

CASE STUDY

Meyer Ranch

Project Type: Residential/Water Reuse

Location: Braunfels, Texas

HIGHLIGHTS

A modular MBR system was fully operational in just 43 days to quickly solve the developer's urgent problem.

Advanced MBR technology produced high-quality effluent, meeting strict TCEQ standards & allowing for on-site irrigation reuse.

The project provided for future growth with a permanent 150,000 gallons per day facility designed to serve up to 1,000 homes.

ENVIRONMENTALLY RESPONSIBLE WATER REUSE OPPORTUNITY

A residential developer in the Texas Hill Country faced a critical hurdle: a lack of sewer access and strict regulatory standards for wastewater disposal threatened to halt development of a new 700-acre community. After a previous solution was rejected, the developer urgently needed a new, compliant system. MIMBR Systems and IWS provided a rapid, phased solution using modular MBR technology to deliver essential wastewater infrastructure and a permanent, scalable facility for the growing community.

CHALLENGES FACED

- **Urgent Need:** Houses were being built rapidly, demanding a swift wastewater treatment solution to prevent project delays.
- **Phased Capacity:** Treatment capacity had to be added in phases, precisely matching the pace of home completion.
- **Requirement for High-Quality Effluent:** The system required producing reuse-quality water, necessitating advanced treatment sophistication.



SOLUTIONS IMPLEMENTED

- **Rapid Phased Design and Construction:** IWS designed and built the capacity in two phases:
Phase I: Served the initial homes.
Phase II: Started within 8 months of Phase I, utilizing two BluBox Modular MBR Systems® with a supplemental tank to expand capacity.
- **Advanced Technology:** The BluBox units employ state-of-the-art Membrane Bioreactor (MBR) technology.
- **In-House Delivery:** IWS (with its MIMBR subsidiary) designed and manufactured the BluBox units in their Texas facility, enabling extremely fast delivery timelines.

OUTCOME AND IMPACT

- **Exceptional Speed:** Phase 1 was installed and started-up in just 44 days. Phase II design, construction, and start-up took only 5 months.
- **Capacity Expansion:** The total treatment capacity increased to 150,000 gallons per day (GPD).
- **High-Quality Water Production:** The treatment process produces reuse-quality water, ensuring environmental compliance.
- **Support for Continued Development:** The quick, phased delivery of essential infrastructure supported the community's rapid and ongoing housing development.



By rapidly deploying BluBox Modular MBR Systems, IWS and MIMBR successfully provided the vital wastewater infrastructure needed to prevent a major housing bottleneck. This phased approach delivered exceptional speed: Phase I in just 44 days, and the Phase II expansion in only five months. In total, this implementation successfully provided the required 150,000 GPD of reuse-quality water, ensuring the essential services kept pace with the community's rapid development.

"Words cannot express my gratitude for your team coming together with our Meyer Ranch team and making the incredible task come together on a very demanding time with many challenging circumstances. Your remarkable response, quality product, permit assistance, and meeting the requirement deadline are very appreciated. It has been a blessing to work with you all and I look forward to additional projects in the future."

Randy Rollo, President of Randolph Todd Development



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