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09 November 2021

Ms. C. J. Wallace, Cultural Resources Coordinator
Illinois State Historic Preservation Office
Cultural Resource Protection
One Old State Capitol Plaza
Springfield, Illinois 62701

RE: SHPO LOG #012083118

Dear Ms. Wallace:

Thank you for your e-mail of 08 November 2021 approving the 95% documentation for the Sidell Elevated Water Storage Tank. In accordance with the Memorandum of Agreement (MOA) between the Village of Sidell, the Illinois Environmental Protection Agency, and the Illinois State Historic Preservation Officer regarding the Demolition of an Elevated Water-Storage Tank in Sidell, Illinois under SHPO LOG # 012083118, we have attached the final digital Historical Resource Report and Press Release as specified in Item G under the MOA Mitigation Section. Under a separate cover we are also submitting these materials to the Village of Sidell along with printed photos as specified in Item H under the MOA Mitigation Section. Thank you for your assistance with this project.

If you have any questions about the project, please contact me at (217) 333-1636 or (847) 287-9045.

Sincerely,

Kevin McGowan

c Mr. Andrew Kieser, Fehr Graham
Mayor Terry Bates, Village of Sidell

**HISTORICAL RESOURCE REVIEW OF AN ELEVATED WATER STORAGE TANK
IN SIDELL, VERMILION COUNTY, ILLINOIS**

Prepared for & Funded by:

**Village of Sidell
306 North Chicago Street
Sidell, Illinois 61876**

Prepared by:

**PUBLIC SERVICE ARCHAEOLOGY & ARCHITECTURE PROGRAM
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URBANA, ILLINOIS 61801
(Project No. 21-036)**

Author:

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**Kevin P. McGowan, Ph.D.
Principal Investigator**

19 October 2021

Introduction

The Public Service Archaeology & Architecture Program of the University of Illinois at Urbana-Champaign conducted research to partially fulfill a Memorandum of Agreement (SHPO Log #012083118) among the Village of Sidell, the Illinois Environmental Protection Agency, and the Illinois State Historic Preservation Officer regarding demolition of an Elevated Water Storage Tank in Sidell, Illinois. The investigations included: preparation of an historic narrative of the Sidell water system and the role of the Sidell Elevated Water Storage Tank in that system; photographic documentation and description of the Sidell Elevated Water Storage Tank; and compilation of existing drawings and photographs. This report provides a context for understanding Sidell Elevated Water Storage Tank (Figure 1).

Local Historical Context

Vermillion County is located in eastern Illinois, bordered by Edgar County to the south, Champaign and Ford Counties to the west, Iroquois County to the north, and the State of Indiana to the east. The entire county, except for a small region on the south and east, is drained by the Vermillion River and its tributaries. The Salt Fork of the Vermillion flows northeast through the center of the county. The Middle Fork joins the Salt Fork about six miles west of present-day Danville and forms the Big Vermillion proper. The North Fork flows from north to south through the county and joins the Big Vermillion at Danville. The Little Vermillion flows easterly through the southern part of the county. The lower reaches of both the Middle Fork and the Little Vermillion were heavily timbered, the land becoming quite broken with high banks and eroding bluffs competing with river bottomlands. The Vermillion in turn drains into the Wabash River, thence the Ohio, and finally the Mississippi River (Internet Archives 2021a: 80). Much of Vermillion County, situated within the “Grand Prairie” region of east-central Illinois, was composed of tall-grass prairie prior to Euro-American settlement (Bogue 1979: 13; Poggi 1934: 97ff; Pooley 1968: 166). A low broad ridge crosses the prairie from the northeast to the southwest, and both prairie and ridge are bisected by the Vermillion and its tributaries, exposing valuable bed-rock and coal-beds. Early settlement in Vermillion County concentrated near timbered groves where fuel, building material, game, and shelter for livestock were more readily available, and where the underlying soils were more easily worked than prairie soils. The open prairies were not widely settled until the development of the self-scouring plow and improved field-draining technology made cultivation of prairie soils more practical (Faragher 1986: 62-64).

Euro-American settlement of the area that is now Vermilion County began in 1819, just one year after Illinois was established as a State. What initially attracted settlers to the Vermillion County region was the discovery of numerous salt springs, known as the “Vermillion salines”, located along the Salt Fork River about six miles southwest of present-day Danville. These salt springs were long utilized by local Native American groups as well as eighteenth century French explorers. The springs first became accessible to settlers after the “Kickapoos of the Vermillion” ceded their territories to the United States Government in August 1819. The first Euro-Americans to lay claim to the Vermilion salines was Joseph Barron, a resident of Fort Harrison (Terre Haute), who had first visited the springs in 1801, and a companion, Truman Blackman (Ancestry.com 2021 307, 309). Such was the commercial value of salt for many everyday uses, that Blackman secretly organized a second party to return and claim the salines for himself, prompting Joseph Barron to abandon the enterprise. Blackman and his party, including his brother Remember Blackman, Dan and George Beckwith, Francis Whitcomb, Seymour Treat, and Peter Allen, settled by the salines in November of 1819, and became the first Euro-American settlers as well as the founders of Vermilion County (Ancestry.com 2021 309; Stapp and Bowan 1968: 7-8). Seymour Treat was the first to bring his family and build a cabin at the salines, and is considered the first permanent Euro-American settler of Vermilion County. Word of the salt springs spread and soon others came to work at the salines and to explore the potential of acquiring cheap, fertile farmland (Ancestry.com 2021: 310). James Butler, a Vermont native and resident of Clark County, Ohio, planted the first crops in the county in 1820. He returned from Ohio the next year with his family and built a cabin along

the Fort Clark Road about four miles southeast of the salt works. Butler's cabin became an important landmark and stopping place for early pioneers traveling west along the Fort Clark Road, and the location was long known as "Butler's Point" (Cunningham 1905:659). In time others joined Butler at his settlement, including Asa Elliot, Amos Woodin, and Francis Whitcomb (Ancestry.com 2021:609-611). These early pioneers played a leading role in the formation of Vermilion County, and James Butler's and Asa Elliot's cabins became the hub of early county affairs (Stapp and Bowan 1968: 28,70).

Vermilion County was established in January 1826 from unorganized territory that had previously been attached to Edgar County (Powell n.d.: 36-47). The seat of justice for the new county was established a year later, in January, 1827, on land donated by Guy W. Smith and Dan Beckwith, one of the early salt miners. The town was named "Danville" after Dan Beckwith who, with his brother-in-law Amos Williams, surveyed and platted the town (Ancestry.com 2021: 325). By this time salt production at the Vermilion salines had become a successful business venture. Large scale commercial production began in 1824 when an Ohio new-comer, John W. Vance, obtained a lease from the state for the control and operation of the salines. Vance was familiar with salt making from his early days in Kentucky, and under his management the Vermilion salt works became a prosperous employer, with a dozen cabins, a trading post, and the Vance Tavern. The salt works declined in the early 1830's when cheaper salt began to be shipped to Chicago's lake harbor, and from there to east-central Illinois. John Vance continued with the operation until 1836, and in 1840 local salt production was finally abandoned (Tilton 1967: 12).

After the initial development of the Vermilion Salines and Butler's Point, the settlement of Vermilion County proceeded at a slow pace, due, in part, to the unyielding prairie soils as well as the lack of navigable waterways in the region. Most of the early settlers came from the Upland South states of Virginia, Kentucky, Tennessee, and southern Ohio, as well as southern Indiana and Illinois. The earliest farmers coming in the 1820's and 1830's were mostly pioneer subsistence farmers who settled in dispersed farmsteads typically situated near the prairie-timber borders along the Vermilion River and its major tributaries, the North Fork, Middle Fork, and Salt Fork Rivers. By 1831 settlement in the region of Vermilion County prompted the establishment of a new government land office in Danville. In 1833 Vermilion County was reduced in size by the formation of Champaign County to the west, and Iroquois County to the north. The prairies began to be settled in the 1840s but prairie farming remained limited until the steel plow and the railroads came to Vermilion County in the 1850's. The railroads opened up major markets, such as Chicago, for the products of the Central Illinois farmers. The first railroad line, the Wabash or Great Western, arrived in Danville in October 1856. The Danville-Urbana-Bloomington-Pekin line, originating in Indianapolis, was completed in 1869. Finally, the north to south running Chicago-Danville-Vincennes line began operation in 1871 (Stapp and Bowan 1968: 70-71). The opening of new markets and the sudden influx of formerly unavailable supplies and goods fundamentally changed the local economy. The former practice of agricultural production for mostly local use began to be replaced by a market economy. In addition to increased agricultural output, the arrival of the railroad also stimulated industrial development. The most important new industrial enterprise in Vermilion County was coal mining. People began small scale coal mining around Danville as early as the 1850's, but coal mining became an industrial activity in the late 1860's as the railroad industry became a ready market for Vermilion County coal, and the Illinois Railroad Company laid tracks to the mines (Williams 1930: 426). The other major industry in the late 1800's was brick manufacturing using locally available clay and shale (Williams 1930: 426). Industrialization and the influx of large numbers of people via the railroad, many of them speculators, merchants and industrialists from the East, stimulated rapid urbanization. Danville's position as transportation hub and industrial center secured its regional leading role by the late nineteenth century.

Sidell Township.

Sidell Township occupies the southwestern corner of Vermilion County, bordered on the north by Vance Township, on the east by Catlin Township, on the south by Edgar County, and on the west by Champaign County. The civil township encompasses part of Township 17 North in Ranges 13 and 14 West, and part of

Township 18 North in Range 14 West. The valley of the Little Vermilion River runs through the center of Sidell Township, which is bordered and defined by ridges of high land across the length of the northern and southern township lines. The wide valley that encloses some of the richest farming land in Illinois is watered and drained by tributaries of the Little Vermilion, including Goodall Branch, Archie Creek, Freudwell Branch, and Baum Branch (DeLorme 2010: 65; Internet Archive 2021a: 436). Sidell Township was separated from Carroll Township and organized in 1867. It realized its current boundaries in 1890 when eight sections and three half sections were separated from northeastern Sidell Township to form part of Jamaica Township (Internet Archive 2021: 436). W. A. Moore served as the first Township Supervisor, and was twice reelected. H. Gibson was the first Clerk, W. P. Witherspoon served as the first Assessor, and William Gray was the first Justice of the Peace (Ancestry.com 2021: 1030; Internet Archive 2021a: 436). Sidell Township was named for John Sidell, who owned thousands of acres in the township and founded the Village of Sidell (Illinois Historical Survey 2021:64).

Few permanent settlements were made in Sidell Township prior to about 1850, and the heavy and often wet prairie soil was not widely cultivated until 1855 or 1860. A few men settled in Sidell Township prior to the vast Sullivant purchases in 1853. They included a man named Boose, who settled at Jackson Grove in 1828; Robert Cruisan, who settled at Sidell Grove in 1829-30; and Thomas Brewer, who entered land in Jackson Grove in 1830. Brewer eventually sold his land to Josephus Collett, a land speculator from Indiana. In 1844 Collett entered tracts that encompassed small groves along the Little Vermillion, including Sidell Grove, Jackson Grove, Garrett Grove, Rowan Grove, and Twin Grove. The Jackson brothers – Adam, William, Thomas and James, were employed by Collett to manage his livestock. The Jacksons began to farm the land and in 1854 established permanent family farms that are still owned by their descendants. Frank Foos is believed to have made the first permanent improvements in the township, erecting a cabin and cultivating the soil, in 1851, before selling out to Edward Rowan. Others who settled in the 1850s included John Stark and Archibald McDowell in 1855; and William Gray, W. H. Sconce, Robert Stunkard, Barton Cole, William Moore, John Symmes, and Ward H. Lamon by 1858 (Ancestry.com 2021: 1024-1029; Village Board of Sidell 1984: 2-3, 5-6).

In 1853 Michael Sullivant purchased 47,000 contiguous, prairie-covered, acres of mostly government land in Champaign County and in what is now Sidell Township, Vermilion County. Much of the land in Sidell Township had been originally purchased from the government by Robert H. Ives and Quit Claimed to Sullivant at government prices. Sullivant also purchased or entered over 50,000 acres in Ford and Livingston counties, all farmed by hired help, and none of the acreage leased out. The almost 3,800 acres of Sullivant land in Sidell Township were managed by Michael's son, Josephus Sullivant, and were largely devoted to cattle grazing and feeding. Increasing demand for cattle, and limited grazing ranges and supply in Illinois, prompted Sullivant and other cattlemen to procure cheaper Texas cattle, and inadvertently brought with them "Texan Fever", which decimated the imported herds and was even more lethal to the native breeds. Sullivant never recovered from this setback and eventually sold his Sidell Township holdings to Edward Clark (Ancestry.com 2021: 1024-1026; Village Board of Sidell 1984: 2-3). In 1880 Samuel W. Allerton purchased this land from J. H. Clark and developed it into the renowned "Allerton Ranch". Samuel Allerton was a founder of the National Bank of Chicago and co-founder of the Chicago Union Stockyards, and made his fortune in the agricultural and livestock markets. Continuing to live in Chicago, Allerton handed over management of Allerton Ranch to his partner, W. G. Herron. Together they induced the Chicago and Eastern Illinois Railroad to build their line through the Little Vermilion valley and donated land for the right-of-way. In 1881 they built a grain elevator and laid out the town of Allerton, which became an important shipping point for grain, cattle and horses (Internet Archive 2021a: 282-283; Illinois Historical Survey 2021: 59).

John Sidell arrived in Vermilion County in 1860 and settled in the valley of the Little Vermilion in what was then Carroll Township. Sidell was born in Washington County, Maryland, on 27 June 1816. With his first wife, Elizabeth Cline, he had two children: George A. and Allie E. Elizabeth died in 1854 and in 1857 John married Ada B. Ransom, a native of Canada, with whom he had three children: Jennie H., Joseph J., and Lula

B. (Ancestry.com 2021, P.1029): In 1861 Sidell bought out Alexander Rowan's 1,300 acres in Collett Grove, and proceeded to buy up smaller farms until he had accumulated an additional 6,000 acres (Internet Archive 2021a: 435-436). In 1873 Sidell decided to open several thousand acres to homesteaders. He chartered a train from Columbus, Ohio to transport prospective buyers to a land auction held on 21 August 1873. John Louke and D. B. Stockton presided as auctioneers and a free lunch was served to all (Illinois Historical Survey 2021: 64-65). With his remaining 3,000 acres straddling the Little Vermilion, Sidell developed what became the largest cattle business in Vermilion County. In 1877 a post-office was established in Sidell's home in Sidell Grove (Ancestry.com 2021:1032-33). Many area farmers soon found that much of the bottomlands and large areas of prairie uplands in Sidell Township were seasonally wet or chronically poorly drained, hindering widespread cultivation of the thick prairie soils. This circumstance led to the establishment by Charles F. Gray of the Gray Tile Company, whose early factory produced the clay or terra-cotta drainage tile required to address the problem. Gray constructed his tile factory on land he had purchased from John Sidell. During the 1880s the factory produced an average of 410 tiles per day, or approximately 150,000 tiles per year, and employed twenty men full-time and year-round. Between 1881 and 1890 the Gray Tile Company was the largest tile manufacturing company in the country. In 1890 the main building, the mill, and the storage houses burned to the ground and put Gray Tile Company permanently out of business (Village Board of Sidell 1984: 23). In the decade during which it operated, the Gray Tile Company helped convert thousands of swampy acres in Sidell and surrounding townships into productive crop land.

Village of Sidell.

By 1880 it appeared that rail transportation through Sidell Township was imminent. John Sidell, along with Samuel Allerton, was instrumental in bringing the Chicago & Eastern Illinois Railroad to the township and freely donated the right of way through his extensive land holdings. In 1881 the C.&E.I. laid down track from Danville that connected with the Danville Olney & Ohio River Railroad east of Sidell Grove. In the Fall of 1881, fourteen miles of track were laid west to Sidell Grove, where a C.&E.I. Railroad depot was constructed. Telegraph lines were extended along both railroads, linking the Sidell depot with the nationwide network and providing fast and easy communication with the outside world. The first passenger train ran over the line in February 1882. Sidell's first merchant, Samuel B. Rawlings, established a general store in the west room of the depot (Village Board of Sidell 1984:7,24). Although Sidell remained the end of the rail line for the next five years, John Sidell saw the promise of a thriving community at Sidell Grove. In 1884 he surveyed and laid out a town just east of the Depot, and donated land for the Sidell school and a Methodist church (Ancestry.com 2021: 1024-1029; Village Board of Sidell 1984: 2-3). The original town plat was composed of twelve blocks, or nine full blocks and three half-blocks north and south of the C. & E.I. track, in what is now the center of Sidell (Village Board of Sidell 1984: 24). The railroad was finally completed through Sidell Township in 1889, and several townships in southern Vermilion County were served by the Sidell Division of the C.&E.I. Railroad. John Sidell died in 1889 having witnessed the fruition of his many endeavors. His son, Joseph J. Sidell, continued his father's legacy in the cattle business and, with his wife Maude and their children, made his home just north of Sidell Village (Internet Archive 2021b: 252-255). The town of Archie, one mile to the south, had been laid out one year earlier than Sidell, but over time businesses, residents, and even structures migrated to the more promising location of Sidell.

Sidell was incorporated as a Village in 1886. In 1889 a Board of Trustees was established to form a Village governing body. The Board consisted of: W. T. Butler, President; C. A. Wright, C. S. Church, W. B. Cauble, E. A. North, J. W. Rawlings, and G. W. Palmer, Trustees; R. L. Powell, Clerk; and O. S. Tullis, Police Magistrate. At this meeting President Butler appointed a committee to draft the Village ordinances. A street and alley commission formed in May 1890 constructed wooden sidewalks in both the business and residential sections of town. A licensing commission was also formed to review applications for the licensing of various businesses. In November 1890 a calaboose, or jail, was constructed, and at the urging of the Sidell citizenry, a "force pump" was installed to extract water more easily from a public well located on Gray Street. In June 1890 the first Southwick Addition was approved, followed by Miller's Addition in March 1891, the Gray and Mitchell

Addition in September 1891, the J. Southwick Fairview Addition and the Second Gray & Mitchell additions in November 1891, the second Southwick Fairview Addition in February 1893, and the Rowand Addition in June 1893 (Village Board of Sidell 1984: 3).

Following the platting of the town and the establishment of the permanent Sidell Post Office in 1884, many families and a wide array of businesses moved into the community. As Linda Rosnett related in *The Sidell Reporter* 125th Birthday Special Edition: By 1888, there were blacksmiths, barbers, dry goods and grocery stores, restaurants, hotels, doctors, a tile factory, a bank, and even a grand opera house. With dozens of businesses and up to twenty trains on two railroad lines passing through each day, the only thing lacking in Sidell was a good local newspaper. The early merchants knew that a newspaper would help the fledgling town, so a group of civic-minded men determined to find and recruit an experienced newspaper man willing to locate in Sidell. This group included C. W. Forbes, implement dealer; J. W. Orr, owner of the Star Mill; John L. Jackson, dry goods and grocery merchant; H. R. Rogers, grocer; John G. Clark, Postmaster; and the Honorable John Sidell. The man they found was 30-year-old James E. Whipple, who had previously published the *Cayuga Journal* in Indiana. Renting space in the depot building on Chicago Street he set up his printing plant and, on May 26, 1888, published Volume 1, Number 1 of the *Sidell Weekly Journal* (*The Sidell Reporter* 2021; Village Board of Sidell 1984: 8-9). After a few months Whipple sold the press to Charles A. Wright, a local farmer and village property owner who took an active role in public affairs. Chapman's 1889 *Portrait and Biographical Album of Vermilion County, Illinois* stated: "If Sidell ever becomes a large town, its growth may be attributed in a large measure to the enterprise and public spirit of Mr. Wright", and declared the *Sidell Journal* "One of the chief instruments in the growth of the town" (Internet Archive 2021b: 731). In 1889 Wright leased his building and the printing offices to schoolteacher Thomas Morgan, but by 1890 Charles Wright was back at the helm and the name of the paper was changed to the *Sidell Reporter*. Wright remained owner until his sudden and untimely death in 1895. His widow, Carrie Barnett Wright, continued publishing for a time, but between 1895 and 1900 the weekly *Sidell Reporter* changed hands several times and its future often looked uncertain. In 1900 T. B. Williams, a schoolteacher, purchased the paper and changed the name to the *Sidell Journal*. Williams published the *Sidell Journal* for 32 years, from December 8, 1900, to September 1, 1932, then sold the paper to Charles C. Lane, who put new emphasis on hometown news from Sidell and the surrounding communities of Indianola, Allerton, Fairmount and Jamaica, Illinois. Charles and Thelma Lane published the *Sidell Journal* for over fifty years until his death in October 1982. In January 1983 Thelma Lane sold the paper to John and Robert Armes, who published from February 1983 to November 1984. Linda Rosnett then published the *Sidell Journal* from December 1984 to 1990. After a brief hiatus, when the paper was operated by an individual who absconded with subscription money in the dark of night, Linda Rosnett's assistant, Rinda Maddux, stepped in to keep the paper going and has continued to publish the *Sidell Reporter* for the last thirty years (Illinois Historical Survey 2021: 62; Rinda Maddux, personal communication August 29-30, 2021; Village Board of Sidell 1984: 8-9).

The Sidell Grain Elevator has played an important and long-standing role in Sidell's economy. The first grain buyer in Sidell was John G. Clark, one of the first inhabitants of Sidell, who was also the first merchant in town and the first Sidell Postmaster, and died in 1889. In 1890, a year after John Clark died, Sidell was described as having a grain office and a few corn cribs. In 1891, John M. Cathcart, who owned a lumber and grain business in Broadlands, started a similar business in Sidell. An 1893 Danville city directory lists the J. M. Cathcart elevator as among Sidell businesses. In 1896 Cathcart, his son William, and his son-in-law John M. Herron, established the Sidell Grain and Elevator Company. In 1902 it was incorporated with William Cathcart as president. The firm owned and operated seven other elevators plus a transfer elevator at Mount Vernon, Illinois. In the early 1900s, there were two elevators in town, Farmers Elevator on Chicago Street and the Paul S. Kuhn Elevator on Gray Street, both along the railroad tracks. Farmers Elevator also owned the elevators at Hastings, west of Sidell, and at Maizetown, northeast of Sidell. In 1925 the Maddux brothers, Chester, Samuel, and Rufus, bought Farmers Elevator and named it the Sidell Grain and Feed Company. In January 1926, the elevator was destroyed by fire and the Maddux Brothers purchased the Paul S. Kuhn Elevator on Gray Street. In 1927 Fred F. Current took over as manager and became a full partner in 1933, when the name was changed

to Sidell Grain Company. On December 3, 1937, the grain elevator burned to the ground and was rebuilt in the same location on Chicago Street. For several years in the 1940s the Sidell elevators were leased to Federal-North Iowa Grain Company but, in 1946 were turned back to Sidell Grain Company under the management of William Current. In 1936 the Maddux brothers and Fred Current sold the Sidell Grain Company to a group of local men under the name of Sidell Elevator Company who immediately leased it to Federal-North Iowa Grain Company. In 1967 fire again destroyed the elevator, which was re-built on the same spot. The next year Federal-North Iowa went bankrupt, and the elevator was leased to B. C. Christopher & Company, a Kansas-based grain and securities company that in the 1980s operated thirty country grain elevators across several Midwest states. B. C. Christopher continued to operate the Sidell Grain Company and Elevator until at least 1984 (Village Board of Sidell 1984: 10). The Sidell grain silos and elevator have been owned and operated by Sidell Agri Services, Inc. since 1994 (Manta Media Inc.2021).

Water System Context

Public water-supply systems, employing reservoirs, aqueducts, and gravity, had been developed and utilized by such early and far-flung civilizations as pre-Christian Rome and the Aztecs of Meso-America. Early public water-supply works were naturally limited by topographical conditions and were dependent upon the principles and effects of gravity. The introduction of artificial or mechanical pumping methods allowed for the development of three general schemes designed to solve the problem of water distribution: the “Gravity”, the “Reservoir”, and the “Direct” Methods. The Reservoir system, under many designs, involves the mechanical elevation of water from a lower to a higher level, and its storage in basins or reservoirs of sufficient size and elevation to meet all requirements. The Reservoir system ranges in scope from designs for small tanks elevated upon supporting columns to immense reservoirs for the water supply of great cities. In the general scheme of a water-supply system, the elevated reservoir serves a dual purpose – providing for a surplus supply to be utilized as required, as well as permitting a temporary suspension of the mechanical operations of the plant. In large cities, reservoirs are developed in topographically elevated regions. In the rural Midwest, small-town reservoirs, or water tanks, are first built on elevated land if available, and secondly, raised upon a structure of sufficient height to create adequate pressure required to satisfy community needs (Hathi Trust Digital Library 2021; Minnesota Historical Society 2021; South Dakota Historic Preservation Office 2021).

Municipal water systems were uncommon in nineteenth century United States outside of densely populated urban centers. New York City had created localized reservoir and pumping systems by the 1770s, Philadelphia pumped water from the Schuylkill River into elevated wood storage tanks by 1799, and Chicago began pumping Lake Michigan water into elevated wooden tanks by 1842. The oldest complete water system in the United States is believed to have been installed in Bethlehem, Pennsylvania between 1754 and 1761 (Hathi Trust Digital Library 2021). For much of the nineteenth century, rural and small-town American communities obtained most of their water from private wells and other local water sources such as lakes and rivers. By the 1880s, concerns over the supply and quality of water for drinking, washing, and fire-fighting, led to the development of municipal water storage systems across the country. Many communities were prompted to install municipal water systems after rampant and destructive fires. Fire insurance companies would not insure businesses in communities without sufficient fire protection (United States Department of the Interior – National Park Service {USDI–NPS} 2021). Early elevated water storage tanks were usually constructed of iron-girded wood with flat bottoms and conical tops. When filled with water, the wooden tanks, or reservoirs, would initially leak. As the wood became saturated, it would swell and effectively seal in the water. Such storage tanks were, and are still, common on rooftops in dense urban settings. Water towers were often constructed of wood, stone, or masonry brick. Several notable examples of early composite elevated water storage tanks are found in Central Illinois. The water tower in Havana, Illinois, constructed in 1889, was designed to create adequate water pressure through gravity flow. It was

constructed with a limestone foundation, brick and steel walls, and a metal roof. The 50,000-gallon storage tank was made of steel. The 1887 Paxton Water Tower in Ford County, the 1891 Benson Water Tower in Woodford County, and the 1896 Ransom Water Tower in LaSalle County all used masonry brick for the towers and wood for the storage tanks (Minnesota Historical Society 2021; South Dakota Historic Preservation Office 2021; USDI-NPS 2021).

As municipal water systems utilizing elevated storage tanks proliferated and demands became greater, engineers and builders rapidly transitioned to more cost-effective metallic reservoirs and towers constructed with riveted plates and members of iron or steel. Iron was universally employed until about 1890 but with improved manufacturing processes, iron was supplanted by flexible structural steel as the most suitable material for metallic reservoirs and towers. By 1897, there were more than 3,000 complete municipal water-supply plants in the United States. About one-third of these were equipped with some form of elevated metallic storage tanks, or reservoirs, more than half of which were constructed after 1890. One of the first and best examples of a modern, elevated, riveted-steel tower and tank, supported by 100-foot Z-bar columns, stiffened with I-beam ties and diagonal tie-rods, was constructed in 1898 in Jacksonville, Florida (Hathi Trust Digital Library 2021). The basic riveted-steel construction design developed for water towers and storage tanks in the 1890s, and exemplified by the 1898 Jacksonville water tower, changed little over the course of the next fifty years. The most typical water tower erected in towns across the American Midwest in the first half of the twentieth century had a 50,000-gallon capacity storage tank atop a 100-foot-high tower, or trestle, and was of riveted-steel construction (Minnesota Historical Society 2021; South Dakota Historic Preservation Office 2021).

Since water towers are basically elevated water-containment tanks, boilermakers traditionally constructed the storage tanks, ironworkers constructed structural components such as beams, struts, and girders, and pipe fitters assembled components that conveyed fluids in motion. By the middle of the twentieth century, and throughout the boom years of water tower construction from 1946 to 1980, two large companies dominated the industry. Between them, the Chicago Bridge and Iron Company (now CBI, Inc.) and the Pittsburg-Des Moines Steel Company (now PDM, Inc.) erected between eight and eleven thousand water towers in the Midwest and Plains regions of the United States. Both large companies worked on all types of storage tanks and vessels, and water towers were a small part of their businesses (Minnesota Historical Society 2021; South Dakota Historic Preservation Office 2021).

Riveted-steel construction remained the standard for water towers until the 1950s, so much so that a tower built in Minnesota in the 1950s might be nearly identical to a tower built in the 1890s in Iowa. Industry leaders, however, were sensitive to criticisms that too many water towers looked monotonously utilitarian. In 1931, Chicago Bridge & Iron Works sponsored a competition to develop designs that would illustrate viable improvements in the appearance of elevated steel tanks and their supporting structures (Chicago Bridge & Iron Works 1931). While many of the submissions represented aesthetic innovations, the most significant change came about in the 1950s with the introduction and widespread use of welding. Weld technology required many changes in construction techniques and expertise, but also made possible expanded forms and designs. The Torospheric Design became popular in the 1950s in populated areas requiring a high-capacity water-storage system, and featured multi-columned towers supporting high-capacity tanks, as well as access ladders, catwalks, and handrails. The 1960s saw the introduction of Pedespheres, or Single-Pedestal design to replace the traditional lattice support of riveted steel. This the most common type of water tower used today to replace aging riveted-steel tanks and towers. The Hydra-Pillar, introduced in 1962, features a large-diameter, single-enclosed shaft that has become popular for municipal water works because it is considered to be low-maintenance (Minnesota Historical Society 2021; South Dakota Historic Preservation Office 2021).

Village of Sidell Water Works

From the founding of the Village in the 1880s until the construction of a waterworks in 1928, the residents of Sidell obtained potable water from a public well on Gray Street and from an unknown number of private wells. In November 1890, at the urging of the Sidell citizenry, the Gray Street well was equipped with a “force pump” to make it easier and faster to extract water. In September 1893 the Village Board accepted a petition submitted by the “Well Committee” to dig a second, 8-foot diameter, public well in front of the post office, then housed in the Odd Fellows Temple. For businesses such as Taylor’s Livery Stable on Market Street, adequate and dependable clean water was essential, but the primary reason for a second public well was fire protection. Despite ordinances designed to minimize fire hazards by limiting burning in the Village, efforts to subdue several destructive fires demonstrated the need for emergency water supplies. For many years the all-volunteer Sidell Fire Department formed part of a mutual aid association made up of surrounding fire departments in Allerton, Indianola, and Jamaica, Illinois. The Village did not organize a regular, full-time Fire Department until the 1950s (Village Board of Sidell 1984: 19).

According to *Sidell, Illinois Centennial 1884-1984*, page 4, On February 6, 1926, an ordinance was passed authorizing the construction and purchase of a water works system for the Village of Sidell, the cost not to exceed \$30,000 (Village Board of Sidell 1984: 4). In the same book, on page 19, it is stated that two years later, on April 17, 1928, Ordinance No. 201 was placed on the village books. This ordinance authorized the village of Sidell to erect a system of water works and that “all necessary property, real estate, building, wells, pumps, engines, motors, elevated steel tank, reservoir, fire hydrants, valves, water mains and all necessary machines, appurtenances, and appendages thereto shall be acquired, erected, constructed and maintained in the Village of Sidell to be known as the “Sidell Water Works”. Budgetary considerations may have been a reason for the two-year delay, as the estimated cost of constructing the water system had been reduced from \$30,000 in 1926 to \$23,000 in 1928. Two months later, on 6 June 1928, The President of the Board of Trustees of the Village of Sidell, P. A. Powers, President of the Board, and the Village Clerk, Ralph O. Tatman, drew up a formal solicitation for sealed contractor bids for the construction of a complete water works system in the Village of Sidell. An article announcing the request appeared in the *Sidell Journal* dated Friday June 15, 1928, and is included here verbatim:

Notice to Contractors Waterworks System Village of Sidell, Illinois

Sealed bids will be received by the President and Board of trustees of the Village of Sidell, Illinois, for the construction of a complete water works system in the said Village, until the hour of two (2:00) o'clock P.M, of the twenty fifth (25th) day of June, 1928, in the Village Hall in said Village at which time and place said Bids will be publicly opened and read”.

The labor, material, and equipment to be furnished, constructed and erected compete in place ready for use has been divided into five (5) sections, and bidders may bid on any or all sections. The system is estimated to have the following quantities.

SECTION I – WELL

The existing dug well, five feet in diameter, and approximately thirty-seven (37) feet deep is to be cleaned out, repaired, and placed in satisfactory sanitary condition.

SECTION II – PUMPING STATION

Frame and concrete pumping station seven by twelve feet (7x12 ft.) in plane, to be located over the dug well after the said well has been put into service. Also the construction of foundations for the elevated tank, pump, and motor.

SECTION III – PUMPING EQUIPMENT

One (1) centrifugal pump direct connected to an electric motor, and having an extended shaft and extra bearing for pulley and belt or clutch connection to an auxiliary motor. One (1) four-cylinder automotive type gasoline engine to be used as an auxiliary drive.

SECTION IV – ELEVATED TANK

Furnishing and erecting a sixty thousand (60,000) gallon elevated steel tank, on a steel tower one hundred ten (110 ft.) feet to the balcony, and with all appurtenances ready for connecting to the distributing system.

SECTION V – DISTRIBUTION SYSTEM

Furnishing and installing complete in place a distributing system as follows:

5960 linear feet of 6-inch cast iron main.

5000 linear feet of 8-inch cast iron main.

20 fire hydrants

10 6-inch valves.

5 4-inch valves.

15 cast iron valve boxes, and All necessary tees, reducers, crosses, plugs, and other appurtenances.

Said improvement is to be constructed and made in accordance with the plans and specifications now on file in the office of the Village Clerk and in the office of the Caldwell Engineering Company at Jacksonville, Illinois.

Proposals must be made on blanks furnished by the Caldwell Engineering Company or the Village Clerk, and in compliance with instructions attached thereto, which may be had upon application to the said clerk or engineering company. Proposals must be accompanied by cash or certified check made payable to the order of the Village Clerk of the Village of Sidell, and be in amount equivalent to at least ten per cent (10 pc) of the aggregate of the proposal submitted.

Payment for the work will be in cash.

No bids will be received unless the party offering the same shall furnish satisfactory evidence to the said Village that he has the necessary facilities, ability, and pecuniary resources to fulfill the conditions of the Contract, and execute the work, should the contract be awarded to him.

The contractor, or contractors shall be required to furnish bond in the full amount of the contract.

Bidders will examine the plans, specifications, and also the locality in which the work is to be done, and judge for themselves all the surrounding conditions and circumstances affecting the costs and the nature of the work.

The President and Board of Trustees reserve the right to reject any or all bids, waive any technical defects, and contract to the best advantages and interests of the Village.

Dated at Sidell, Illinois, this sixth (6th) day of June, 1928.

P. A. POWERS, President of Board of Trustees

RALPH O. TATMAN, Village Clerk

Records documenting the awarding of contracts, the finalized plans and specifications, and the construction and completion of the Sidell Waterworks in 1928, have not been found. There is a gap in the archived *Sidell Journal* issues for much of the next year, and Village records stored in the Sidell Village Hall were destroyed in a fire in circa 2015. Research into the Caldwell Engineering Company of Jacksonville, Illinois, named in the Notice to Contractors as possessing the proposed plans and specifications, documented that Caldwell was acquired by Hutchison Engineering Company of Jacksonville, Illinois in 2019, and subsequently was dissolved as a corporate entity. Hutchison Engineering graciously provided a copy of Caldwell Engineering Company's undated plans (See Supplement), drawn on a scale of 3/8" = 1 foot, for File No. K-74, the Sidell, Illinois Water Supply System (Hutchison Engineering Company, personal communication 27 August 2021). Although significant changes were made, the installation of the system appears to have largely adhered to the original plans and specifications agreed upon by the Village Board of Sidell. And there is evidence that the system was in place and operating by late 1928 or early 1929. On July 20, 1928, the *Sidell Journal* reported that "Part of the water mains for the Sidell water system are now here. Work will commence in the near future" (*Sidell Journal* 20 July 1928). In October 1928 the Sanborn Map Company produced a Fire Insurance map of Sidell, Illinois depicting and describing the completed Water Facilities including the "gravity tank", shown in its current location northeast of the intersection of Chicago and Main streets (Figure 2). The description reads:

Water Facilities:

Municipal ownership. Direct and gravity pressure system. - 1-electric driven centrifugal pump, cap'c'y 35 G.P.M. - 1-gravity tank on 110 ft. steel trestle, cap'c'y: 60,000 gals, about 80 ft. above business section. 1-500 gal fire cistern near fire dep't. About 2 1/10 Miles of 4" & 6" mains, 20 double hyd's. - Average daily consumption about 6,000 gal's. Domestic & fire pressure 40 Lbs. per Sq. inch at Main and Gray streets (Sanborn Map Company 1928).

In March 1929 the office of Water Works Superintendent was created. It was the job of the licensed Superintendent to flush hydrants at least once every two months, to read meters, make all repairs and installations, and to be present to assist all jobs in the water department. A Village ordinance established water rates, payable quarterly for water consumed, and imposed a minimum quarterly charge of \$3.00 on all Village residences with access to the system. In 1958 Superintendent V. Talbott was required by law to add chemicals

to the village's water for purification purposes. In later years the superintendent became responsible for collecting the water bills (Village Board of Sidell 1984: 19).

Description of the Sidell Water Works System

In 2013 the Illinois Environmental Protection Agency (IEPA) undertook an evaluation of the Sidell Water Works system and their findings are presented here. They described the Sidell Water Works System as consisting of four major components: supply, treatment, storage, and distribution and that prior to 1993 there was no treatment component. In the Village of Sidell Water Works System, water obtained from three drift wells is treated with potassium permanganate, then fluoridated, filtered, and chlorinated. The treated water is then pumped into the 60,000-gallon elevated tank, from which it flows out through the distribution system (IEPA 2013:1).

Supply: The water works system has, over the years, drawn water from seven different wells. Well #1 may have been one of the two early public wells that pre-date the system, or it may have been the first well drilled specifically to supply the system. Its location is currently not known, and it was capped and sealed in 1997. Well #2, located inside the well house in the alley just northeast of the water tower, was capped and sealed in 1999. The #2 well house contains controls that communicate with the treatment plant and from there to the wells. Well #3 is located inside the well house southeast of town and continues to be operated at all times. Well #4, located southeast of town, was capped and sealed in 2010, and Well #5 was capped and sealed in 1997. Well #6, opened in 1997, and Well #7, opened in 2011, are manually alternated on a monthly basis to supplement Well #3. The combined actual capacity of Well #3 and Well #6 or Well #7 is 75 gallons per minute (gpm). A pressure sensor at the base of the elevated tank automatically controls the well operation. In addition, all wells can be controlled at the treatment plant, on the southeast edge of town on Orr Street (IEPA 2013:3).

Treatment: The waste-water treatment plant, located on the southeast edge of Sidell on the west side of Orr Street, was installed in 1993 under Permit #0080-FY1992. The one-story wooden frame building, encased in metal siding, houses a vertical welded steel tank filter constructed by the Kisco Company. Dimensions of the structure are 20 feet by 12 feet by 9 feet high. A concrete block sand filter located adjacent to the plant measures 12'6" square with two feet of freeboard. A chain link fence surrounds the water treatment plant building and the sand filter. The plant receives raw groundwater, subjects it to potassium permanganate treatment, filtration, fluoridation, and disinfection, and pumps the finished water to the 60,000-gallon elevated storage tank. Waste flow generated by the plant discharges to underdrains in the sand filter to the Village's storm sewer system and eventually to the Little Vermillion River (Fehr-Graham & Associates LLC 2019, section 3.5.6; IEPA 2013: 2, 9, 10).

Storage: A four-post, riveted steel, elevated tank with a storage capacity of 60,000 gallons of water. The elevated storage tank, constructed in 1928.

Distribution: The distribution system was installed in 1928 and still consists of approximately five miles of four and six-inch cast iron water mains. The original distribution system remains operational, and all valves and hydrants are in working condition. The 36 valves are operated yearly, and all 28 hydrants and the distribution system are flushed yearly (IEPA 2013:2). Repairs of major leaks were completed in June 2003. As a result of the repairs the average daily per capita consumption dropped from 133 gallons to seven gallons. While the water mains are now in good condition, due to the age of the system some upgrades have been recommended, including six new fire hydrants (Fehr-Graham & Associates LLC 2019: 3.7).

The Proposed Sidell Water Tower

In 1928 the Village Board of Sidell, and Caldwell Engineering Company, developed plans and specifications for the projected Sidell Waterworks System. In Section IV of the Notice to Contractors published in the *Sidell Journal* on June 15, 1928, the plans called for an elevated storage tank described as "a sixty thousand (60,000) gallon elevated steel tank, on a steel tower one hundred ten (110 ft.) feet to the balcony, and

with all appurtenances ready for connecting to the distributing system”. Caldwell Engineering Company of Jacksonville, Illinois appears to have been acting as a general contractor, and also provided detailed architectural drawings of the projected Water Supply System that included a well, a pump station, and a tank. The plans show a detailed, but not complete, architectural drawing of the projected Elevated Tank, a plan drawing and two profile drawings of the four identical post foundations, and a plan drawing and two profile drawings of the riser pipe foundation (Figure 3). As noted below, a comparison of the model drawings with the existing water tower finds that, while the type of elevated tank construction and many structural details were carried through in the construction of the existing water tower, significant as built changes were made. Noting these changes, it is not known whether Caldwell Engineering or some other engineering or construction firm built the Sidell water tower, or what final, or actualized, plans and specifications were used in its construction.

The Sidell Elevated Water Storage Tank Description

The following description of the Sidell Elevated Water Storage Tank is based on field photos and measurements, a 2013 Illinois Environmental Protection Agency Public Water Supply Evaluation Report (itself based on an elevated tank inventory date of 29 December 2005), and a 2019 Project Plan Report prepared for the Village of Sidell by Fehr-Graham & Associates LLC. The Sidell water tower is located in lots 9, 10, and 11 of Block 7, now the northeast corner of Main Street and Chicago Street (Boudinot 1907).

The Sidell Water Tower is a riveted steel structure with four support columns, a riser, and a water tank with a basin-shaped bottom, vertical sidewalls, and a conical roof topped with a spherical finial (Figures 4 - 16). The 60,000-gallon water tank is 30 feet tall. The water tank rests atop a 90-foot-high riser giving an overflow height of 120 feet. The water tank is capped by a stemmed, spherical finial, and the estimated height of the structure is reportedly 120 feet, although the finial adds approximately two feet to the overall height (IEPA 2013: 11; Fehr-Graham & Associates LLC 2019). The water tower rises from four concrete piers that are approximately 5' X 6' at ground level. While the depth of the base of the concrete piers is unknown, model Caldwell Engineering plans extended the piers 6 feet below the ground surface and measured 7 feet x 7 feet at the base (Caldwell Engineering Company 1928). The support columns are attached to the concrete piers by 2" diameter anchor bolts that extend through 10 ½" x 7" riveted steel boot plates bolted to 28" x 16" base plates.

The elevated tank is supported by four steel latticed columns each comprised of three approximately 36'6"-long beam segments that rise from the concrete foundations and attach to the vertical sides of the tank. Each segment consists of two 12" wide angled steel beams connected by riveted steel lattice work. The columns are connected to each other by two sets of horizontal steel struts, spaced approximately 36'6" apart, that are spliced and riveted to the columns. The horizontal struts are made from paired steel beams stabilized by V-shaped interior lattice work. Additional support is provided by diagonally installed 1¼"-square tower rods that are attached to the base, struts, and top of the columns with 15" riveted plates. The tower rods are tightened with 10" turn buckles to add strength to the frame. The base of the tank is supported by a 48" diameter steel riser encasing the inlet/outlet pipe that rests on a 7 foot-square concrete pad. The six lower steel riser panels are vertically and horizontally welded together while the upper twelve riser panels are vertically and horizontally riveted together and riveted to the bottom of the riveted tank. The lower welded panels appear to be the result of reported repairs after a freeze event in the winter of 1936. As related by Sidell resident Clifford Puzey: “Winter of 1935-36 was so cold that the stand-pipe on the water tower froze and burst at the seam. There was a foot of ice around the tower. Oral Bullerduck had a portable welder and was able to pull it together and reweld it”. That summer the Village replaced water mains along Market Street, presumably for the same reason (Rinda Maddux, *Sidell Reporter* 17 August 2021). An 18" x 14" oval shaped hatch located 30" above the concrete riser pad on the east side of the riser gives access to the inlet/outlet pipe. The tank is drained from the base of the riser through a 4'6" steel pipe

with a 3” valve connected, according to the 2005 IEPA elevated tank inventory, to a fire hydrant, which could be isolated from the distribution system. This valve is currently not connected to anything, and no fire hydrants were observed in the vicinity of the water tower. Although a “blow-off valve” was depicted near the base of the riser in the 1928 Caldwell Engineering plan drawing, Mr. Lorin Kinney, former Village of Sidell Waterworks Superintendent, informed me that the pipe currently located near the base of the riser was installed in circa 1996 (Caldwell Engineering Company 1928; IEPA 2013: 11; Lorin Kinney, personal communication 10 September 2021; Fehr Graham & Associates, LLC 2019: 3-7). A 4” diameter overflow pipe exits the west side of the tank just below the roof lid and runs down the northwest support column to within two feet of grade.

The water tank, constructed from riveted steel plates, has a basin-shaped bottom, vertical side walls, and a conical top. The ring connecting the top of the riser with the bottom of the tank has four rows of rivets. The plates composing the tank and the riveted portion of the riser are connected with single lines of rivets. A metal balcony encircles the tank at the point where the basin-shaped bottom meets the vertical tank side walls. The balcony has a 2’0” high riveted metal railing all around. Attached to the north side of the railing is a vertical metal pole with an electrical box and a small antenna dish or grate. A metal appendage of unknown purpose is attached to the tank roof and runs down the north side of the tank and outside the railing to about six feet below the balcony floor. The metal balcony floor is in four parts, each quarter span notched at both ends. Through these notches the four double-columned support legs protrude and, extending another two feet up the vertical tank sides, connect to the tank with two rows of rivets on each of the paired support columns. A metal ladder is bolted to the southeast double-columned support leg about six feet below the balcony, and extends to just above the outside of the balcony floor, where two horizontal plates rest on, and presumably are bolted to, the balcony floor. The ladder is hinged just above the balcony floor and the upper portion of the ladder can be detached from the lower portion. The 1928 Caldwell Engineering plans show a ladder that revolves around the tank. The upper ladder extends to just above the outer edge of the top of the tank, where it is hinged to a third section that extends horizontally to a manhole at the top of the tank. The manhole, which is intended to provide access to the interior of the tank, is covered by a circular raised lid bolted to the tank and topped by a stemmed, vented, spherical iron finial rising about two feet above the center point of the top of the tank. The looped distal end of the top ladder wraps around the vertical, circular stem wall of the finial allowing the two upper portions of the ladder to rotate around the tank on two ladder wheels located just above the outer rim of the tank top (Lorin Kinney, personal communication 10 September 2021). Above the balcony on the vertical tank side facing southwest, “SIDELL EST. 1884”, is painted in large black block letters. It is currently not known when the lettering was done or by whom.

The Sidell Water Tower has had, over the years, condition issues that persist to this day, as documented in reports issued by the IEPA in 2013 and Fehr-Graham & Associates LLC in 2019. In addition, both reports note that the existing tank is not easily accessible for routine maintenance, water testing or elevated tank inspection (Illinois Environmental Protection Agency 2013; Fehr-Graham & Associates LLC 2019). In September 1993 the Sidell Village Board contracted the Republic Tank and Iron Works to paint the tower and the tank. The cost was \$1,300 and included a 5-year guarantee. In 1996 large portions of paint suddenly peeled off the tank and the riser. The condition was corrected by Republic Tank and Iron Works under terms of the guarantee (*Sidell Journal*, Thursday February 15, 1996: Rinda Maddox 8/21). The tank was inspected in 2003 and was recoated both inside and outside. The tank was reinspected in 2005 and the exterior was recoated again. The lower half of the riser pipe and the exterior of the tank were recoated in 2008, but these and many other areas still show signs of progressive, corrosive rusting. The IEPA conducted an engineering evaluation of the Sidell Public Water Supply on 3 December 2013. No sanitary or operational deficiencies were noted (IEPA 2013). The 2013 IEPA Public Water Supply Evaluation Report, and the 2019 Fehr Graham & Associates, LLC Project Plan Report, determined that while the existing elevated water storage tank has continued to meet the needs of the Sidell community, the structure has

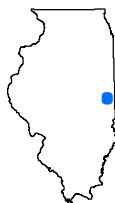
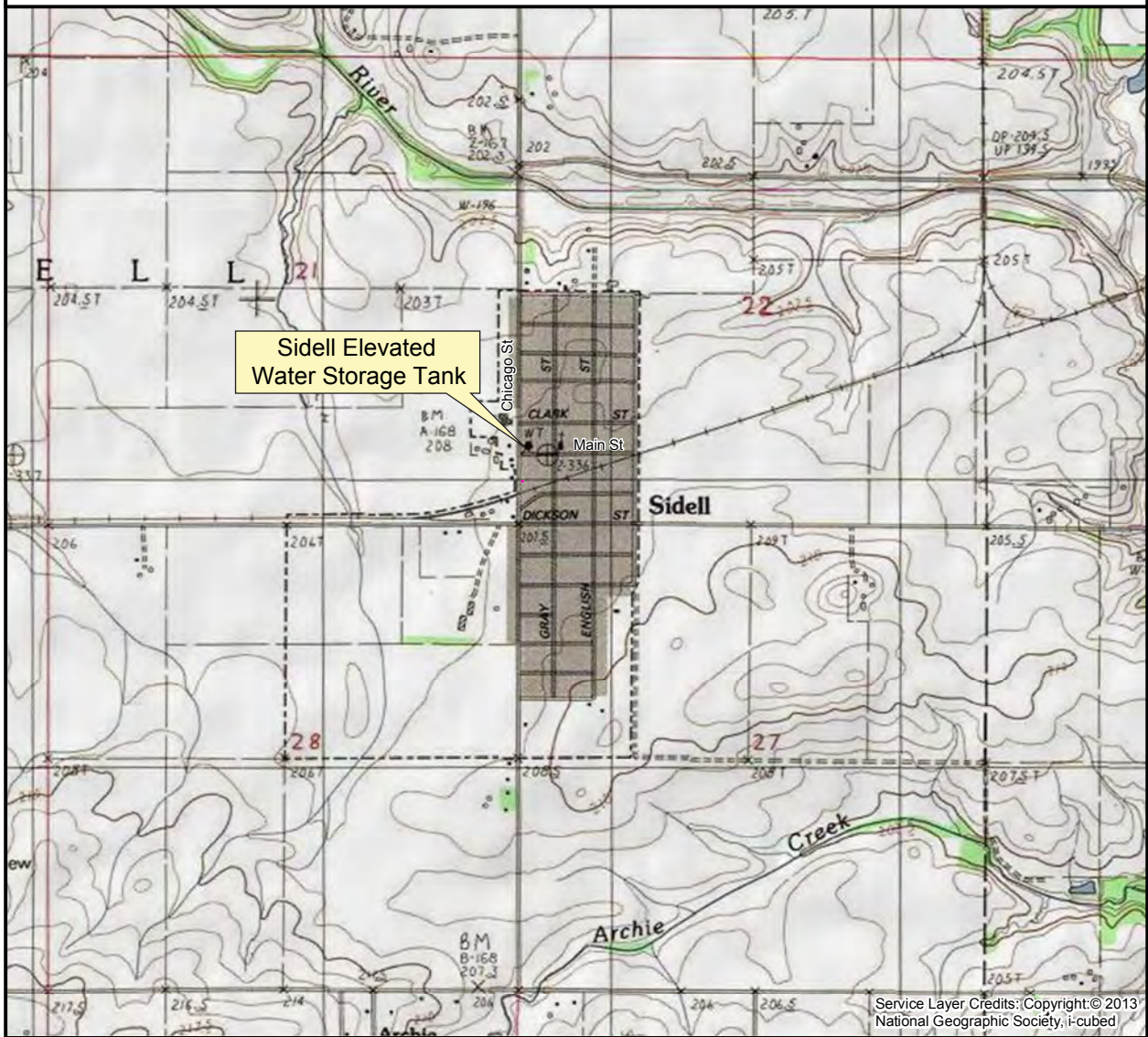
deteriorated over the years, with, among other problems, chronic and progressive rusting, and cracked and disintegrating concrete piers.

In comparing the model drawings with the existing water tower there are structural differences. The most obvious structural difference is that the drawing of the tower shows four vertical support sections per leg, and three sections of horizontal steel struts, while the existing tower has only three vertical support sections per leg and only two horizontal steel strut sections. In addition, the plans for the post foundations are remarkably similar to post foundation plans drawn by Chicago Bridge & Iron Works for a water tower built in Carrollton, Illinois, and they were not followed in Sidell as originally drawn. The Caldwell drawings depicted six-foot deep foundations tapering from 7' X 7' at the base to 3'4" X 3'4" at the surface where the tower legs, or posts, attach. The actual existing post foundations measure approximately 5' X 6' in plan. The top surface of the riser pipe foundation, drawn by Caldwell as measuring 6' X 6', actually measures 7'1" X 6'10", or approximately 7' X 7' in plan, and sits 5" above grade (ground surface).

Summary

On April 17, 1928, Ordinance No. 201 authorized the Village of Sidell to erect a system of water works and that "all necessary property, real estate, building, wells, pumps, engines, motors, elevated steel tank, reservoir, fire hydrants, valves, water mains and all necessary machines, appurtenances, and appendages thereto shall be acquired, erected, constructed and maintained in the Village of Sidell to be known as the "Sidell Water Works". While a Notice to Contractors soliciting bids in five major areas of construction was published in the *Sidell Journal*, no information has been found to indicate who was awarded the various contracts and what companies actually performed the work. Plans for the water system, including supply, storage, and distribution facilities were drawn by Caldwell Engineering Company of Jacksonville, Illinois and were provided by Caldwell's successor company, Hutchison Engineering. A comparison of those plans and the actual water tower make clear that while the overall design remained the same, significant changes were made, possibly as a result of a reduced budget. Reports by the IEPA in 2013 and Fehr Graham & Associates, LLC in 2019 noted chronic and worsening deterioration of the structure, and pointed out that design limitations have rendered the tank effectively inaccessible for routine maintenance, water testing or elevated tank inspection.

SIDELL QUADRANGLE
VERMILION COUNTY - ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)1998



Location

SIDELL ELEVATED WATER STORAGE TANK
NORTHEAST CORNER OF MAIN STREET & CHICAGO STREET
SIDELL
VERMILION COUNTY
ILLINOIS

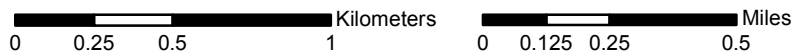


Figure 1. Location of the Sidell Elevated Water Storage Tank.

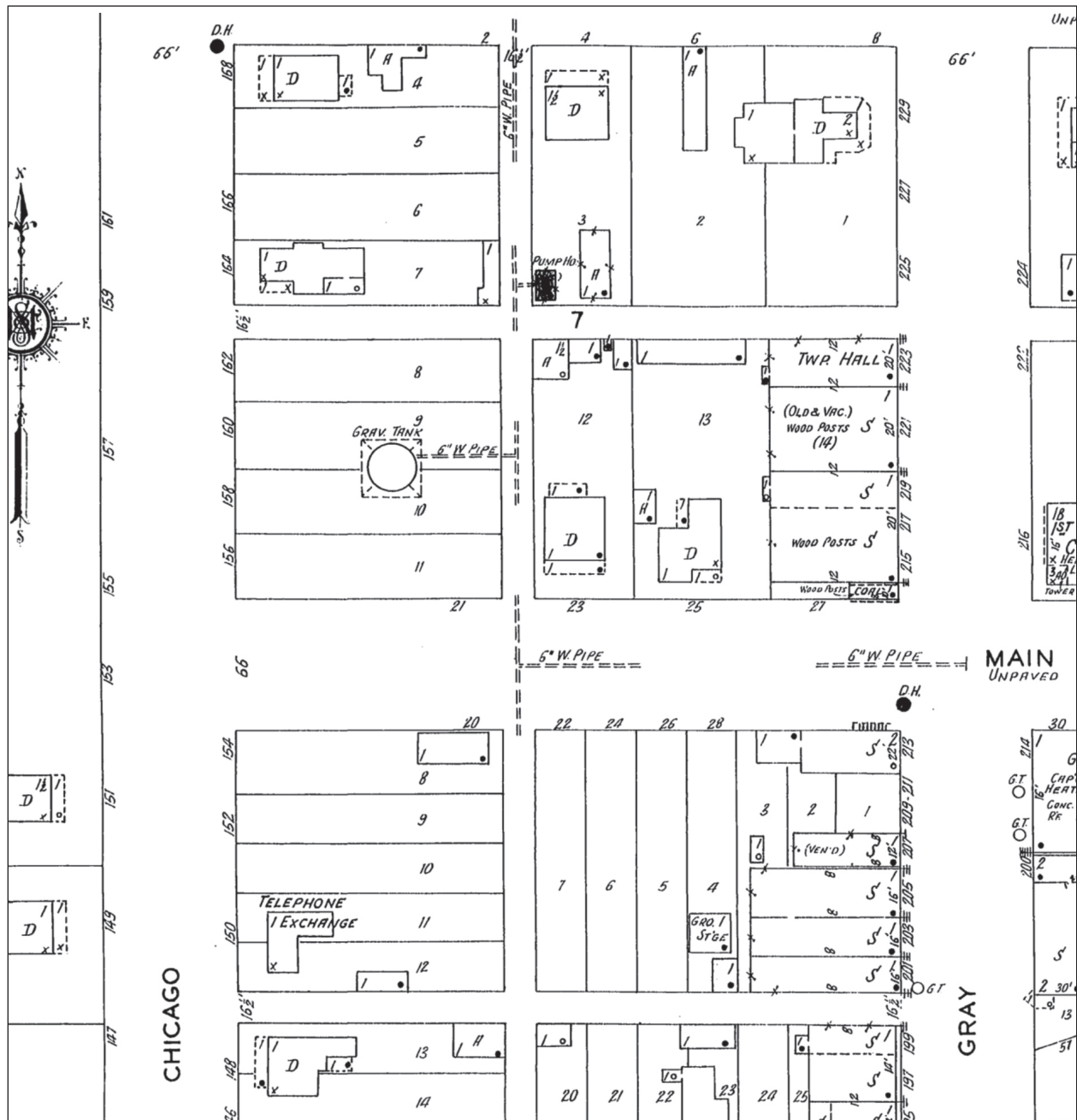


Figure 2. 1928 Sanborn Fire Insurance map.

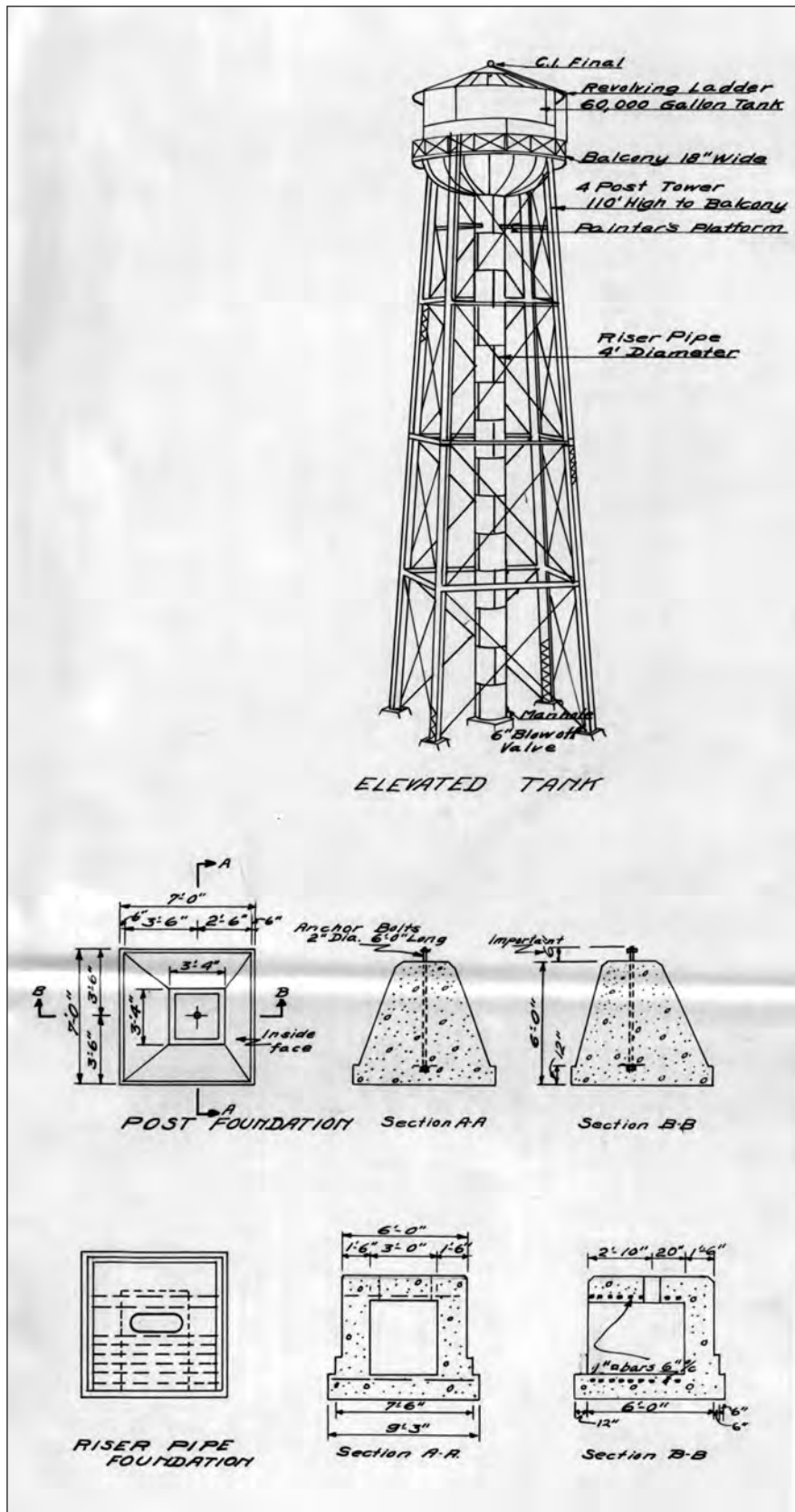


Figure 3. Detail of plans (Caldwell Engineering Company, 1928)



Figure 4. Sidell Elevated Water Storage Tank contextual view, to southeast.



Figure 5. Sidell Elevated Water Storage Tank and Well House, facing northeast.



Figure 6. Sidell Elevated Water Storage Tank, facing southwest.



Figure 7. Sidell Elevated Water Storage Tank, facing northwest.



Figure 8. Detail view of storage tank, facing northeast.



Figure 9. Detail view of storage tank, facing northwest.



Figure 10. Detail view of storage tank underside, facing northeast.



Figure 11. Detail view of support structure, facing west.



Figure 12. Detail view of interior leg and support, facing northwest.



Figure 13. Detail view of tower leg support structure, facing northeast.



Figure 14. Detail view of uptake riser base and pressure release valve, facing northeast.



Figure 15. Detail view of riser access hatch, facing west.



Figure 16. Photo of storage tank finial (courtesy of Lorin Kinney).

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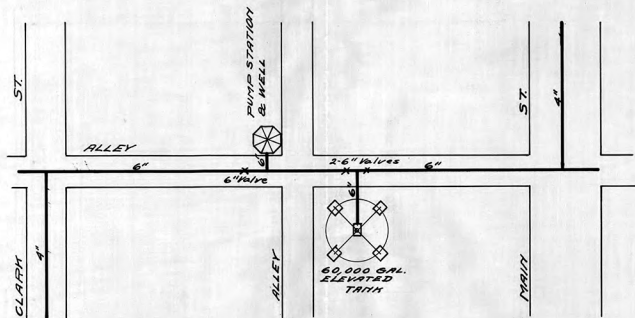
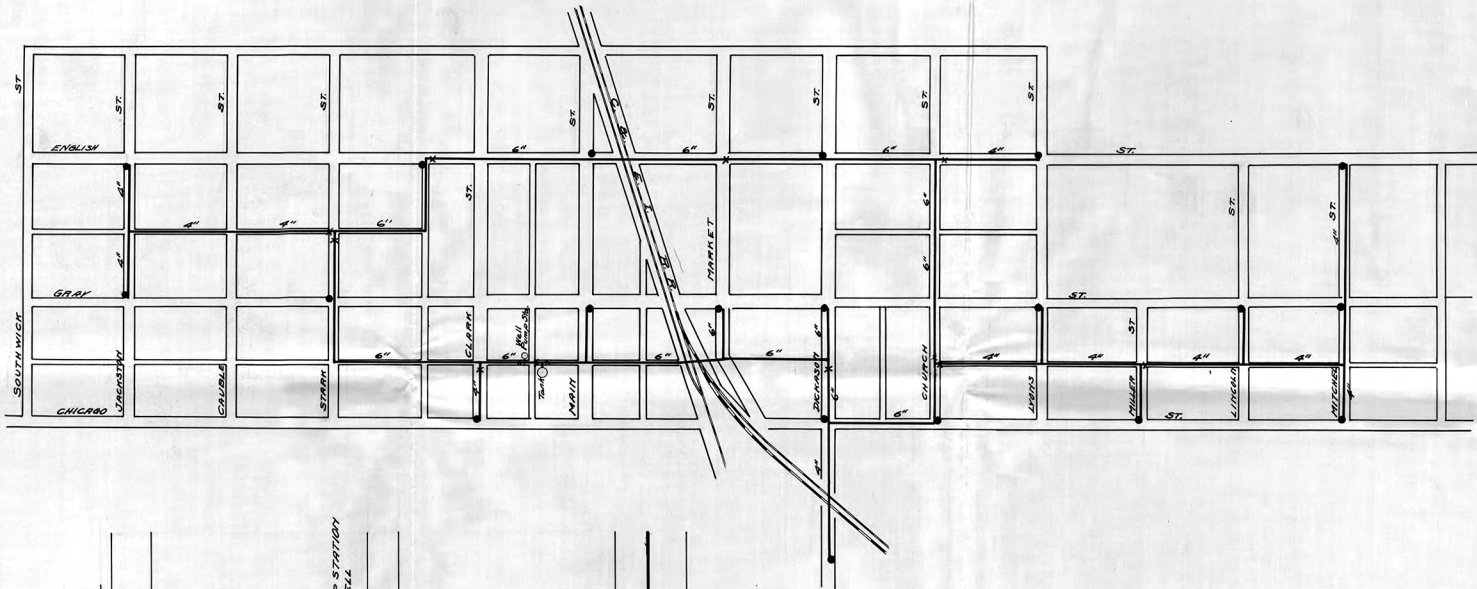
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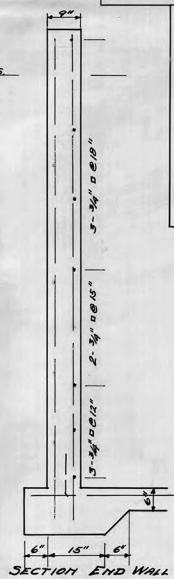
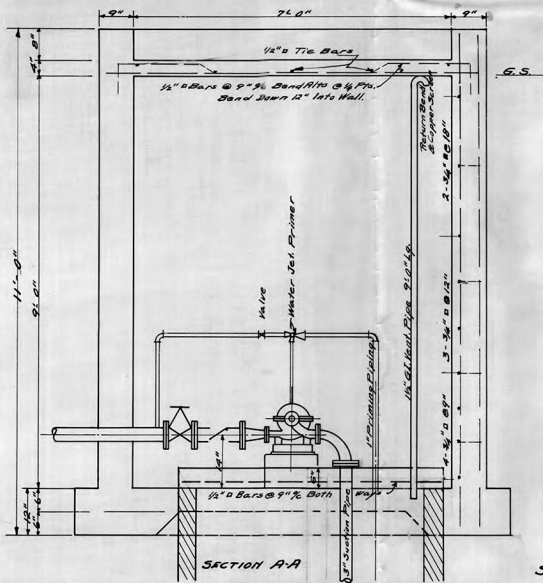
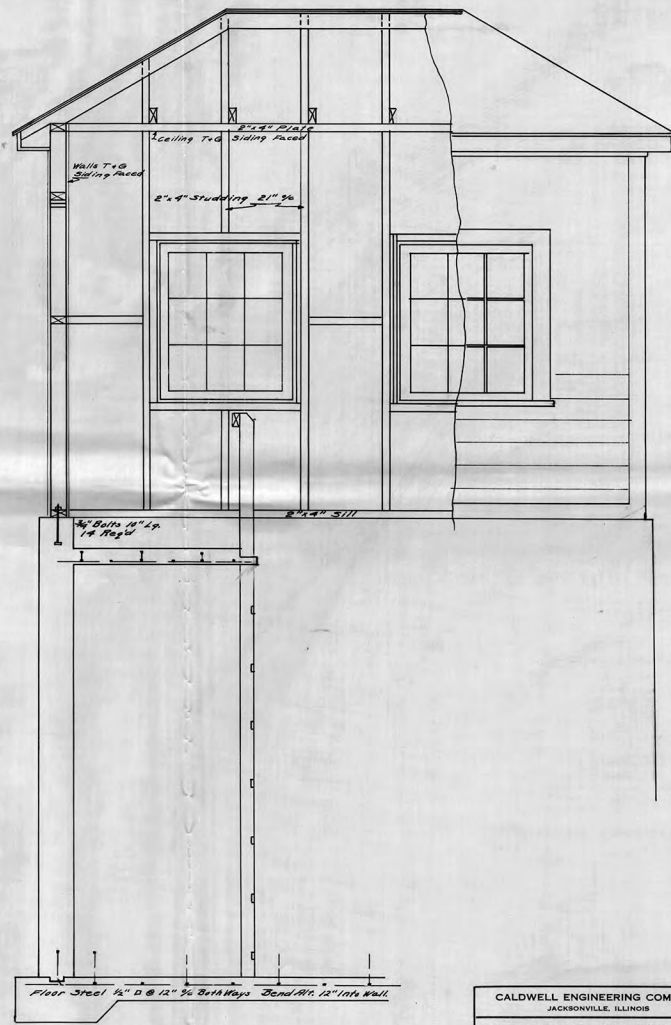
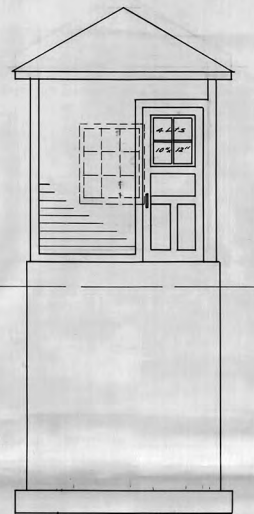
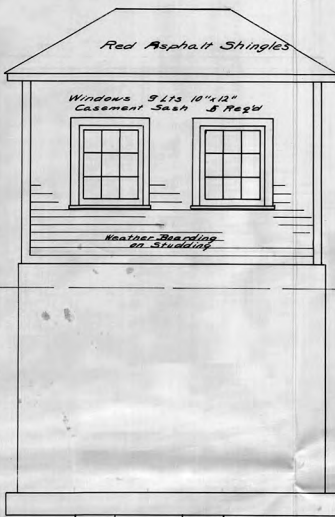
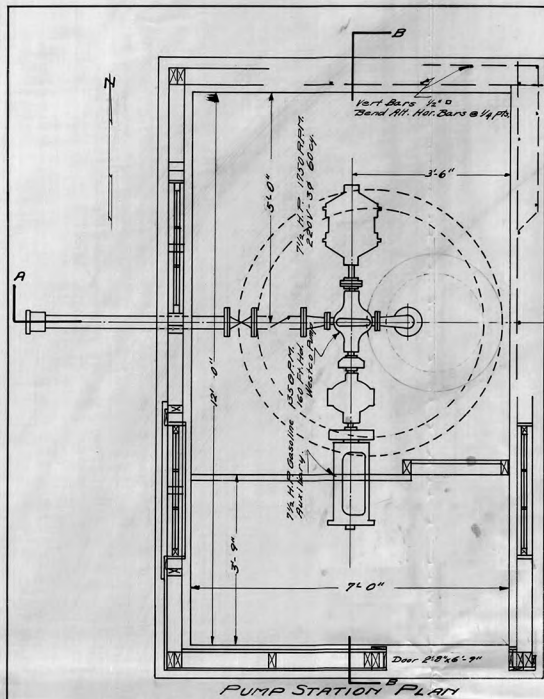
1930 History of Vermilion County, Illinois. Volume I. Historical Publishing Company, Topeka-Indianapolis.



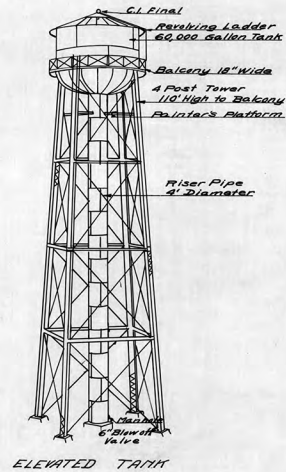
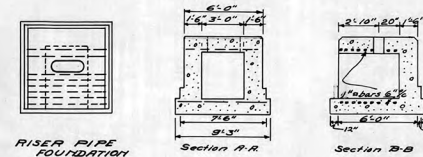
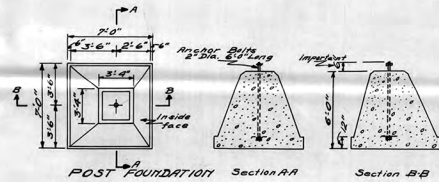
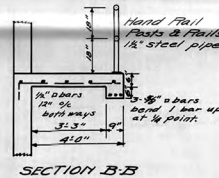
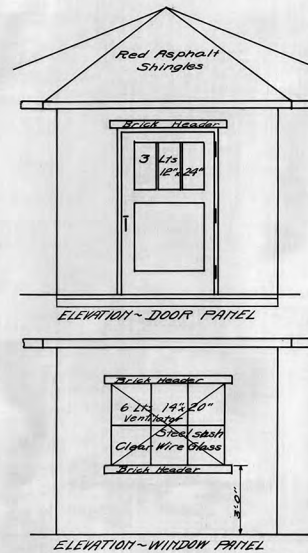
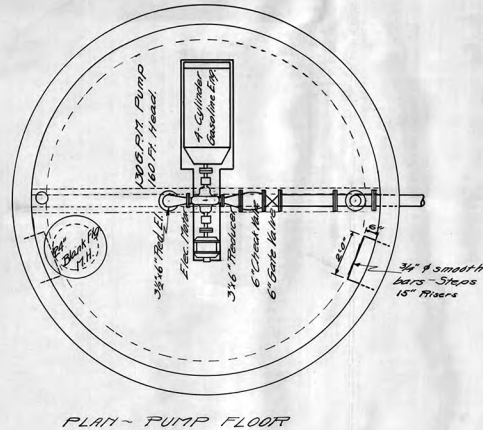
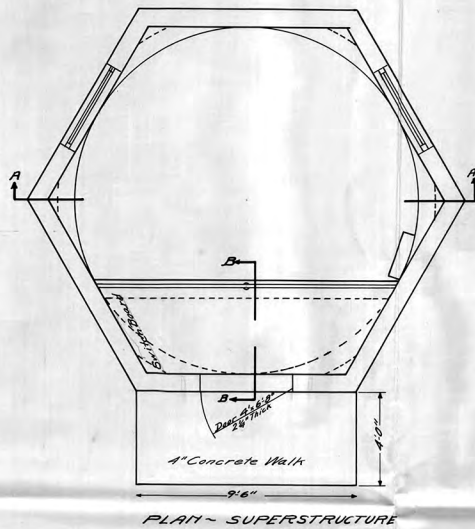
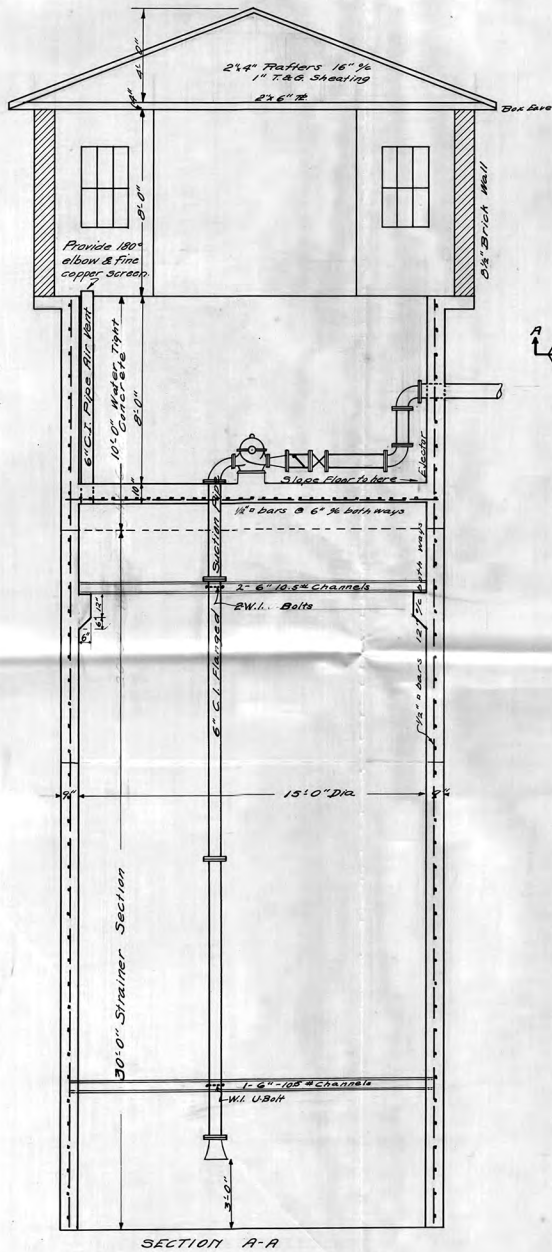
WELL & TANK LOCATION

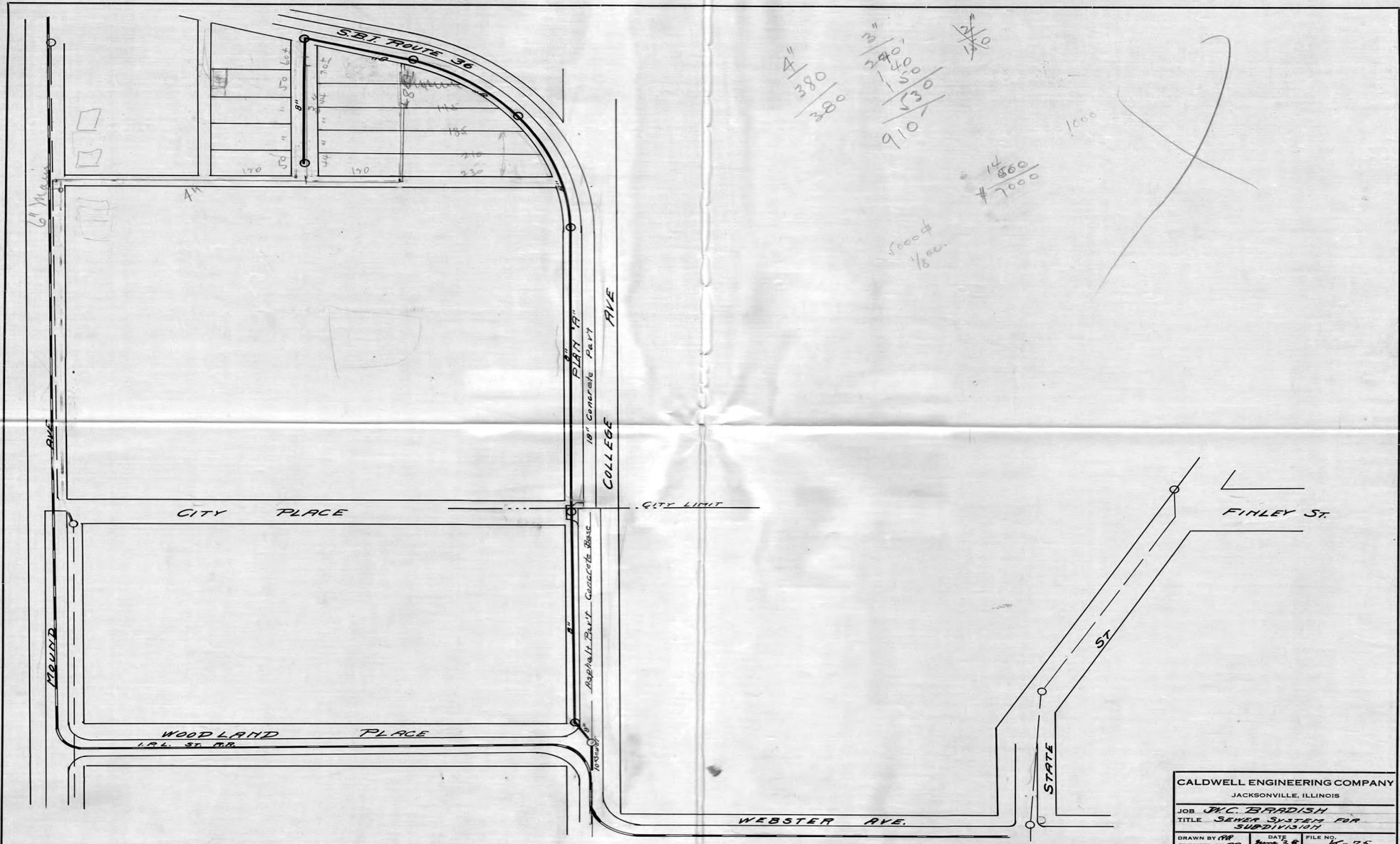
Scale - 1" = 20 FT.

CALDWELL ENGINEERING COMPANY JACKSONVILLE, ILLINOIS			
JOB <i>SIDELL, ILLINOIS</i>			
TITLE <i>WATER SUPPLY DISTRIBUTION SYSTEM</i>			
SCALE <i>1" = 200 FT.</i>	FILE NO. <i>K-74</i>		
DRAWN BY <i>BR</i>	TRACED BY <i>BR</i>	DATE <i>7/2/51</i>	SHEET <i>1</i> OF <i>2</i>



CALDWELL ENGINEERING COMPANY JACKSONVILLE, ILLINOIS			
JOB SIDELL, ILLINOIS			
TITLE WATER WORKS PUMPING STATION DETAILS			
SCALE As Shown	FILE NO. K-748		
DRAWN BY GWH	CHECKED BY JH	SHEET 2 OF 2	





$$\begin{array}{r} 4' \\ 380 \\ \hline 380 \end{array}$$

$$\begin{array}{r} 3' \\ 240 \\ - 140 \\ \hline 100 \\ 530 \\ \hline 910 \end{array}$$

$$\begin{array}{r} 14 \\ 800 \\ \hline 7000 \end{array}$$

1000
 1000
 1/8 in.

CALDWELL ENGINEERING COMPANY
 JACKSONVILLE, ILLINOIS
 JOB **J.K.C. BRADISH**
 TITLE **SEWER SYSTEM FOR SUBDIVISION**
 DRAWN BY **MP** DATE **June 28** FILE NO. **K-75**
 CHECKED BY **MP**

PRESS RELEASE

For immediate release to the Champaign News-Gazette, the Danville Commercial News, and the Sidell Report.

The Village of Sidell, Illinois is moving forward with plans to dismantle its almost century-old “Tin Man” style water tower at Chicago and Main streets and replace it with a modern water tower to be located near the corner of English and Market streets. The riveted steel water tower, constructed in 1928, is the tallest structure in the village and welcomes visitors with big block letters reading “SIDEELL EST. 1886” on the southwest-facing side of the tank. Over the years the old water tower has served to provide Sidell with clean, safe drinking water as well as water to fight potentially devastating fires. Through the efforts of the Sidell community it survived the effects of the deep freeze of the Winter of 1935-1936, as recalled by long-time Sidell resident Clifford Puzey: “Winter of 1935-36 was so cold that the stand-pipe on the water tower froze and burst at the seam. There was a foot of ice around the tower. Oral Bullerdick had a portable welder and was able to pull it together and reweld it”. Time and the elements, however, take their inexorable toll, and the stalwart Sidell water tower will soon be but a memory, preserved in the archived records and, one can only imagine, in the hearts and minds of the good citizens of the Village of Sidell, Illinois.