West Badin

In West Badin the bulk of the surviving original housing consists of two types of bungalows and one duplex type.

One bungalow type, typified by 704 Roosevelt Street is one-story, L-shaped, three bays wide, three bays deep, covered with clapboard with an engaged, full facade screened porch. This bungalow and several others in West Badin retain their original dark slate roofs. Windows are six-over-six sash. Trim is plain with simple brackets supporting the overhanging rafter ends. The rafter ends are exposed along the front and rear elevations. Other bungalows of this type are found primarily on Washington and Mayo Streets.

An example of the second bungalow style can be seen in 417 Jackson Street. It is one-story, two bays wide, two bays deep, with shallow gable front roof and central chimney. Rafter ends are exposed along the side elevations with the gable end centered by a bracket. The structure's most prominent feature is an offset, projecting, fully screened porch which shelters the main entrance. Its roofline echoes that of the main roof, with exposed rafter ends and central bracket. A variation of this type can be seen on Grant Street with a nearly full width screened porch with the entry stairs at the side.

The structure at 228-226 Lincoln Avenue is representative of the duplexes. It is one-story four bays wide, two bays deep, with slate covered gable front roof, central brick chimney, clapboard siding, high brick foundation, exposed rafter ends with brackets. The porch is nearly full facade, hip roofed, with exposed rafter ends. Seventeen additional duplexes of this type are found on Roosevelt and Wayne Streets.

The small cluster of original one-story brick commercial buildings in West Badin have been altered and now stand vacant and vandalized. They do show some fine masonry work which is evident in both Badin and West Badin, with the use of distinctive dark glazed headers.

In West Badin surviving institutional structures built by Alcoa include churches and the Badin Colored School. Prominent among these are the Baptist Church on Roosevelt Road and McDonald's Chapel AME Zion Church on Dewey Street, both Gothic style elements.

The Baptist Church with its steeply pitched, slate covered roof, is of brick, laid in 1-6 common bond with dark glazed headers. Asymmetrical in plan, the one-story church's main feature is an offset square corner tower with flat roof and stucco and brick frieze band. The tower is ventilated by tall thin louvered openings with rounded arches. The main double door entrance is set in a lancet arch with keystone: a quatrefoil is set in the doors' fanlight. A large lancet arch window with heavy muntins and frosted glass dominates the main facade. Smaller windows mark the four bay depth.
McDonald's Chapel AME Zion Church is also built on the Gothic theme with somewhat classical variations. Its central projecting tower set in the front facing gable end and bracketed with discordant classical returns, is topped with corbelled crenelations. The main entrance's double doors now replaced with the present glass and aluminum doors is set in a lancet arch with stained glass transom. The belfry is ventilated by paired lancet arch louvered openings and is flanked at the first-story level by stained glass Gothic windows which are repeated in the five bay deep building. One interior and one exterior chimney extend high over the moderately pitched gable roof.

The Badin Colored School (West Badin) has a two-story central block marked by a granite string course, a hipped roof topped by a handsome Greek lantern. One-story hipped roof wings project from the sides of the two-story block, the double front door with fanlight rests under a classical pediment. Trim is simple with boxed eaves and white reveals around the six-over-six sash symmetrically placed windows. Two pairs of simple tall brick interior chimneys extend above the roof of the central portion. When the school was dedicated in 1925, it was "topped with an aluminum-shingled roof that was the first of its kind ever assembled in North Carolina." 6

Narrows Dam and Power Plant

At the time of its completion in the summer of 1917, the Narrows Dam was the world's highest overflow type dam. It was designed by James W. Rickey, chief hydraulic engineer of the Aluminum Company of America. Rickey was a native of Ohio, trained as an engineer at Rensselaer Polytechnic Institute in Troy, New York. Before working for Alcoa, Rickey served the Northern Pacific Railroad and two power companies in Minnesota.7 The concrete dam he designed at the Narrows of the Yadkin River is 216 feet high and 1654 feet long. The dam creates a head of 177 feet, a reservoir of over 5300 acres, and a shoreline of 115 miles. Badin Lake, created by the dam, is a popular recreational center in the southern Piedmont. The Narrows power plant is a handsome one-story building nine bays wide with a gable roof and six-foot raised monitor. The building stands 160 feet in length and 60 feet wide, 80 feet high on the riverside and 40 feet high on the gateside. The frame and roof-truss system of the plant is steel with a concrete floor and brick and concrete walls. The brick walls, terra cotta tile roof, and large arched windows gives the building a Spanish Revival appearance. Three steel penstocks convey water to the turbine engines that provide power for five generators with an overall capacity of 96,500 kilowatts. Alcoa generates alternating current through small aluminum cables to rectifiers near the potrooms at the Badin Works, one and one-half miles west of the power plant, where it is converted to direct current for use in the pots. A steel railway and pedestrian triple span Warren lattice truss bridge connects traffic from the west side of the river to the power plant. Also visible at this site are the remains of the French construction projects.