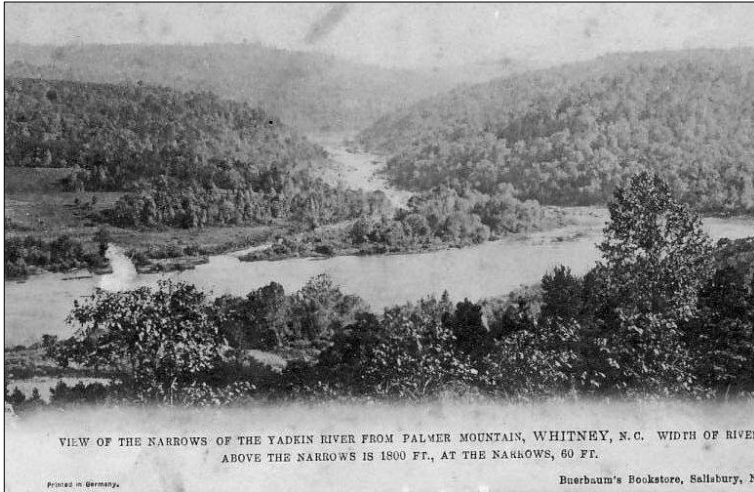


Public Meeting on Permitting and Cleanup Activities at Alcoa Badin Works

Wednesday November 16, 2022
Atrium Health Meeting Room

Presentation by Ryke Longest, Duke Environmental Law &
Policy Clinic

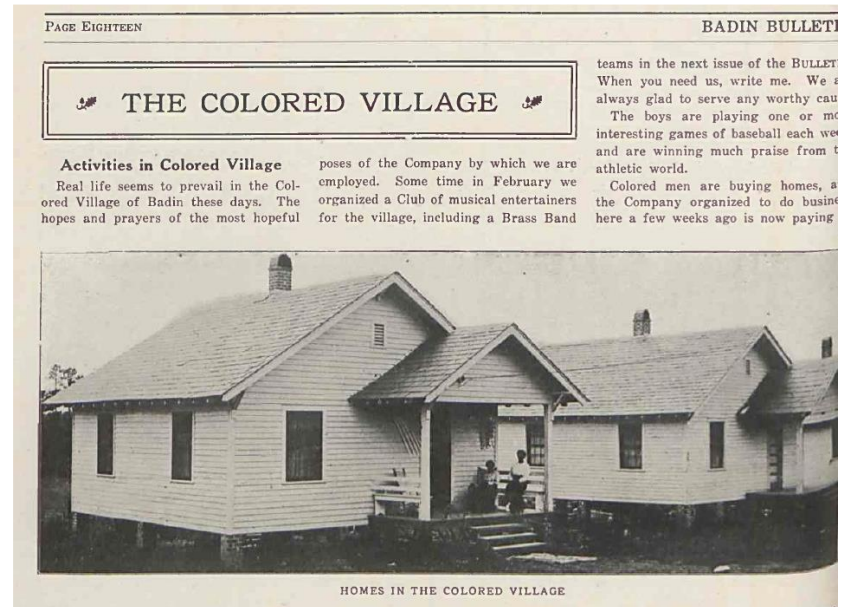
Alcoa's Tallassee Power Company Builds Town of Badin and Plant



Narrows Pre-Damming



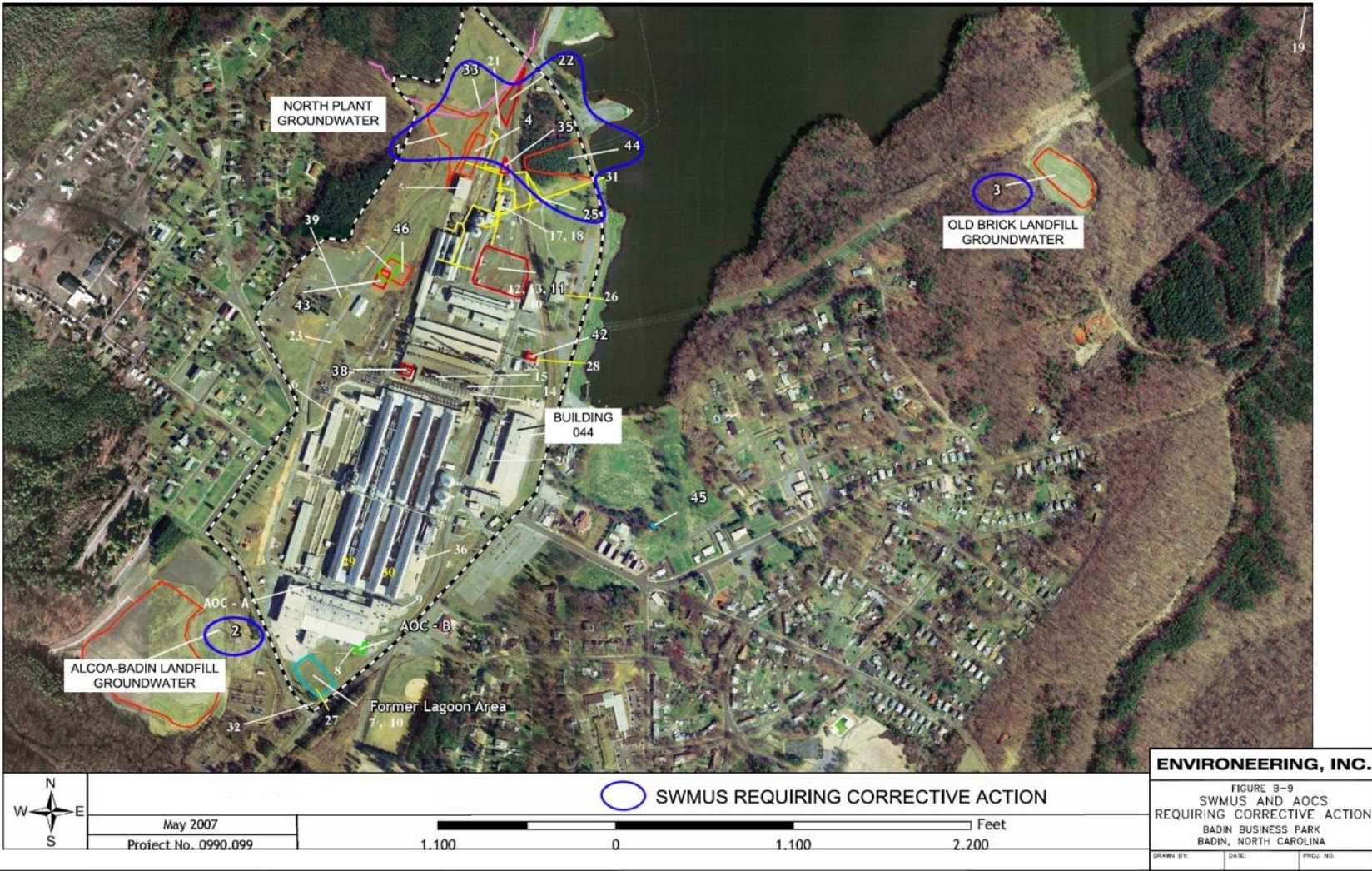
1938 Aerial



Badin Bulletin

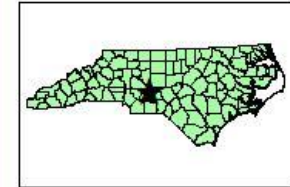
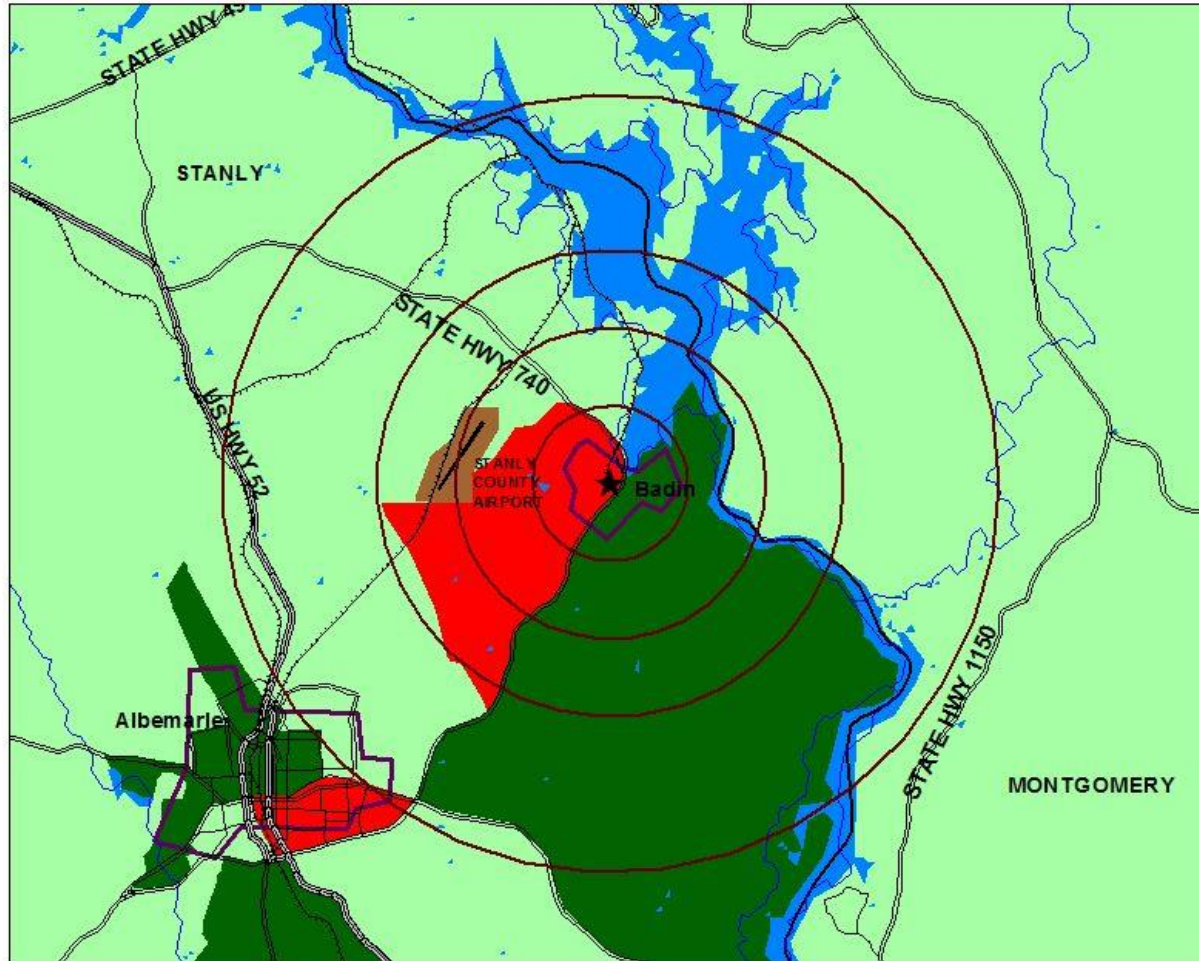
In the wisdom and good wishes of the Tallassee Power Company for the permanent location of the race in a place where we can help ourselves and others as well, they have opened to us an opportunity thru which the negro earning even the smallest wage may secure a house and lot which he can call his own, without any voice to the contrary—his own home. This means that he is to be free and independent, so far as a home is concerned. The plan by which this home is to be had makes it possible for all. He is given ten years to pay for a home, which costs only the small sum of say \$1400. This proposition does not only open the opportunity for owning homes to the race, but opens for those desiring it, a most splendid chance for building and operating business on the same payment plans.

Solid Waste Management Unit (SWMUs) Requiring Corrective Action



Environmental Justice and West Badin

POTENTIAL EJ AREAS AROUND ALCO BADIN WORKS FACILITY, NORTH CAROLINA



- ★ Site Location
- 1, 2, 3 & 5mi, Buffer Zones
- Railroads
- Major Streams
- County Boundaries
- Indian Lands
- Potential EJ Areas
 - Low Income
 - Minority
 - Minority/Low Income
 - Non-EJ Areas



0.7 0 0.7 Miles

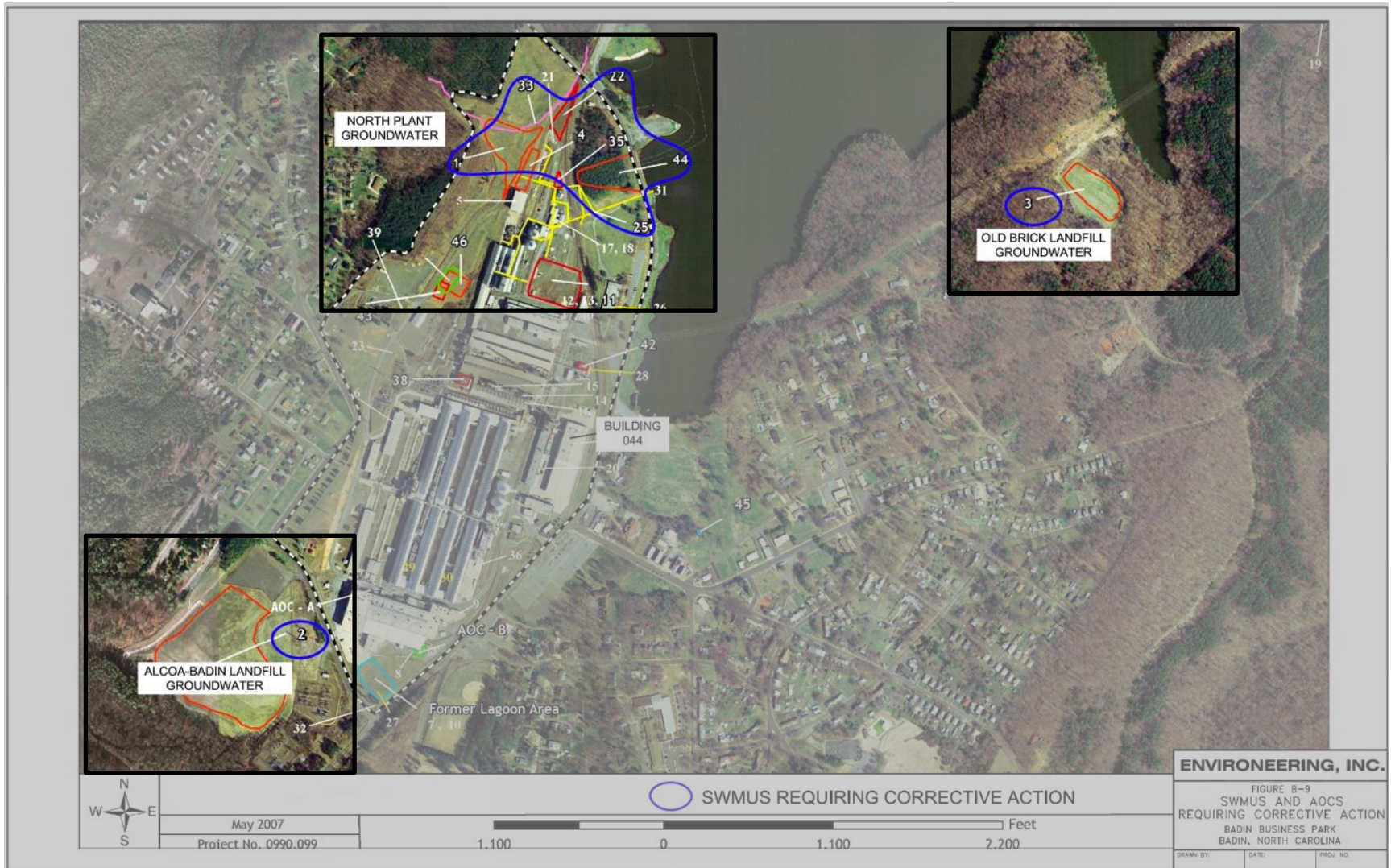
Source: 2000 U.S. Census Population and Housing Summary Tape File 3 (STF3) Data.
Aggregated to Block Group Level.

Relative State Minority Threshold: 35.78%
Relative State Low Income Threshold (20K): 28.30%



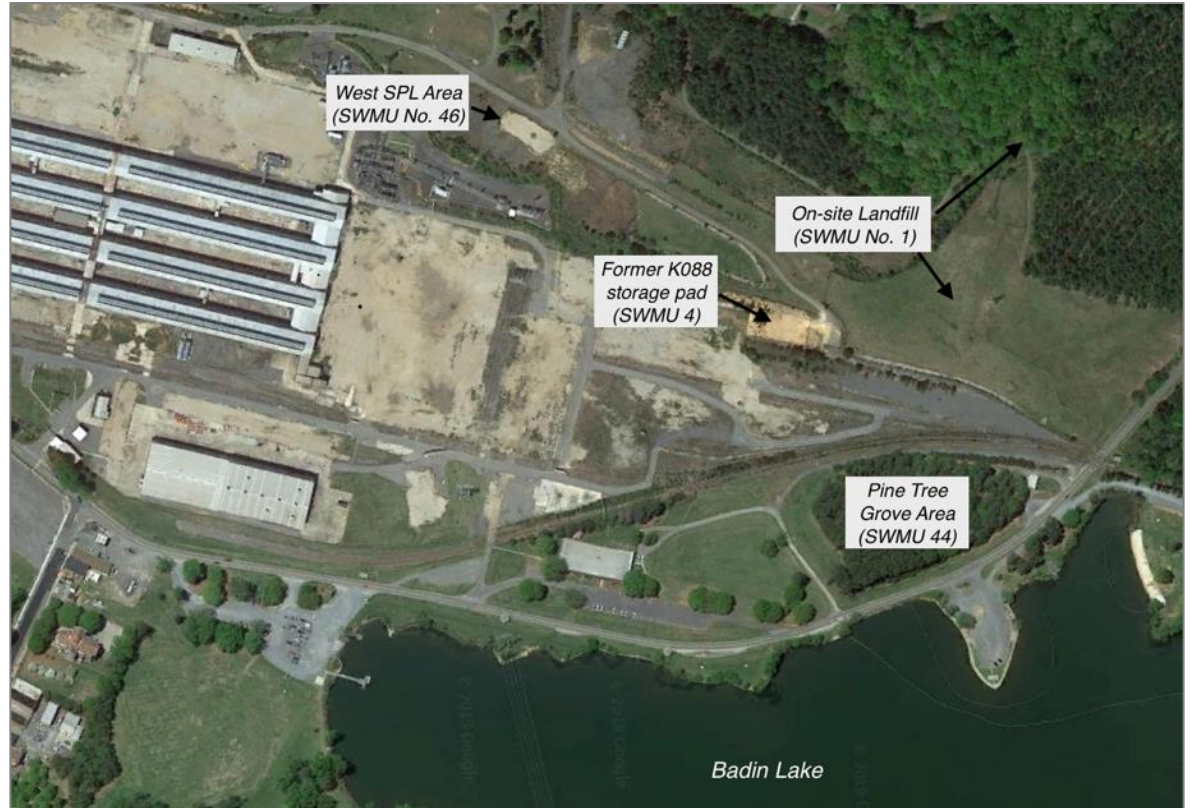
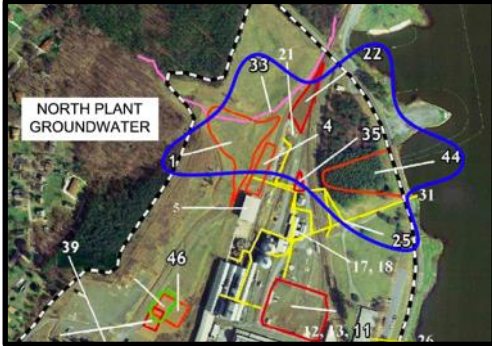
EPA REGION 4
OFFICE OF ENVIRONMENTAL ACCOUNTABILITY

Largest SWMU areas with buried spent potliner



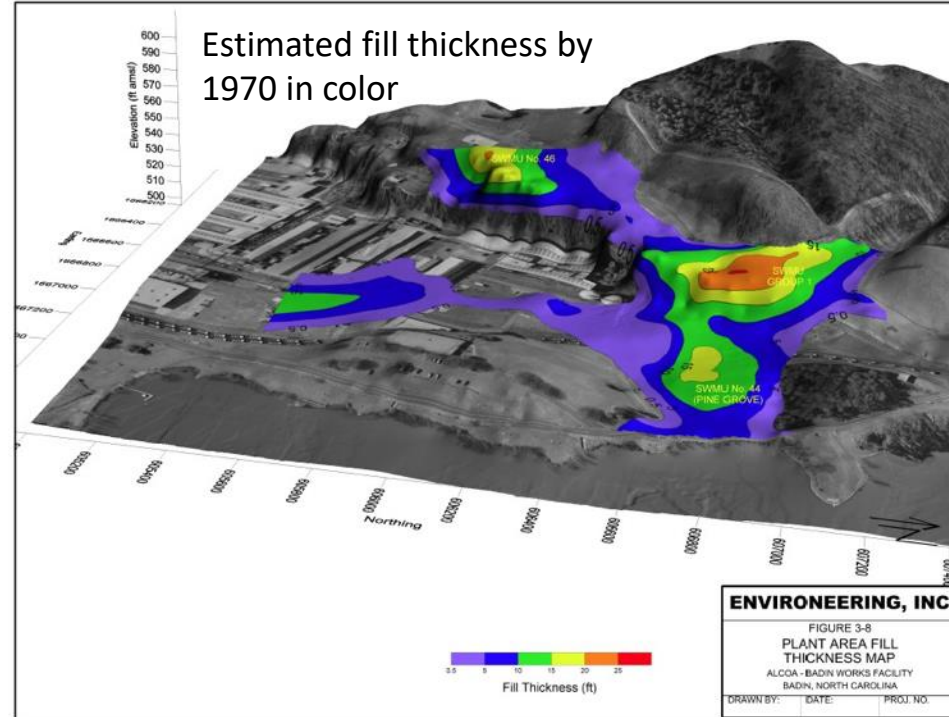
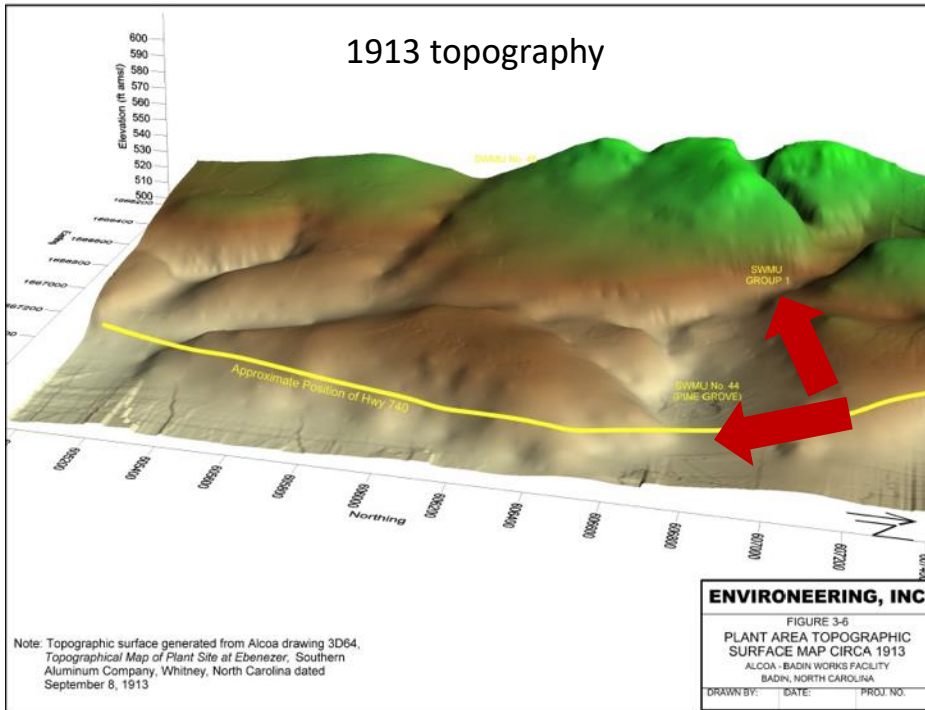
North End SWMU Area


2019 aerial view from Google Earth



Topography (shape of the land)

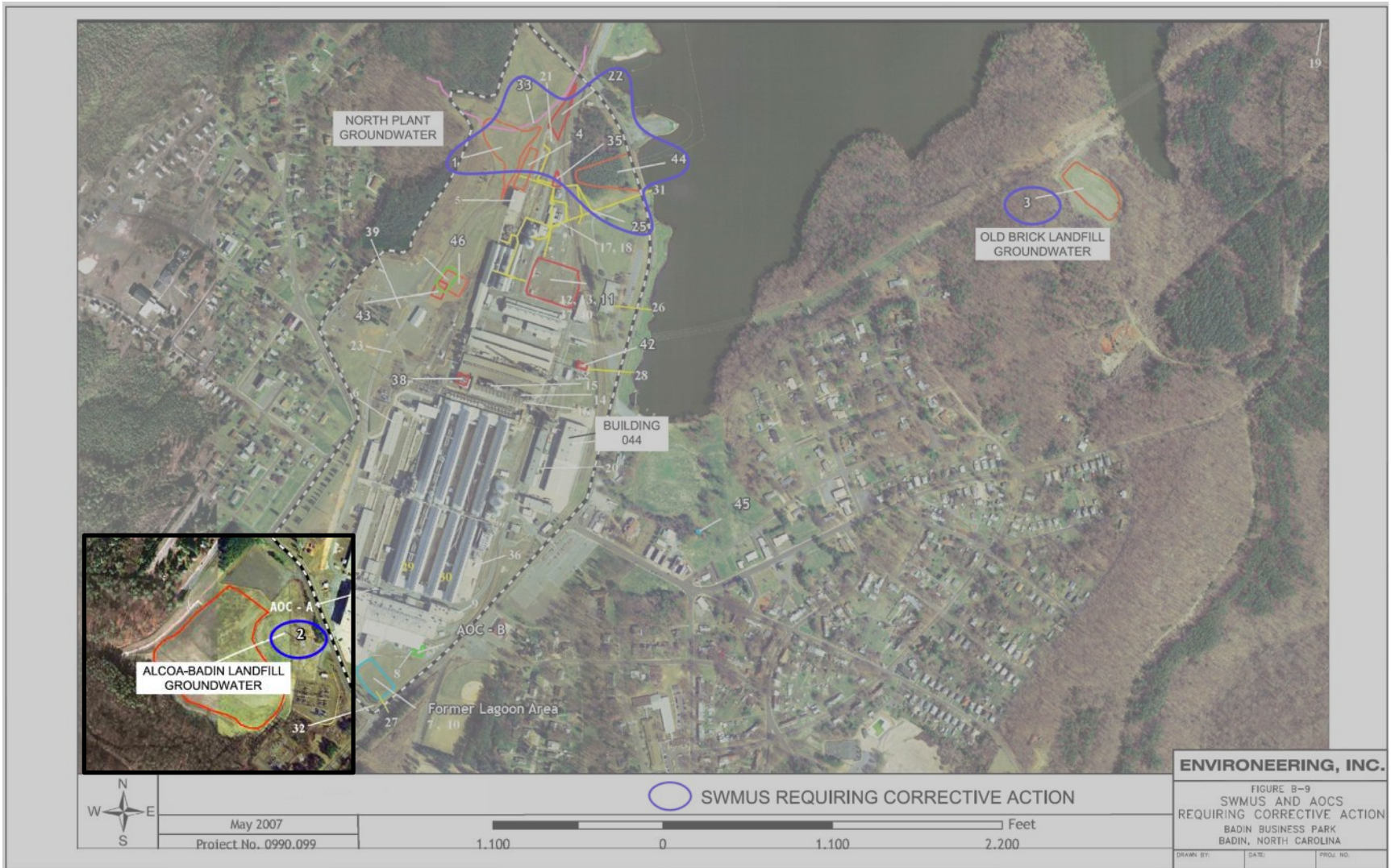
North End SWMU Area is a natural valley that was progressively filled in from 1916 to 1968



 Red arrows point to sites where spent potliner was dumped in a valley draining into Badin Lake, from 1910s to 1970s

By 1970s, cyanide and fluoride were leaching from **unlined** fill material (in color) into surface water and Badin Lake.

SMWU No. 2: Alcoa-Badin Landfill



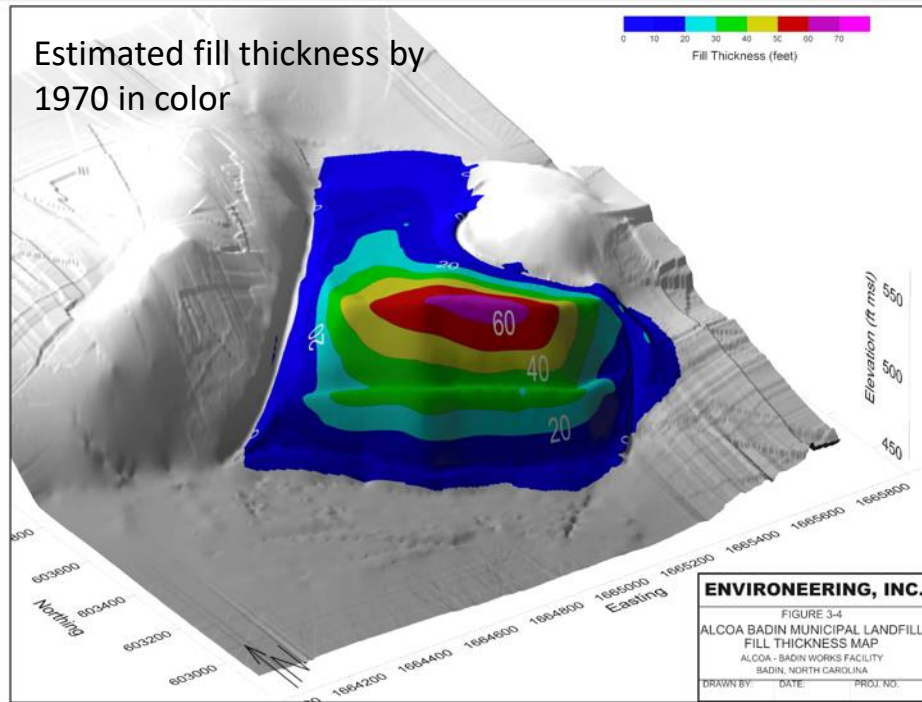
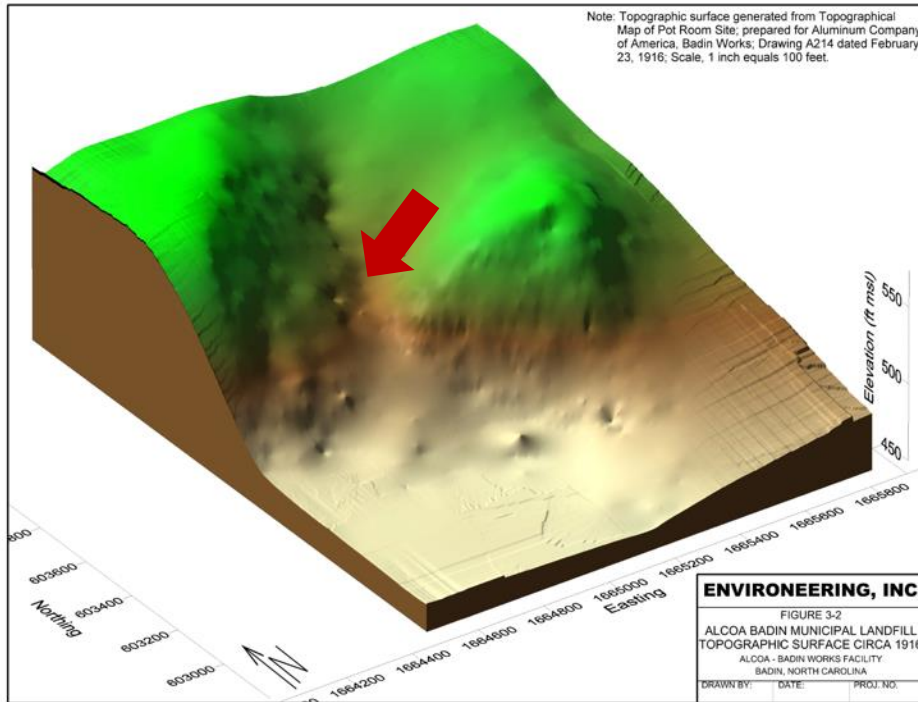
SMWU No. 2: Alcoa-Badin Landfill



2019 aerial view from Google Earth

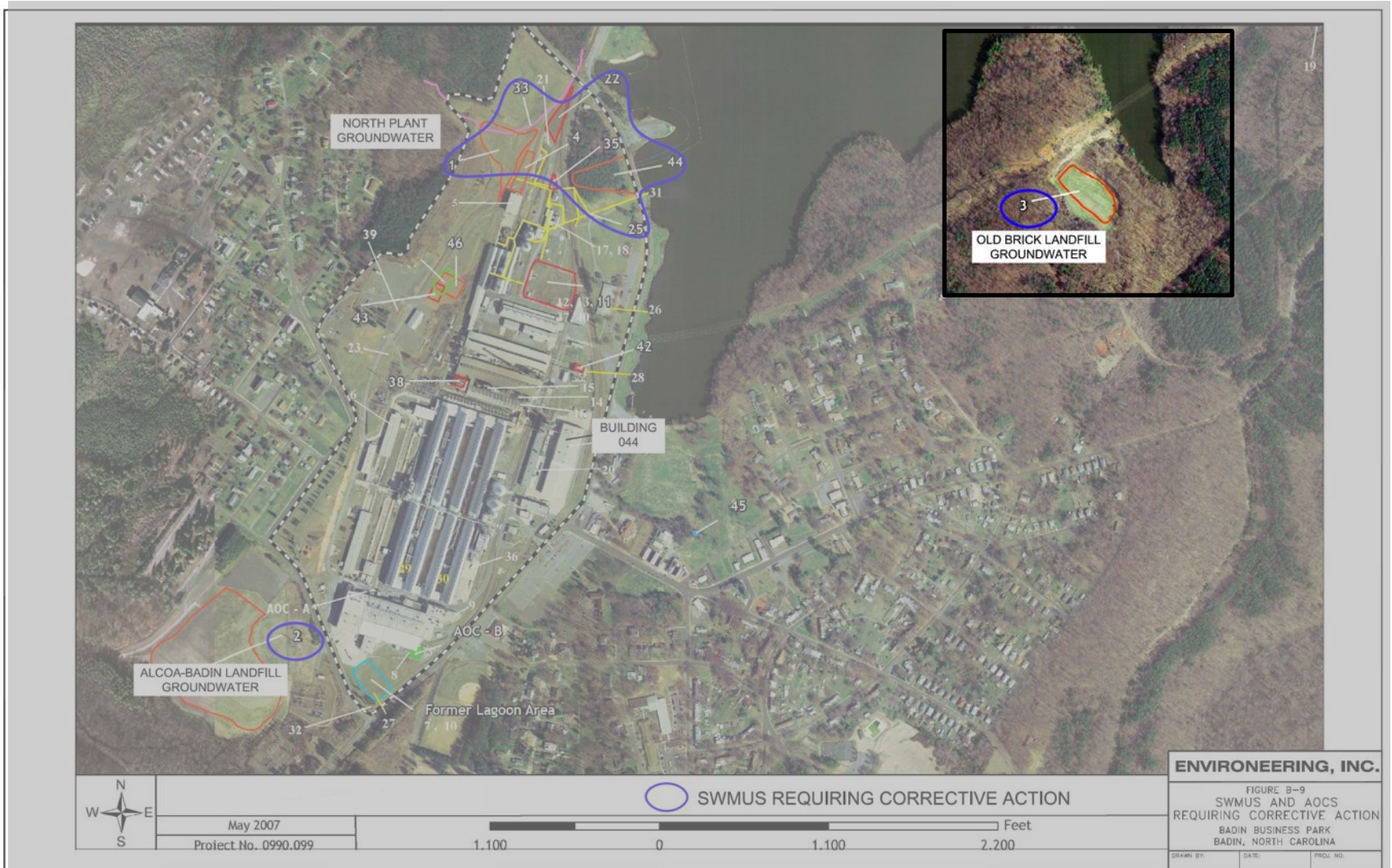
SMWU No. 2: Alcoa-Badin Landfill topography

SWMU No. 2 was a natural valley used as a dump (right), graded between mid-1970s and 1990s (left)

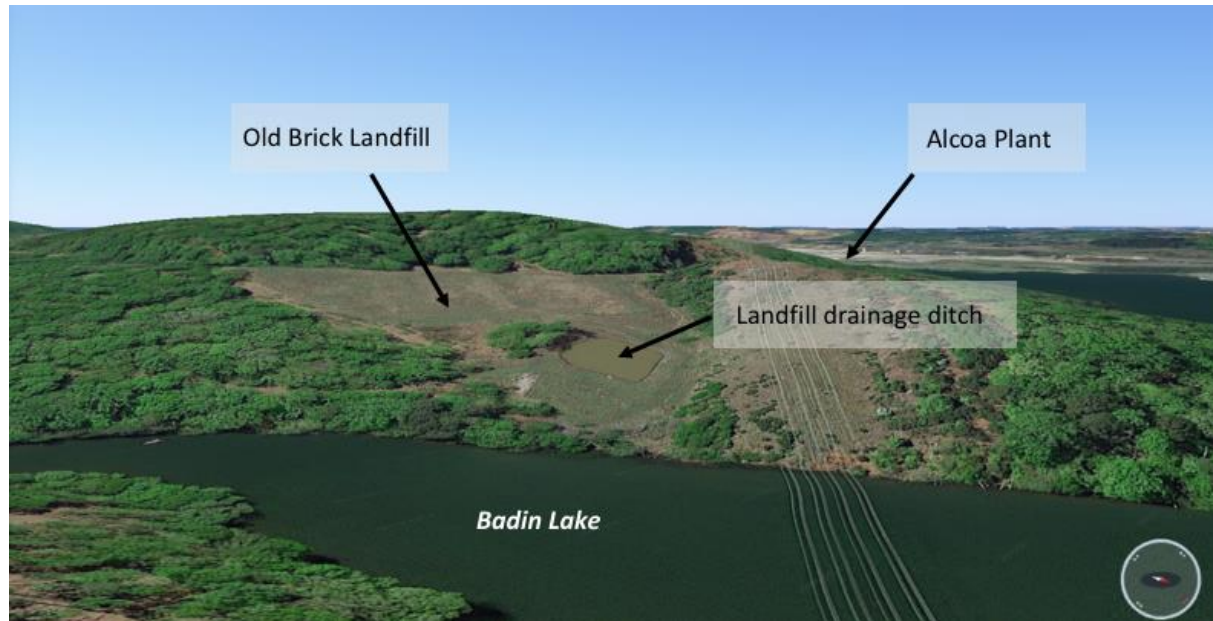
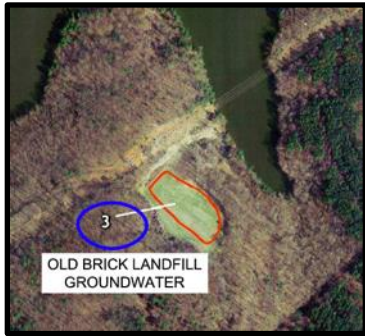


Red arrow points to natural valley draining into Little Mountain Creek

SMWU No. 3: Old Brick Landfill



SMWU No. 3: Old Brick Landfill



2019 aerial view from Google Earth

RCRA Corrective Action remedies must . . .

1. Protect human health and the environment;
2. Attain media clean up objectives; and
3. Control the sources.

In 1984, Congress noted that
“classes of land disposal facilities are not capable
of assuring long-term containment of
certain hazardous wastes, and to avoid
substantial risk to human health and the
environment, reliance on land disposal should be
minimized or eliminated, and land disposal,
particularly landfill and surface impoundment,
should be the least favored method for
managing hazardous wastes”

42 U.S.C. § 6901