



MEMO

To: Nevada Mayor and City Council

From: Brandon L. Mickelson, PE

Subject: Monthly Project Update from HR Green, March 2025

Date: April 9, 2025

On-Call Engineering Services – 40100100

HR Green provided the following on-call services:

- Attended City Council meetings
- Multiple development/site plan reviews
- Water capacity review for development
- Potential sanitary sewer and water main extensions/connection review/discussions
- WWTF storm water management plan

US 30/580th Interchange Well Water Main Relocation Project – 2302726

This project consists of the relocation of Nevada's 16" Well Water Main in the vicinity of the new US 30/580th Avenue Interchange from the intersection of US 30 and Sand Hill Trail east to 580th Avenue and then north along the existing 580th Avenue right-of-way to the north end of the interchange project. The Iowa DOT will be responsible for all costs associated with this project, including construction, design, and construction phase services.

The project is complete. HRG is currently coordinating project closeout procedures including providing documentation required by the DOT. Reimbursement will occur once project closeout is complete. Water main portion is complete but closeout must wait for overall DOT project to be complete.

Sponsored Projects - 191900

Nevada Sponsored Project Final Design – 191900.03

- Project C – Harrington Park construction is nearly complete.
- Projects A&B - West Indian Creek (Lincoln Way to E Ave) and Tributary to West Indian Creek have received final regulatory approvals.
- Next steps
 - Projects A and B both bid. We recommend RW Excavating LC for project A and Construct-Inc. for project B.
 - Harrington Park (Project C) sewer and water services will be restored to the restroom on the east side of the park in the spring.
 - Harrington Park (Project C) need to determine plan for permanent seeding bid.
 - Project AB have permanent seed in the bid.

GIS Services – 181696

- On-Going GIS Maintenance on GIS Server and Online Web Maps and Web Applications.
- Design Ticket Requests have been completed and are available for support on an as-needed bases.

Wastewater Treatment Facility – 160473

- Phase 1, Site Preparation:
 - Work was completed as of 5/14/21.
- Phase 2, WWTF Plant:
 - Held construction progress meeting with WBCI on 2/26.
 - Next construction progress meeting is scheduled for 3/12.
 - On 5/21, a tornado impacted the WWTF site causing damage to multiple buildings and the site. WBCI has contacted their insurance carrier and adjusters were on-site on 5/29. HRG has been coordinating with WBCI regarding next steps and WBCI will be providing updates when available. WBCI is still "in-control" of the site and claim(s) would be made against the Builder's Risk insurance policy. Temporary roofing repairs and temporary Admin Building garage doors were installed by WBCI on 5/23. WBCI has not provided an updated project schedule showing impacts from the tornado damage. WBCI is expecting final report on damages from their insurance carrier very soon; Insurance adjusters report on building damage was received on 7/24/24; Engineer's report on the structural inspection for insurance claim was received on 8/27/24; As of 2/26, one tornado damage item (digester blower enclosure doors) remains to be completed within 2 weeks.
 - Current work items underway includes: Scheduling for startups, various "cleanup" work throughout all buildings and site. Private well startup experienced issues with pressure switch that will need investigated; HRG coordinated with well contractor and others to discuss issue and issued a field order for corrective action to resolve and complete well startup; subsequent flushing/disinfection of the potable water piping throughout the facility to follow.
 - HRG completed preliminary electrical and controls walkthroughs on 4/23 & 4/24; completed preliminary mechanical walkthrough on 5/2; completed site, process, structural/architectural walkthroughs on 9/13, 9/20 & 9/25.
 - Progress schedule shows project is behind schedule to meet updated contract completion date; however, delays with Phase 3 completion will result in the inability to complete process startups and place the facility into operation until Spring 2025 assuming Phase 3 meets its scheduled startup date (see below).
 - WBCI submitted a request for Substantial Completion on 7/23/24; after considerable discussion HRG recommended denial of the request based on the work not being considered Substantially Complete and ready for its intended use due to the tornado damages and the related outstanding claim; HRG was informed that the City's insurance carrier would not provide property insurance for the facility until the tornado damages and claim have been settled; The City and HRG discussed and decided to provide lists of observed outstanding items (not an official punchlist), formal written verification related to the assessment of liquidated damages for the work completed prior to the tornado event, and a schedule for plant startup based on Phase 3 progress schedule; WBCI submitted a formal request for Substantial Completion on 2/24/25 and this was discussed at the 2/26 progress meeting, City and HRG would like to have written confirmation from WBCI's insurer that the tornado damage claim has been "settled" in order for the City to be able to obtain property insurance as previously discussed, HRG to provide formal written recommendation on the 2/24/25 Substantial Completion request.
- Phase 3, Lift Station:
 - Held construction progress meeting with Boomerang on 2/26.
 - Next construction progress meeting is scheduled for 3/6 (virtual) and 3/12 (in-person).
 - Work performed this period includes:
 - Miscellaneous electrical install
 - Miscellaneous plumbing and HVAC installation

- Process piping and pipe support installation
- Surge tank anchoring preparation
- Standby generator/ATS testing
- Wall pour issues update:
 - Major wall pour completed on 10/4. HRG is working with Boomerang for remedy on defective work from wall pour. Boomerang's subconsultant (Terracon) has completed wall scanning effort and provided a summary report regarding voids (visual and subsurface). Additional issues with concrete cover over reinforcement was noted in Terracon report. HRG formally responded with comments on the Terracon report and requested Boomerang to provide formal response regarding plan to remedy and impact to schedule. Boomerang has hired a third-party structural engineer (Shuck-Britson) to assist them with further investigation and development of remedies to the defective work. Boomerang and their third-party structural engineer completed an on-site review/investigation on 2/13. They developed preliminary proposed remedies and submitted to HRG for review on 2/21. HRG review proposed remedies and provided feedback on 3/2. Boomerang submitted updated final proposed remedies on 3/27. HRG reviewed the updated remedies, met with City staff to review and discuss our recommendations on 3/28, and formally responded to Boomerang on 4/4. Decision and response to Boomerang is to allow commencing with proposed remedies with conditions to retain Shuck-Britson to assist with repair and providing a 10-year warranty bond on all repairs. Both conditions would be at no cost to the City. Boomerang's formal response accepting the City's conditions was received on 4/26; however no preliminary schedule to complete repairs accompanied their response. Boomerang has continued working on wall repairs within the screen room and screen room stairwell areas (interior and exterior); most repairs to the lower walls are complete. Boomerang and Shuck-Britson were on-site 2/26 to review wall patches that appeared to be "defective"; Boomerang completed rework of numerous patches under the direction/observation of Shuck-Britson; wall repairs are complete
 - HRG is tracking labor effort related to defective wall pour activities separately from other construction administration/observation efforts so there is a record of related engineering costs to withhold/offset from project payment to Boomerang.
- Upper Wall & ground floor slab pour issues update:
 - HRG completed site visit for full observation of upper wall and ground floor slab pour on 9/28/23; HRG issued formal notice of defective work to Boomerang on 9/29/23; Boomerang has been completing wall repairs following the same repair procedures as the lower wall repairs; Boomerang developed and submitted a repair plan for the suspended slab and upper walls on 11/22/23 with additional information submitted on 11/28/23; HRG reviewed the repair plan and return comments/questions to Boomerang on 12/4/23 for further clarification; Boomerang responded to HRG's comments/questions on 12/15; Conference call with HRG, Boomerang, SBI, and City was held on 12/22 to further discuss repair proposal; City gave final direction for approval of repair proposal and HRG issued formal notice to Boomerang on 12/26; Boomerang has scheduled a meeting with City and HRG on Jan. 2nd to discuss City's condition of approval to provide a 10-year warranty on repair work; Boomerang and Shuck-Britson were on-site 2/26 to review wall patches that appeared to be "defective"; Boomerang completed rework of numerous patches under the direction/observation of Shuck-Britson; Boomerang has removed and reset all floor hatches in the Service Area to correct per plan elevation. Boomerang has ground the floor slab to the correct plan elevation; HRG and City staff noted three minor wall patching issues in the screen room and notified Boomerang to address on 6/19; Boomerang has reset

and repaired the slab around the last floor hatch in the Service Area as of 8/2; HRG observed wall rub in lower Screen Room on 8/21 and finds the workmanship/quality to be unsatisfactory, HRG notified Boomerang of findings and requested the work be corrected; Boomerang completed repairs to non-conforming overhead door and walk door floor embeds per Shuck-Britson's repair plans; Boomerang applied/install flooring system to address ground level slab flatness/levelness defective work in November but issues still remain to be resolved; onsite meeting held 12/4/24 with Boomerang, Shuck-Britson, and subcontractors to review ground level slab flatness/levelness issues and develop additional repair plan for areas of concern; As of 12/18/24, Boomerang has nearly completed correction to lower Screen Room wall rub; on 1/28/25 HRG noted significant cracking in one of the wall patches on the east wall of the pumproom stairwell, documented with photos and notified Boomerang and requested Shuck-Britson be contacted to provide direction for repair; Shuck-Britson gave Boomerang direction to remove and replace the cracked wall patch found on 1/28/25 and Boomerang began repair on 1/30/25

- HRG is tracking labor effort related to defective upper wall & ground floor slab pour activities separately from other construction administration/observation efforts so there is a record of related engineering costs to withhold/offset from project payment to Boomerang.
- Boomerang forwarded "as-built" drawings of the lower and upper wall/ground level slab repairs from Shuck-Britson on 1/21/25; HRG to do a superficial review to determine if these documents include all repair areas that HRG has previously noted
- Boomerang's systems integrator subconsultant (Jetco) informed all parties at the 10/18/23 progress meeting about a new significant delay related to delivery of the project's electrical gear (Motor Control Centers). The systems integrator has presented an alternative electrical gear arrangement as a means to mitigate this issue. HRG evaluated this alternative, impacts to the project schedule, and cost impacts and presented this information to City staff in a virtual meeting on 11/16/23; City staff decided to reject the proposed substitution; Boomerang was formally notified of this decision on 11/17/23 and an updated progress schedule was requested; On 12/13 Jetco provided an updated MCC delivery ship date of 6/21/24 from the factory; Boomerang provided an updated construction progress schedule at the 4/24 progress meeting showing MCC delivery on-site at 6/28/24; MCC was delivered on-site on 7/23/24; As of 12/18, an on-site review of progress will be done with Jetco the week of 1/6/24 to determine schedule for controls/VFD startup schedule
- Boomerang was investigating if a temporary bypass pumping arrangement is an option to allow startup of Phase 2 work until Phase 3 is operational. On 10/24/23 HRG, Boomerang, and City staff discussed a temporary bypass pumping arrangement in detail and the general outcome of the discussion was this is not a feasible option due to multiple different factors
- Based on HRG's observations, the last received progress schedule (2/26/25), Boomerang appears to be at least 21 months behind schedule to meet the current contract substantial completion milestone/date (June 9, 2023) based on a lift station startup date of 4/2/25. The current construction progress schedule includes the project's final completion milestone/date; however, HRG would estimate the work being fully complete no earlier than the end of May 2025 (original: September 30, 2023).
- Phase 4, Force Main and Trunk Sewer:
 - The project was declared Substantially Complete as of 4/12/24.
 - Future construction progress meetings will be scheduled on an "as-needed" basis until the project is fully complete.

- Abandonment of existing 8" gravity sewer is complete less the final ~300' due to potential service line connection conflict which is being investigated. There is apparently an active service line connection from the condo units on the south side of Highway 30 that are preventing this sewer line to be completely removed. The City will need to work with the property owner(s) to relocate their sewer service connection to another part of the collection system as the 8-inch gravity sewer in the Highway 30 right-of-way will ultimately need to be removed completely.
- Fiber optic cabling installation work commenced the week of 12/4/23 with reinstallation of damaged/destroyed conduit and handholes within the IDOT S14 project work area followed by aerial fiber optic cable installation. Note that end connections cannot be completed until Phases 2 & 3 will allow. The City will need to determine how/if to assess the IDOT for reinstallation of fiber optic conduit and handholes damaged as part of the IDOT S14 project by the IDOT's contractor. End connections and fiber optic cable installation is anticipated to begin once associated conduit and handholes on Phase 3 are installed (Phase 2 is ready).
- On 10/10/24 the fiber optic subcontractor expressed concerns with some clearance heights above driveways/field accesses/roadways on the aerial portion of the fiber optic cable route. HRG has taken field measurements to check clearances and is coordinating with all parties to provide required clearance heights, if needed; HRG provided a formal field order (FO#6) with revisions to the aerial fiber optic installation on 2/26/25, Phase 3 has completed installation of underground fiber optic conduit and handholes that will allow connection into the lift station electrical room.

2024 Street Improvements, Division 1, Street Reconstruction – 2303452

- Construction is substantially complete. Final grading/seeding/restoration will need to take place in the spring due to weather/temperatures/seeding windows. Final seeding to take place shortly after a few punchlist items are completed.
- Frequent rainfall early in the construction season, when a majority of the work was underground slowed project progress. The stretch of dry weather in late summer/early fall allowed Con-Struct to make good progress to catch back up and substantially complete the project in 2024.

North Well Field Exploration - 2303590

- HR Green submitted Draft Report for the project to City staff to review.
- Next steps are to schedule a review meeting, receive feedback to incorporate, and finalize the report. The Report could be submitted to Iowa DNR for review as the basis for future raw water improvements (as needed).

19th Street Trail – 2402192

- This project consists of a 10' wide trail along 19th Street from South G Ave to Lincoln Highway.
- Division 1 work (earthwork/utilities) is complete. Division 2 (paving) is substantially complete. The remaining final grading/seeding will need to take place in the spring of 2025 when weather allows. Final seeding took place on April 3rd, 2025. Project closeout should commence shortly.

Oak Park Estates Trail from 6th Street to 8th Street – 2502027

- 90% design review meeting held with city staff on 4/1
- The goal is to complete design to be able to bid the project in mid-2025, with construction to be complete by the end of 2025.

- ix. WWTP
- x. Kading Property
- xi. Vialytics
- xii. Accessibility