

# Re-visioning the Chamberlain Brownfield Site Waterloo, IA

Results of Re-use Visioning Discussions  
Between the City of Waterloo, H.R. Green, Inc. and TAB  
July 18, 2017



**Technical Assistance for Brownfields (TAB)**  
Kansas State University

Delta Institute, Michigan State University,  
Great Lakes Environmental Planning, Inc.



## Background

In April 2017, Blase Leven, coordinator of the Technical Assistance for Brownfields Program (TAB) at Kansas State University, was contacted by Christopher Western, Planner II & Brownfield Coordinator in the City of Waterloo (City) Community Planning and Development department, to request assistance from TAB with re-visioning the reuse of the former Chamberlain Manufacturing brownfield site located at 550 Esther Street in Waterloo, Iowa. This 22 acre site had been used in the early part of the 20<sup>th</sup> century by a factory for manufacturing ringer washing machines, and was subsequently used by the Chamberlain Manufacturing Corporation to manufacture munitions. Chamberlain Manufacturing closed in the late 1990s and abandoned the site including several buildings which have since been demolished. The site was later donated to the City of Waterloo in 2003. The Chamberlain site is currently bordered by a residential area to the north and west, a golf course to the east and a public park to the south.

Over the years, the U.S. Environmental Protection Agency (U.S. EPA) and private environmental consultants have investigated the site for suspected contamination through a series of environmental site assessments. Investigations have identified a number of environmental contaminants in the soil and groundwater at the site and in groundwater off site. The environmental justice (EJ) community that lives in the surrounding residential area has asserted for many years that contaminants that have migrated off of the site have caused serious health problems for local family members and neighbors, and that environmental clean-up of the Site will be unable to sufficiently protect human health and the environment in the future. Various studies conducted by the Iowa Department of Public Health and U.S. EPA do not necessarily support this contention. However, residents continue to express serious health and safety concerns about the Chamberlain Site and so do not agree with initial suggestions by the City of Waterloo to have the Site remediated and redeveloped for low income residential housing or as a public park/green space. The City would like for a redevelopment of the Site to directly benefit the adjacent community.

At community meetings attended by the City of Waterloo, its environmental consultant H.R. Green and U.S. EPA, residents have been reluctant to discuss clean-up and reuse of the Chamberlain Site. As a result, the City has been unable to obtain much input from the community around viable site re-use. However, based upon a Consent Decree between U.S. EPA and the Chamberlain Manufacturing Corporation, the City will be able to receive a financial settlement from Chamberlain Manufacturing if the site is cleaned up according to commercial cleanup standards. The City would use this settlement to provide community benefits (for example, exterior home improvements) for the nearby, lower income residents. The City has recognized that given the recent redevelopment of the Logan Plaza Shopping Area nearby, there is not much current additional demand near the Chamberlain Site for mixed commercial/retail development. Also, given the presence in Waterloo of three local industrial parks with good transportation access and the limited transportation access for the Chamberlain Site, redeveloping the Site for industrial use may not be the best option. The City has contemplated moving a portion of the commercial golf course that exists adjacent and to the east of the Chamberlain Site to the Chamberlain Site, and using the City owned land currently used for the golf course for a redevelopment that would benefit its low income residents. H.R. Green believes that a commercial clean up standard may be sufficient for the portion of the golf course relocated to the Chamberlain Site, given the use that would occur there, and is exploring this possibility with the Iowa Department of Natural Resources (IDNR) and U.S. EPA.

## Agreement to Provide Assistance

In May of 2017, TAB agreed to have two planning sessions via conference call with Chris Western and Noel Anderson from the City and Steve Prideaux, Scott Mattes and Rose Amundson from the City's environmental consultant H.R. Green to further "brainstorm", develop and discuss re-use ideas for the Chamberlain Site. TAB partners engaged in the calls included Margaret Renas and Emily Rhodes from Delta Institute, Blake Belanger from Kansas State University, Eugene Goldfarb from Great Lakes Environmental Planning and Rob Dalton from Michigan State University. The two calls were held on June 20<sup>th</sup> and June 23<sup>rd</sup> 2017. The remainder of this report summarizes re-use ideas that developed out of the planning calls.

## Summary of Re-Use Ideas Generated

The following ideas were introduced and discussed as possible re-use options for the Chamberlain Site or the alternate green space to the east of the Site currently used as the golf course. Due to a limited timeline for this project, TAB was not able to assess feasibility of any of the options.

- A mostly market rate housing development with 20-40% affordable housing for the low income population in Waterloo and with the following considerations:
  - Transportation linkages should be present between the existing neighborhoods west of the Chamberlain Site and the new development so that it is not isolated and so that the current EJ community residents are not segregated.
  - Typically developments on golf courses command premiums, mainly due to views so it could be beneficial to have a new development include views of the golf course.
  - To make the development viable, it would be important to attract higher income residents to this location and mix them with lower income homebuyers or tenants. This has been done in locations with high perceived value or in locations that the market perceives as changing and moving. It may be important to determination if such a perception is true for Waterloo.
  - If the development is to occur on the Chamberlain Site, it has been recognized that a soil gas mitigation system would need to be present for newly constructed buildings. However, for a private developer the cost to install such systems would likely not be prohibitive.
  
- Make a Tiny Homes community part of a new housing development possibly marketed to students or professionals from nearby Hawkeye Community College or Allen Hospital:
  - Tiny Homes are currently an up and coming and "hip" trend.
  - Since Tiny Homes (customized, free standing homes approximately 150 square foot (sf) to 600 sf in size and ranging in price from approximately \$25K to \$75K) are typically elevated above the ground, this could eliminate/reduce/mitigate the risk of vapor intrusion from the Site and provide a more unique affordable housing option for low income residents.
  - Tiny homes could be viewed by the EJ community as inferior or less than standard given that the community previously rejected the idea of manufactured homes that resembled mobile home trailers consisting of 1,000 sf units. However, customizing the

homes with high end features (i.e. granite countertops or solar panels) might remove this perceived stigma if the development is also marketed correctly. If the EJ community still would view tiny homes as inferior, then consider marketing the homes to younger education professionals from Hawkeye Community College or early career health professionals working at the nearby Allen Hospital.

- Since tiny homes do not afford extensive living space, add attractive public amenities such as light splash pads, a community center, brand new playgrounds, artificial turf and soccer fields to the development.
  - Some tiny homes are prefabricated and easily assembled. However, whether or not customized designs could necessitate a higher level of workmanship and creation of jobs could be explored.
  - To develop tiny homes could take more time if building codes needed to be revised to accommodate this newer style of development.
- Redevelop the Site for lighter industrial – advanced manufacturing, maker space or incubator space.
    - Waterloo already has three local industrial parks and the Chamberlain site does not have easy truck access. Consequently, development of transportation elements would need to be thoughtful part of Site redevelopment.
  - Redevelop the Site for Community Solar:
    - This idea has been previously explored. Solar is not seen as a direct benefit to Waterloo’s low income residents and does not create sustainable jobs. Concerns have also been expressed regarding the “industrial” appearance and long term maintenance of the panels, and energy generated would also need to be sold to adjacent states. The City would rather the development directly benefit the EJ community. However, solar might be attractive as a “green” *element* of a development.
  - Include green infrastructure (bio-swales, rain gardens, storm-water planters etc.) and/or plants and trees for phytoremediation as part of any Site redevelopment either as an interim redevelopment strategy or as part of a permanent long term redevelopment strategy.
  - Include a community center as part of site redevelopment.
    - The City recently built a new sports complex but a new community center could benefit the elderly, children or at risk residents. However, to make this option feasible, vapor intrusion issues would need to be addressed if a building was developed on the Site. Since a community center would likely be publicly funded as opposed to privately funded, implementation of a mitigation system could be cost prohibitive for the City.
  - Redevelop the Site as a wildlife preserve or refuge with phytoremediation plantings and elevated pathways.
    - This is a community that is hurting from the actual or perceived risks generated by the Chamberlain Site. It may take a generation or two for healing to occur to the point that the Site can be used for economic development.

- In the interim, transform the site using plantings to allow it to become a forest, a meadow or other ecologically sound system. Phytoremediation could be a part of this and afford for educational opportunities.
- Design trails to meander through the Site to allow access by the community. Possibly include a nature based memorial for deceased family members from the community. Have the community provide heavy input and participate in the design of the memorial to help the community to heal.

## **Conclusion**

At the conclusion of the reuse discussions, H.R. Green and the city indicated that it will review the ideas discussed and H.R. Green anticipates including several of the ideas, either in whole or in part, into the three draft designs that it will create for the City. Each of the designs takes into account a “land trade” where a portion of the existing city-owned golf course to the east of the Chamberlain Site is relocated to a remediated Chamberlain Site and a new development is designed to benefit Waterloo’s EJ community on the green space formerly occupied and currently owned by the City.