

# Integrated WATER Services, Inc.

## IWS Sets New Design-Build Record in WA (Contract to Start-up in 90 Days)

Located on San Juan Island in Washington State (10 miles from Victoria Island in Canada), The Oaks Manufactured Housing Community wanted IWS to upgrade its existing wastewater system to be better stewards of the environment and avoid future service disruptions to its community. The 80 unit housing development was constructed in 1985 and utilized a recirculating sand filter for treatment with dispersal to pressure dosed leachfields. The recirculating sand filter needed replacement and the client evaluated a number of options, which included an SBR and a Textile Filter treatment system.



Left to right: Mike Erickson (Owner); Eric Jangard (Owner); Jamie Miller (IWS); and Jeanne Andreasson (WDOH)

IWS executed a Design-Build contract with the Owner in mid-June and was able to design, permit, construct, and start-up the treatment system by mid-September, which was a record for IWS. Dave Patton (CEO) commented, "We did our homework on the project and knew what we needed to get done. We worked as a team with all the

stakeholders to make things happen: our Engineer (Jamie Miller), our Construction Manager (Dale Hemstad), State of Washington DOH (Jeanne Andreasson), our equipment suppliers (Rick Petro of Orcas Sewage Design and Bob Nation of Fextex Systems, Inc.), and the Owners (Mike Erickson and Eric Jangard)."

For having gone as smoothly as it did, the project had a number of complexities that needed to be addressed: a) construct the new system and tie into the existing system without any service interruptions; b) adhere to all county set-back requirements; c) adhere to State set-back requirements for the domestic water well; d) segregate flows from the existing collection system to balance the primary tank configurations; e) construct before the rainy season; f) value engineer to meet the clients budget; g) design the system to accommodate future changes in discharge requirements; h) avoid areas of shallow bedrock; i) dewatering during excavation for the tanks; and j) work in the back yards of some homeowners properties.

The Owner was able to reuse their existing collection system and dispersal area so that the focus of the upgrade was the



Advantex pods installed on top of existing sand filter



*Project involved work in close proximity to homes*

treatment system. Treatment options were evaluated for a number of variables which included: 20 year life cycle costs; ease of maintenance, operator requirements, discharge requirements, and several other factors. The system was sized for 12,000 gpd average daily flow with peak flow of 28,800 gpd. The treatment system included: a) a new 20,000 gal Septic Tank; b) utilize the existing 20,000 gal Septic Tank; 5, AX-100 Advantex Pods; a 15,000 gal Recirculation Tank; a 6,000 gal Dosing Tank; 2 UV Disinfection Units; and a control building.

Eric Jangard of Erickson Investments summed up the IWS project involvement, "IWS was very responsive during the entire project, from the evaluation of various technical approaches through permitting, construction, and start-up. We are a small community but got the full attention and support of IWS and their professionals. We asked a lot of questions along the way and are very satisfied with the final product." •

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### About Us

Integrated Water Services, Inc. (IWS) provides services to municipalities, developers, communities, and businesses to address their water and wastewater needs. IWS leverages its extensive experience in permitting, engineering, construction, project management, site development, and project finance to provide a range of services to its clients with the ultimate objective of providing a solution that meets all the stakeholders' needs. IWS teams with engineering firms, consultants, suppliers, and other contractors to provide the client best value for their specific project needs.

### Corporate Information

Please visit our web site ([www.integratedwaterservices.com](http://www.integratedwaterservices.com)) for additional information or contact us at the following locations:

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