



July 9, 2021

Ms. Carolyn Bury
Project Manager
Corrective Action Section 2
Remediation and Re-use Branch
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: **Storm Sewer Rehabilitation Summary Report
Franklin Power Products, Inc./Amphenol Corporation
Administrative Order on Consent, Docket # R8H-5-99-002
EPA ID # IND 044 587 848
Former Bendix Facility
980 Hurricane Road
Franklin, Indiana 46131**

Dear Ms. Bury:

Industrial Waste Management Consulting Group, LLC (IWM Consulting), on behalf of the “Performing Respondent”, Amphenol Corporation (Amphenol), is submitting this *Storm Sewer Rehabilitation Report* to document rehabilitation activities completed to the storm sewer located in the vicinity of the Site. The Former Bendix facility is located at 980 Hurricane Road in Franklin, Indiana (Site). A September 2020 video and visual inspection of the interior of the on-Site 60-inch diameter corrugated metal storm sewer pipe, noted that one or more joints had become separated and an approximate 1-inch gap was present where the original seals had deteriorated over time (originally installed in approximately 1976). Only one segment (~100-feet in length) of the storm sewer was inspected in September 2020, however, IWM Consulting believed these conditions were consistent throughout the targeted rehabilitation area, which was approximately 600-feet in length.

The storm sewer main is owned by the City of Franklin (City) and repairs were made at no cost to the City. Only sections of the storm sewer main that potentially overlie portions of the dissolved chlorinated volatile organic carbon (VOC) plume and may be attributed to the operations at the former Bendix facility were rehabilitated.

A figure displaying the portion of storm sewer targeted for rehabilitation has been included as **Figure 1**.

Storm Sewer Main Rehabilitation Activities

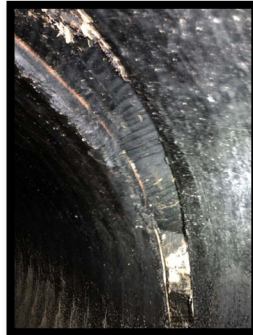
IWM Consulting contracted with a qualified subcontractor (National Gunitite) to rehabilitate the separated storm sewer joints and to re-line the flow invert. Initial inspections indicated that the joints are present approximately every 8 feet, which means approximately 75 joints would be sealed. Joints were found to be separated up to two inches and were potential conduits to the subsurface. The sewer main joints

in the vicinity where the route of the storm main made 90-degree changes in direction were significantly distressed.

The photos below depict the typical joint conditions within the vicinity of the Site prior to rehabilitation activities.



Overall visual separation of joint



Joint separation



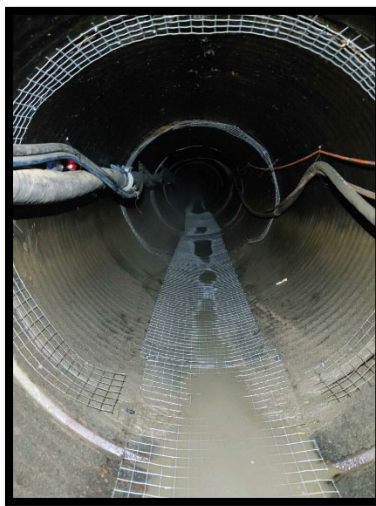
Joint separation

Storm sewer rehabilitation activities were completed between May 12, 2021 and June 17, 2021. The storm sewer was thoroughly cleaned prior to initiation of the rehabilitation activities and the water flow was controlled within the storm main pipe by constructing a temporary sandbag/shotcrete weir system and pumping the storm water through an internal flume system (polyvinyl chloride pipes/hoses) to a down-flow location beyond the work area. The weir and flume system allowed gathered storm water to safely pass through the storm sewer and work area, while allowing for the work area to remain dry, with the exception of during heavy rain events. The temporary weir system allowed for water movement over or through the weirs when heavy rains occurred during the work activities. This aided in preventing backups or pooling of water within the upstream portions of the rehabilitation area.

The photos below depict the storm water weir and pumping system utilized during the project.



Temporary weir and pump intake



Discharge hose and supply lines



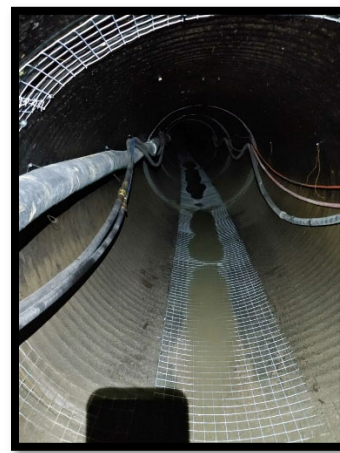
Down-flow discharge area

National Gunitite sealed the joints with a 18-inch full circumferential band using 2-inches of 5,000 pounds per square inch (psi) shotcrete (after it is allowed to cure for 28-days). In addition, the invert of the pipe received a structural lining from the 05:00-07:00 position. The shotcrete throughout the structural rehabilitation was enhanced with 2-inch by 2-inch, 12-gauge, welded wire mesh reinforcement and the final thickness of the shotcrete was approximately 2-inches (1-inch below and 1-inch above the wire mesh). The wire mesh was anchored to the storm sewer pipe using self-taping screws and the wire mesh was tied into the anchors with 16-gauge annealed tie wire.

The photos below depict the installation process and equipment utilized to rehabilitate the selected portions of the storm water main.



View of wire mesh at joint



View of wire mesh in invert



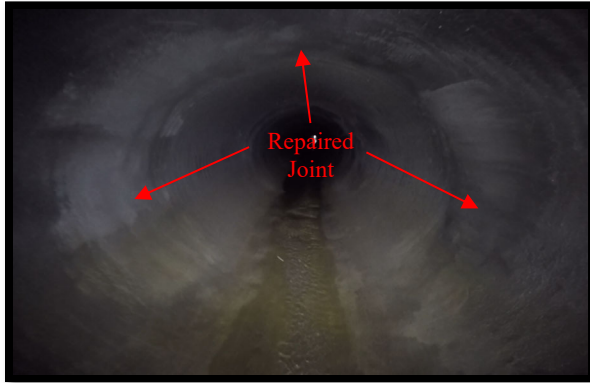
View of dewatering pump and shotcrete mixing equipment



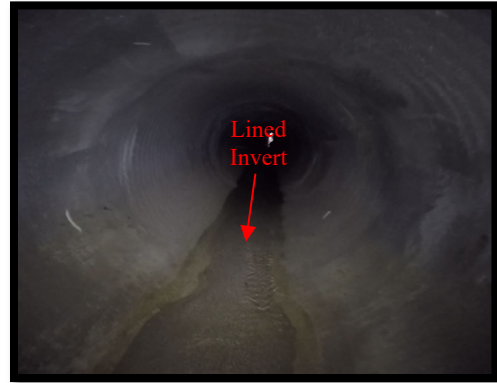
View of compressor for shotcrete application

Following the completion of lining activities, the temporary weir system and all pumping equipment were removed. A final video inspection of the storm sewer main was completed to document final pipe conditions.

The following photos depict the typical joint and invert conditions within the rehabilitated portion of the storm sewer main following completion of work activities.



Typical view of repaired storm pipe joint



Typical view of lined invert



View of repaired main turn at SS-North



View of repaired main turn at SS-South (Northeast corner)

Conclusions

Based on the final video inspection, the storm sewer rehabilitation activities appear to have adequately sealed any potential areas where water could enter or exit the storm main. This should assist during the implementation of future remediation activities at the Site (i.e., in-situ injections).

Please do not hesitate to contact the undersigned with questions or if you require additional information regarding this submittal.

Sincerely,

IWM CONSULTING GROUP, LLC



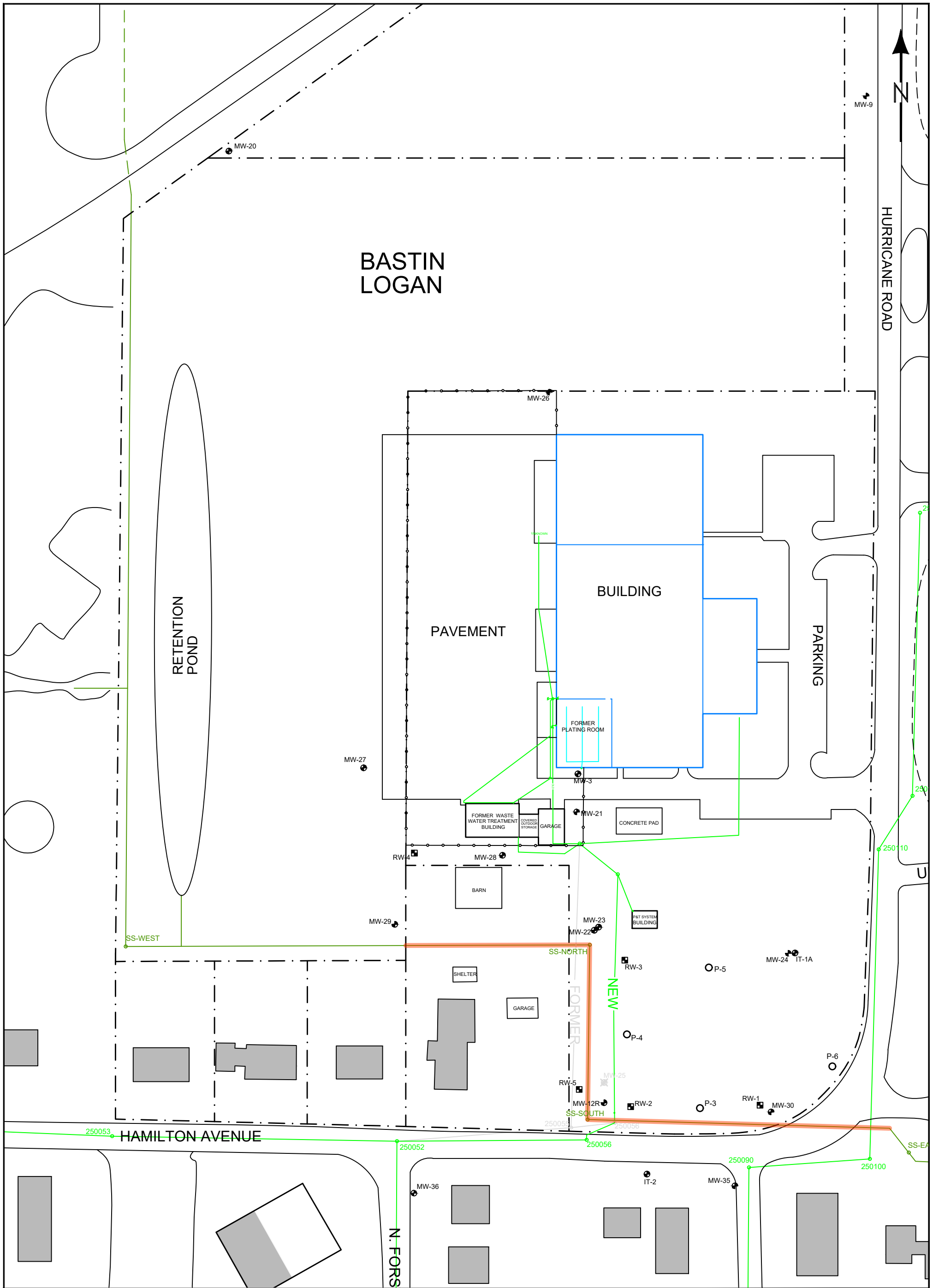
Christopher D. Parks, LPG #2169
Senior Project Manager



Bradley E. Gentry, LPG #2165
Vice President/Brownfield Coordinator

cc: Joseph Bianchi, Amphenol (electronic only)
Carolyn Bury, U.S. EPA Region 5, RRB CAS2 (electronic only)

Figure



LEGEND ABANDONED MONITORING WELL MONITORING WELL RECOVERY WELL PIEZOMETERS		PROPERTY LINE (APPROXIMATE) STORM SEWER SANITARY SEWER		RESIDENTIAL HOME <small>* DETACHED GARAGES & SHEDS NOT SHOWN</small> NON-RESIDENTIAL STRUCTURE PRIMARY BUILDING WALLS		STORM SEWER REHABILITATION AREA 250080	
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SCALE IN FEET

DRAWN BY: L. STRUM
 DATE: 9/27/99
 REVISED: 01/07/2021
 HWP# 111291-01
 DWG. NO. 111291S1

FIGURE 1
STORM SEWER
REHABILITATION

FORMER AMPHENOL RFI/CMS
980 HURRICANE ROAD
FRANKLIN, INDIANA

