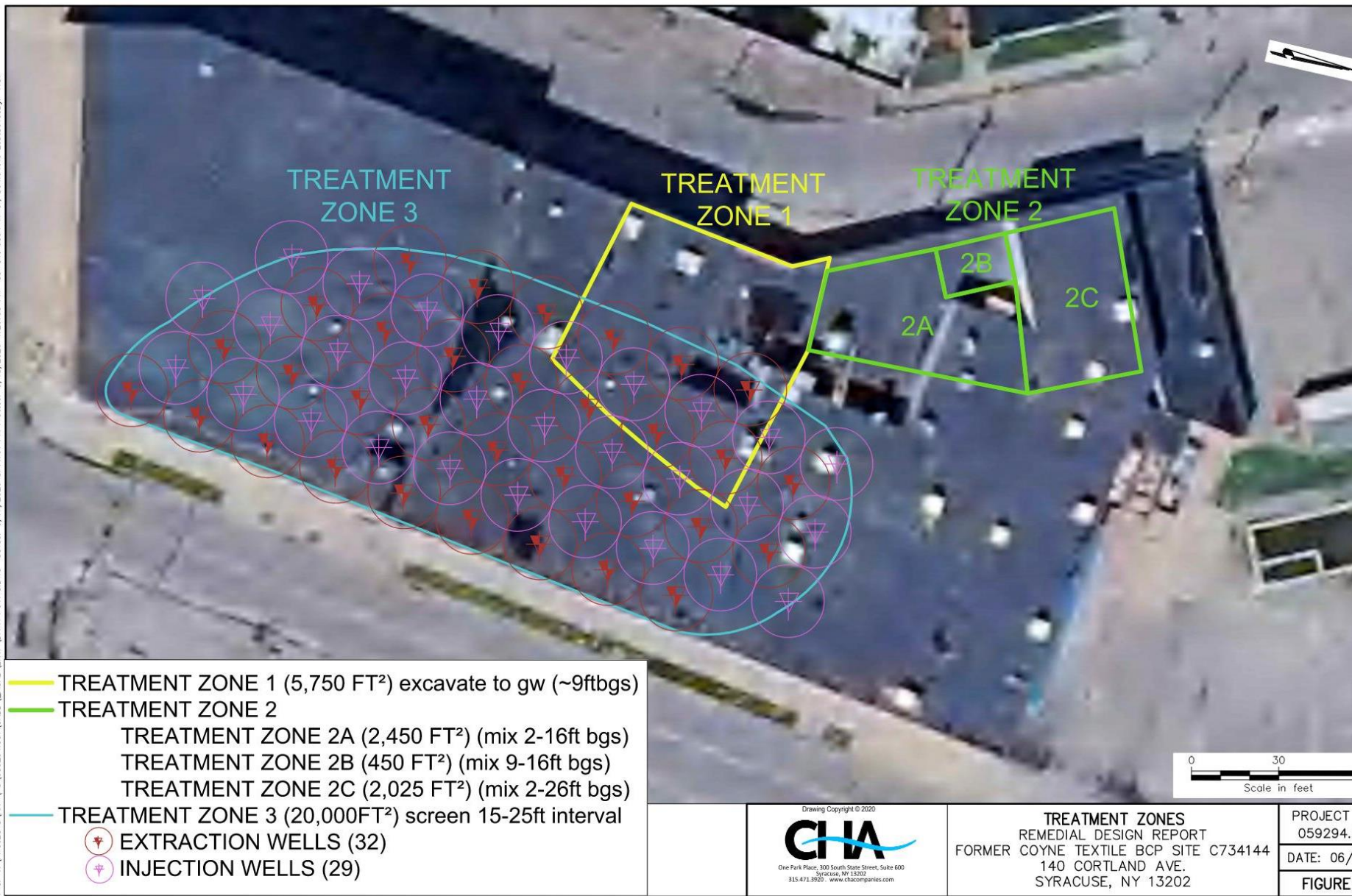
- Create Campus-Like Setting for a 5G Component Factory
- Invest \$25-million for the Campus
- Remediate soil and groundwater contamination
- Mitigate vapor intrusion
- All in ONE Year!!

Transform the City's South Side

What did we do?



- Client entered Brownfield Cleanup Agreement with NYSDEC
- Pilot Testing was Completed
- CHA designed a hybrid remedial program to meet redevelopment schedule
- Designed remedy that included 3 different technologies across 3 treatment zones across approx. 3 acre site



Treatment Zone 1



Excavation of
6 Leaking
Underground
Storage Tanks



Off-Site Disposal
of 3,000 Tons of
Contaminated
Soil



Treatment Zone 2

In-Situ Soil Mixing with
Zero Valent Iron
Injections

4,900 sqft Area
260,000 lbs of ZVI
Cement for stable surface
due to active redevelopment

Treatment of Source
Area Chlorinated
Solvent Contamination
Max Depth 26 ft



Treatment Zone 3

*In-Situ Groundwater
Recirculation with
Chemical Oxidation*

Injection of 6,200
gallons of sodium
permanganate

*Anticipated 45 days of
treatment but
completed in 22!*

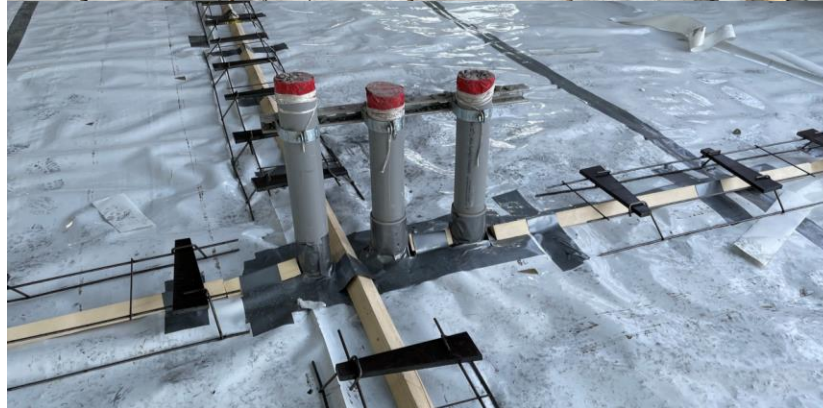
Conducted a
bench test that
saved the client
millions of dollars
in chemical alone



Design 5 sub-slab systems

Create a negative
pressure differential
between sub-slab
and indoor air

Prevent long-
term exposure of
residual sub-slab
vapors



Long Term Mitigation

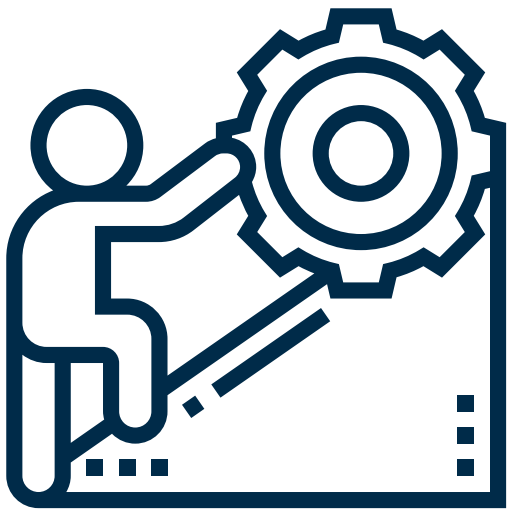
Treatment
Zone 1

Treatment
Zone 2



Treatment
Zone 3

- *CHA found a way to utilize 3 different remedial technologies all on one site that have typically only been utilized independently.*
- *Implemented remedies that could address contamination that floats (i.e. petroleum) and contamination that sinks (i.e. chlorinated solvents) effectively together*



CHALLENGES

CHALLENGE 1

Meet a timeframe of 1 year during active construction & redevelopment with an ever-evolving project design

SOLUTION 1

Mobilized in early 2020 to complete bench & pilot tests. 2-week bid. Construction from July – October 2020. Regulators returned comments to all BCP Documents within 30 days

CHALLENGE 2

Site conditions – building demo, increase of site grade, urban fill.
Account for each condition

SOLUTION 2

Coordinated between CHA disciplines and project team to account for site conditions through daily and weekly meetings

CHALLENGES (CONT.)



CHALLENGE 3

Soil oxidant demand was greater than anticipated and would result in millions of \$\$ in chemical alone

SOLUTION 3

Changed treatment methodology to include ZVI and saved millions of \$\$

CHALLENGE 4

Soil mixing creates a slurry-like surface that other disciplines can't work from

SOLUTION 4

Bench scale test to determine quantity of cement that could be added to create stable surface and not impact remedy

Community Impact

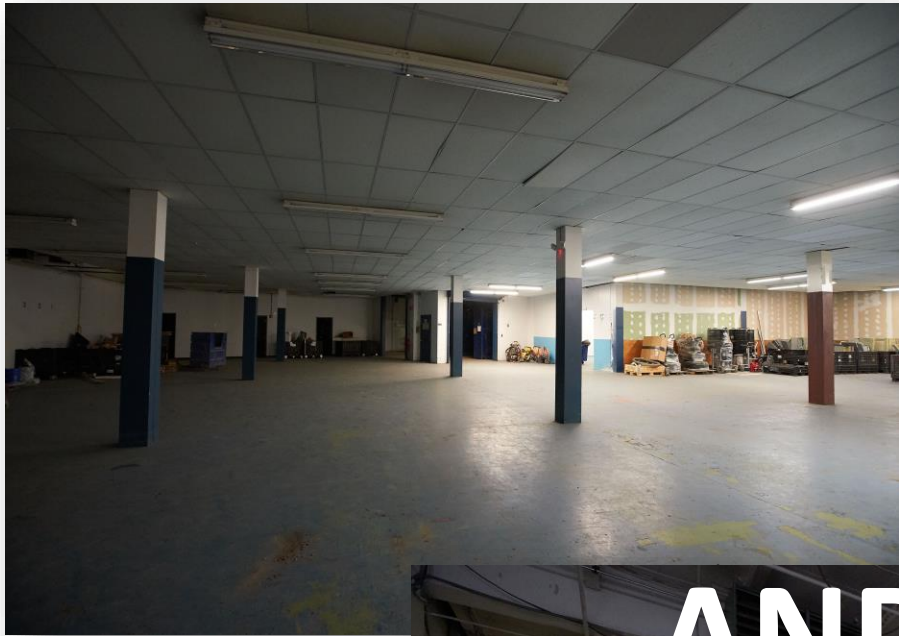


- JMA invested over \$25 million and bring out-of-state operations to CNY
- \$5-million provided as part of a NY Upstate Revitalization Initiative grant to assist the project
- Brings over 200 jobs to the South Side – unlock CNY as a hub for innovation
- Continuing to expand the campus and take over the entire next block in the coming years

“This is a historic moment and the critical first step to restoring American leadership in global wireless technology, as we establish Syracuse as a national 5G hub”

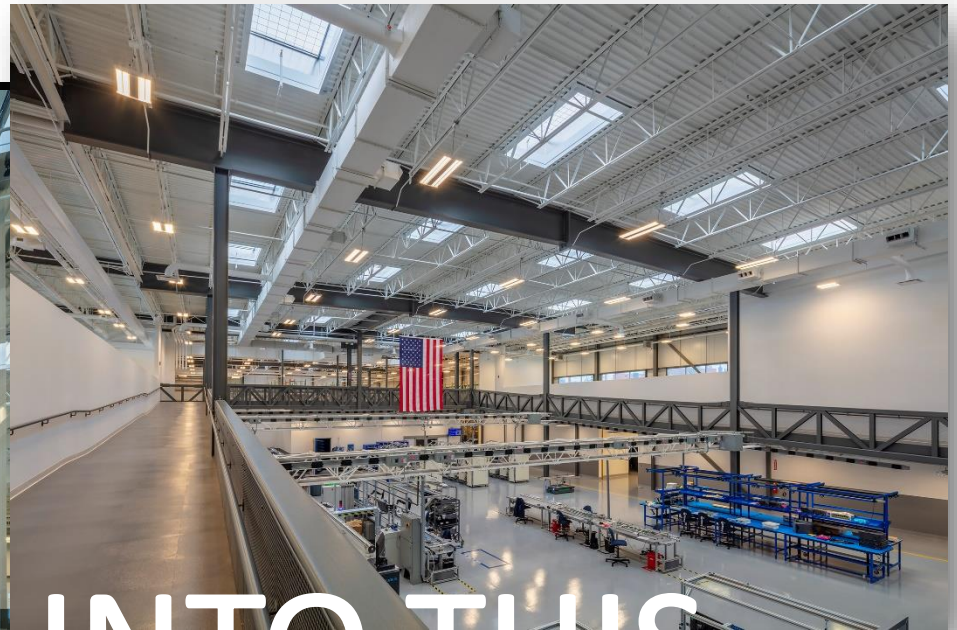
-John Mezzalingua, CEO of JMA

**TURNED
THIS...**

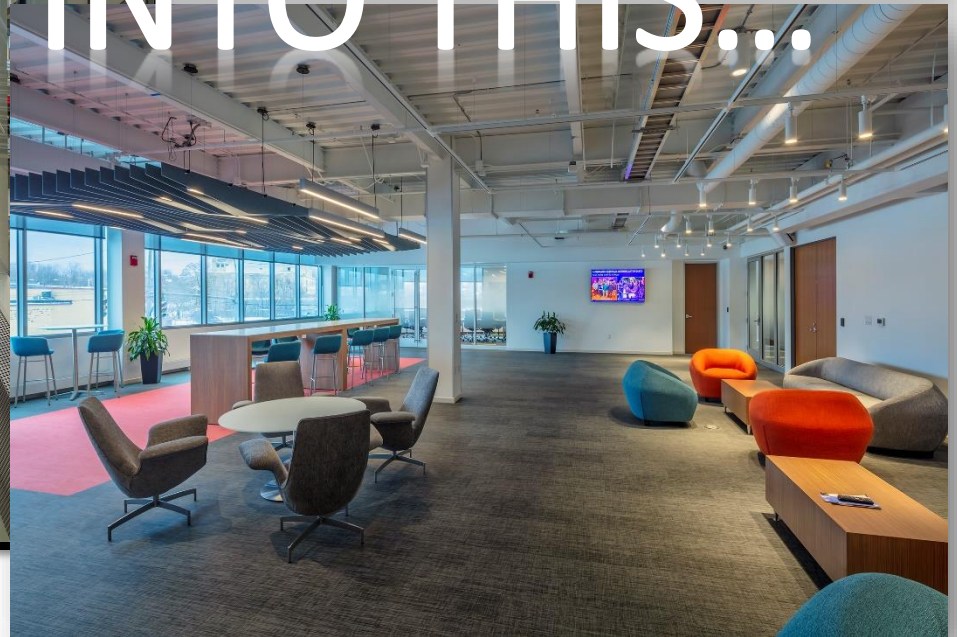


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AND THIS!



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