Application for Urban Design Review Board – Narrative Project Description

WRA Birdland Pump Station Improvements

The Des Moines Wastewater Reclamation Authority (WRA) currently owns and operates the WRA Birdland Pump Station located at the 1800 block of Saylor Road in Des Moines. The existing Birdland Pump Station was built in 1964 and does not have the capacity to handle peak combined sewer flows resulting in sewer overflows during wet weather. Elimination of this combined sewer overflow will require an increase in pumping and conveyance capacity of the existing Birdland Pump Station.

This increase in pumping and conveyance capacity will require the construction of a new pump station along the east side of the Des Moines River, just north of the existing Birdland Pump Station. The new pump station will include a four-pump arrangement and rated to handle the influent sewer's peak hourly flow rate. The pump station will include mechanical screening of influent wastewater. The pump station will also include an odor control facility to collect odorous gases and treat them. Most of the pump station's ancillary features (odor controls, screenings dumpster, HVAC units, monorail, etc.) are enclosed within the pump station structure to shield them from view.

The new pump station will be able to convey flow into the new 18-inch force main that was constructed several years ago and discharges to the Phase 27 Eastside Interceptor. Additionally, it will be able to convey flow into the original 24-inch force main that pumps southerly to the Eastside Trunk.

The project also includes decommissioning and demolition of the existing Birdland Pump Station. Miscellaneous site improvements to support the new Birdland Pump Station will also be included in the project such as new driveway, emergency generator, retaining walls, and site grading. The new electrical backup generator will be located in the southeast corner of the site. As is typical with this type of building only a portion if it will be visible above grade. The above-grade structure and site are the aesthetic focus of the project.

The site is located at the southern end of the Birdland Marina within the Union Park neighborhood. The WRA met with local business owners and representatives of the neighborhood association to develop the architectural strategy. The current design of the building and site is a result of direct input from these groups. The new pump station will tie-in with the existing detail and feel of the neighborhood. A review of existing structures featured wood-clad Victorian-style houses and modest brick buildings. The brick buildings tend towards simple boxes with subtle masonry details such as corbelled arches, rowlock accent bands, infilled openings and cast stone sills. These details are utilized in the exterior façades of the proposed pump station.

The site features elements that are also visually unobtrusive. Retaining walls on the east and south will terminate just above grade. The north and west retaining walls will be visible from the Birdland Marina and the river. There are on-going discussions as to whether this wall will be used for a mural. This issue will be resolved prior to the request for final approval. On top of the retaining walls, enclosing the facility, will be an architectural metal fence and gate. The new pump station, generator and fencing will be set back from Saylor Road to allow the bike path to remain as-is.