This report describes data recovery investigations and discoveries at five archaeological sites along US 491 (formerly US 666), north of Sheep Springs, San Juan County, New Mexico. The investigations were prompted by the New Mexico Department of Transportation’s (NMDOT’s) plans to widen US 491 from two to four lanes (NMDOT project number F111-666-1(491)7, CN 2357). Because the project involves federal funds and is occurring on the Navajo Nation, it falls under the purview of federal laws requiring that effects to cultural resources be considered before construction takes place. These laws include the National Historic Preservation Act of 1966, as amended (PL 89-665), as well as Navajo Nation regulations and guidelines: the Navajo Nation Cultural Resources Protection Act (Tribal Council Resolution CMY-1988), the Navajo Nation Historic Preservation Department’s (NNHPD) Interim Fieldwork and Report Standards and Guidelines (1991), and the Navajo Nation Policy for the Protection of Burial Places, Gravesites, Human Remains, and Funerary Items (revised, 1996). Bohannan Huston, Inc., is providing design-engineering services to NMDOT for this project and contracted with SWCA to conduct both the archaeological testing (carried out in 2004) and the data recovery investigations that are reported here.

The major focus of the data recovery investigations was on the Sandy Rise site (NM-H-5155). Following excavation of Feature 3, a small Pueblo II structure, machine scraping uncovered the remains of a small but intensively occupied Basketmaker II settlement, buried under a meter of colluvial sediments within a stabilized sand dune. Seven radiocarbon dates (all on annuals or woody twigs) pinned down the age of this component at circa 400-200 B.C. The investigations identified and excavated 54 features in this component, seven of which were pit houses. Over 7,000 lithic artifacts were recovered from the site, about 85 percent of it petrified wood, which occurs locally. Botanical remains indicate that the Basketmaker II occupants of the site cultivated maize but also relied on a wide variety of wild plant foods. Faunal remains had not preserved well, but what was present suggested that rabbits were the main source of animal protein in the diet. The absence of bones of medium and large mammals and the dearth of projectile points suggested that hunting of deer, antelope, and other large animals was unimportant. The investigations at Sandy Rise also uncovered a more deeply buried, early Late Archaic component with two features. These features occurred in colluvial deposits that underlay the northern end of the sand dune, approximately 0.5 m below the Basketmaker II component. One radiocarbon date placed this occupation at circa 1750-1500 B.C., at the very beginning of the Late Archaic period. No durable artifacts, nor any maize or other cultigens, were discovered in association with this component.

To the north, two historic Navajo sites were also investigated as part of this effort. NM-H-46-55 was occupied in the early twentieth century and contained the damaged remains of a residential hogan (Feature 1), several midden piles, and a surface scatter of mostly historic artifacts. The hogan contained a central hearth that probably marked the former location of a stove fashioned from a 55-gallon drum. Excavations into one of the midden piles (Feature 2) revealed that this trash overlaid a layer of livestock manure that may have marked the former location of a lamb pen. The few diagnostic prehistoric ceramics recovered indicated a very ephemeral Pueblo II presence at this site.

The other historic Navajo site, NM-H-46-62, contained the well-preserved remains of a small, dry-laid stone structure (Feature 1), a rock concentration that was assumed to be the remains of a broad oven (Feature 2), and several other features, including purported ash stains and rock alignments. Excavations did not reveal any artifacts, ash, or organic midden staining, or any oxidation in Features 1 or 2. Feature 1, originally thought to be a hogan, was more likely the remains of a windbreak or some other non-residential structure. The function of Feature 2 remains unknown. The other features at this site all turned out to be of natural origin, including the “ash stains,” which were actually natural, dark carbonaceous stains of Cretaceous age.

At NM-H-35-17, testing investigations had uncovered a dark-stained feature that was exposed by mechanical excavation during data recovery. Although charcoal introduced by human activity had been recovered from this feature (and radiocarbon-dated) during the testing phase, machine scraping during data recovery revealed that this feature, like the “ash stains” at NM-H-46-62, actually consisted of a large, amorphous carbonaceous lens dating from Cretaceous times. No cultural feature could be isolated within this stain, and so after additional scraping that failed to uncover any archaeological remains, investigations at this site were terminated. No artifacts were collected from this site during data recovery, as it had been completely surface collected during the testing phase.

The Little Water Village site (NM-H-35-19) was the only one of the five data recovery sites that was not investigated during the testing phase in 2004. Extensive excavations had been carried out at this site in 1979, but it was unclear whether or not significant archaeological remains were still present within the right-of-way. Accordingly, investigations including surface collection, backhoe trenching, limited hand excavation, and machine scraping were carried out during data recovery. These efforts did not uncover any additional intact subsurface archaeological remains at the site.