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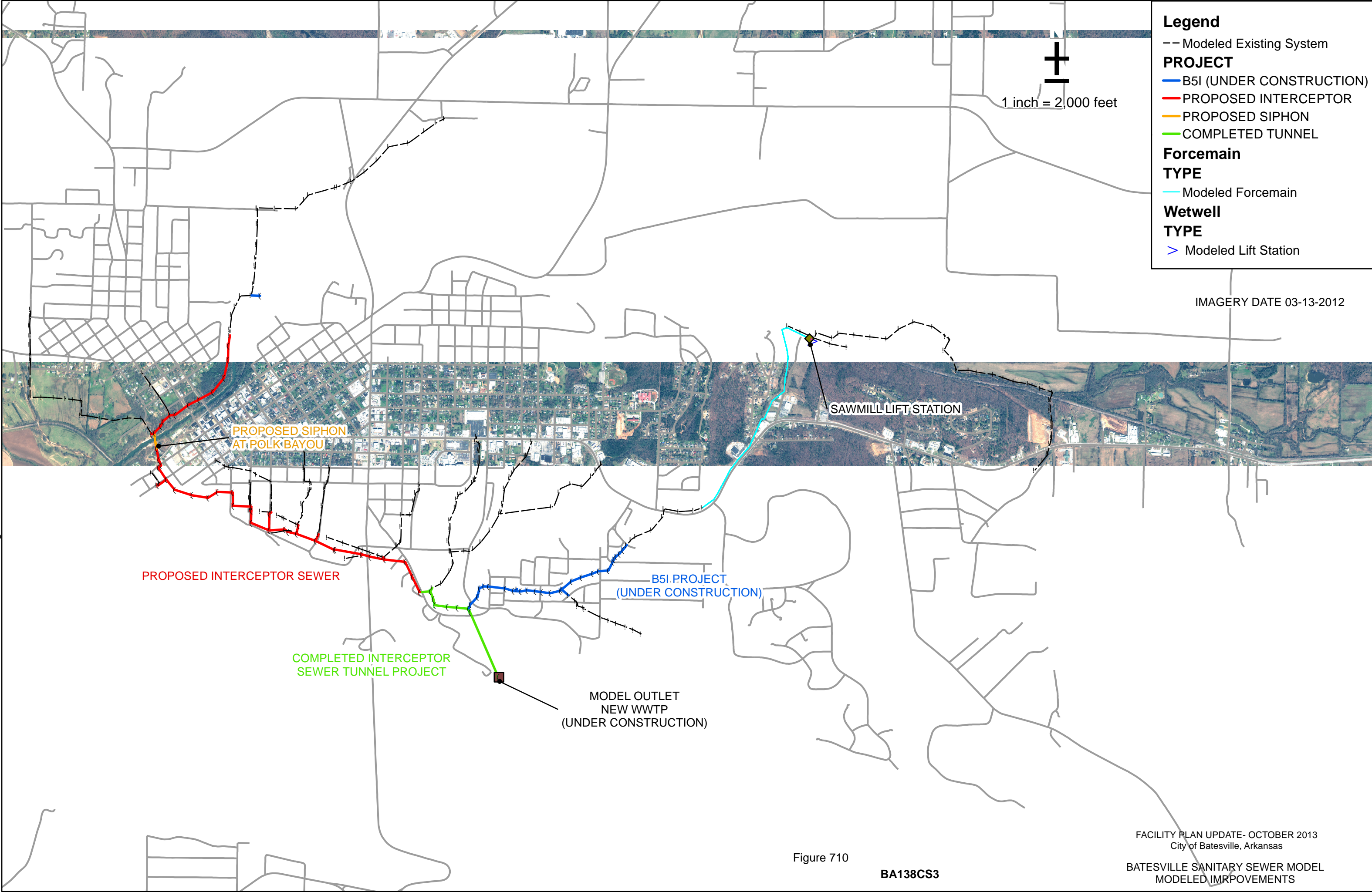


Figure 710

BA138CS3

FACILITY PLAN UPDATE- OCTOBER 2013
City of Batesville, Arkansas

BATESVILLE SANITARY SEWER MODEL
MODELED IMPROVEMENTS

SUPPORTING DOCUMENTATION FOR MILESTONE REVISIONS

Wastewater Collection System and Treatment Plant Improvements

City of Batesville, Arkansas

City of Batesville, Arkansas has been actively involved in major wastewater collection and treatment improvements since early 2008. In April 2009 the City contracted with the engineering firm of McGoodwin, Williams and Yates (MWY) in Fayetteville, Arkansas to develop a program of wastewater collection and treatment improvements while securing regulatory approval and funding through the regulatory departments of the State of Arkansas. MWY was acquired in January 2018 by Olsson, Inc. and MWY became a Fayetteville regional office of Olsson, Inc., a Lincoln, Nebraska based engineering firm. Olsson, Inc. has continued providing engineering services to the City of Batesville with the original managerial and technical staff of MWY.

A Facility Plan and Environmental Information Document (EID) was approved by Arkansas Natural Resources Commission (ANRC) in September 2009. This provided regulatory approval to proceed with funding a substantial collection system and wastewater treatment improvements. The funding of these facilities was secured through ANRC with supplemental funding from the American Recovery and Reinvestment Act of 2009 (ARRA) as administered by ANRC. The local financing of this project came through the passage of a one cent sales tax passed by the voters of the City with an overwhelming 90% plus approval. The total financing package available to the City through ANRC was approximately \$56 million.

To facilitate the flow of funds and comply with regulatory directives, the project was broken up into three phases. Contract Section 1 of this project consisted of 36-inch, 48-inch and 60-inch diameter interceptor sewers that began near the old main pump station and ended at the headworks of the wastewater treatment plant. The route of Contract Section 1 is shown as a green line in the attached Figure 710. This construction required the excavation of a 1700 linear foot, 8-foot diameter tunnel under higher elevations to provide gravity flow through a 60-inch diameter pipe to the plant. These new Contract Section 1 facilities allowed the City to take the aging and deteriorating main pump station out of service. This main pump station was a restriction in transporting peak flows to the wastewater treatment plant. Bids for construction services for Contract Section 1 were received in December 2009. Substantial Completion of construction was required in the contract by February 2012, with final completion required in April 2012. The City completed a separate sewer system rehabilitation project titled, "B5I Project" in September 2014. The route of this construction is shown by the blue line in figure 710.

After the completion of plans for major wastewater treatment improvements, bids for Contract Section 2, Wastewater Treatment Plant Improvements, were received in June 2011. Contract Section 2 consisted of major improvements with substantial expanded capacity to the existing wastewater treatment plant. The new improvements also enhanced the treatment capacity of the existing sewage lagoons. The cells of the sewage lagoons adjacent to White River were modified to serve as equalization basins during periods of high flow that exceeded the treatment capacity of the plant. The early stages of construction of Contract Section 2 can be seen at the east end of the lagoons in the attached Figure 710. The construction contract for Contract Section 2 was executed on July 26, 2011, and the contractor was issued a Notice to Proceed, dated August 1, 2011. Substantial completion was required by February 16,

2014 with final completion required by April 17, 2014. These wastewater treatment plant improvements would expand the capacity of the existing wastewater plant capacity from 4.3 million gallons per day to 9.0 million gallons per day, thereby meeting new, more stringent effluent limits and increasing the hydraulic capacity of the treatment during wet weather flows.

Because of funding restrictions and compliance with the allocation of restricted funds in the ARRA funding program, a part of Contract Section 1 is technically a part of the wastewater treatment facilities near the headworks of the treatment plant. The contractor for Contract Section 1 fell behind in compliance with his completion schedule and the City had to terminate the contract in order to avoid conflicts between the contractor for Contract Section 1 and the contractor for Contract Section 2. The Final Completion for Contract Section 1 was executed on May 9, 2013. This termination of Contract Section 1 required a reallocation of uncompleted work to the contractor for Contract Section 2. Then in July 2014, significant legal issues developed on the project. This resulted in a complete change of management and supervisory staff of the contractor and resulted in significant delays. Subsequently, the contract time for substantial completion of Contract Section 2 was extended to October 2, 2015 with Final Completion required by March 7, 2016.

Plans and Specifications for Contract Section 3 were submitted to the Arkansas Department of Health for review and approval on March 14, 2014. This Contract Section 3 provided for the construction of major improvements to the interceptor sewers upstream from the old main pump station which was to be taken out of service by the construction of Contract Section 1. The route of Contract Section 3 is shown by the redline on the attached Figure 710 The project consist of approximately 11,500 linear feet of 30-inch through 42-inch diameter gravity sewer; approximately 4000 linear feet of 8-inch through 24-inch diameter gravity sewer; a new 520 linear foot inverted siphon under Polk Bayou consisting of 30-inch and 18-inch HDPE pipe; 480 linear feet of 70-inch Diameter Highway Crossing tunnel; 280 linear foot 64-inch diameter railroad switchyard crossing; 110 linear foot of 64-inch diameter tunnel under the mainline railroad; and 420 linear feet of 70-inch diameter tunnel through a poultry processing plant shipping area.

The March 2014 submittal to the Arkansas Department of Health was approved on May 27, 2014. Following the health department approval, the City began finalizing the procurement of easements and permitting consistent with the approved plans. Regulatory permitting was secured regarding environmental permits such as 404 permits and nationwide permits. Permitting was also secured from Arkansas Department of Transportation for State Highway crossings. Railroad crossing permits were secured for the mainline track and the railroad switchyard operated by the Missouri and North Arkansas Railroad.

An easement was also required across a property owned by Union Pacific Railroad. Missouri and North Arkansas Railroad operated all active railroad lines in the Batesville vicinity under a lease agreement with Union Pacific Railroad. However, Union Pacific owned a piece of property on which, many years ago, contained a railroad spur which traversed between the mainline and the railroad switchyard. Over the years, parcels near the mainline owned by Union Pacific and parcels near the railroad switchyard had been sold to private property owners. The city needed an easement from Union Pacific across the remaining parcel which contain the old roadbed of the railroad spur and other adjacent undeveloped areas.

The City of Batesville communicated by email with Union Pacific for the intervening period of May 2014 and May 2015, attempting to secure an easement across the property. Union Pacific insisted on having a railroad crossing encasement, even though there were no railroad tracks or possibility of a rail system connecting on either side of the property. On May 18, 2015, the City was able to secure a response and develop a dialogue with Union Pacific about the permit. In order to secure access across the Union Pacific property, the City offered to purchase the property. What followed was a lengthy process of surveys reaching back to the original purchase of the property in the mid-1800s and a lengthy Environmental Site Assessment of the subject property in order to secure approval by corporate Union Pacific to close on the purchase of the property. The City signed the purchase documents for the property on August 11, 2017.

The program requirements of ANRC require the submission of a Clear Sight Certificate by the City Attorney before the City can be authorized to take bids on Contract Section 3. The delay from being able to secure all the required easements for Contract Section 3 presented logistical problems of being able to take the existing main pump station out of service and passing the total system flow to the soon to be completed Contract Section 2 facilities through the completed lines constructed in Contract Section 1. In November 2014, the City decided to build a portion of the Contract Section 3 project on the city owned property so that the total flow from the city could pass through the newly constructed Contract Section 1 large diameter pipelines to the new facilities to be completed in Contract Section 2. This small portion of Contract Section 3 was completed in December 2014.

The delays in Contract Section 2 and the delays caused by the procurement of easements related to the Union Pacific property resulted in the significant delay of preceding to construction for Contract Section 3. During this intervening time period, July 2014 through August 2017, issues developed along the proposed route of the Contract Section 3 pipelines that required significant route changes. While working on necessary route changes in the spring of 2018, the City and our consulting engineer were made aware of a significant pipe failure issue in two other Arkansas cities with the specified centrifugally cast fiber reinforced pipe to be used for the Contract Section 3 project. The City and our engineering consultants followed the subsequent evaluation process by the cities and met with both cities in March 2019 to discuss their findings. Following those discussions with the two cities, the City of Batesville and our design consultants agreed that a change in specified pipe was warranted because the geological conditions along the proposed pipeline route were quite similar to the conditions relevant to the pipe failure experienced by the other two cities.

Throughout this process the City continued to make changes to the plans and specifications that related to the required route changes and the change in project pipe materials. This required revisions in some of the previously acquired easements. The changes also required a reevaluation of the hydraulic model and subsequent changes in the plans. Following the changes, the City consulted further with ANRC concerning what steps need to be taken to move forward with approval to take bids for construction of Contract Section 3. The City was advised to resubmit the plans and specifications to the Arkansas Department of Health for a new review and approval. Plans and specifications were submitted to the Arkansas Department of Health for their review on July 31, 2020. Final approval of the revised plans and specifications were received from the Arkansas Department of Health in a letter dated October 1, 2020.

The City received the last outstanding easement required from route changes for the project on December 9, 2020. Following the filing of this easement document, the City Attorney issued a Clear Sight

Certificate on December 14, 2020, which has been forwarded to ANRC. The City anticipates a quick turnaround for approval from ANRC. Once ANRC gives approval the city will proceed with advertising and taking bids for the construction of Contract Section 3.

We hope the information provided offers a brief overview to the timeline and the delays. If you have any further questions, please feel free to contact me at any time.

Thank

Damon Johnson, P.E.
Batesville City Engineer