Stormceptor[®]MAX

CASE STUDY

Large Urban Redevelopment Takes Advantage of Stormceptor MAX

Project: Currie Barracks, Phase 3 Location: Calgary, Alberta Owner: Canada Lands Company Engineer: Urban Systems Calgary Contractor: Blue Bird Excavation Calgary Product: Stormceptor® MAX



Currie Barracks is a community within the heart of southwest Calgary. This property was a historic military training area, which has recently been converted to a mix of residential and commercial land use, including parks and multi-use green space. A holistic urban design approach has been implemented throughout the development, creating a sense of community, architecture and landscaping that's aesthetically pleasing. This new green community has earned the distinction of being named the first Gold Certified LEED community in Canada.

A component for maintaining the highest stormwater quality treatment standard was implementation of the award-winning Stormceptor MAX oil grit separator (OGS) technology, to capture and retain sediment, floatables and debris making their way into the upstream stormwater drain network.

In order to treat over 50 hectares of upstream drainage area, and preserve the available land for the desired green space, a Stormceptor MAX unit was designed and supplied by Lafarge.

Each Stormceptor MAX is custom designed and sized to meet the site's needs and water quality requirements. In this case, the unit was constructed using a series of precast concrete 2.44m boxes, 2.44m diameter inlet and outlets, and multiple inspection and maintenance access manholes, to deliver the required performance of 85% sediment removal of particles 50 microns in size and larger. An additional value of the Stormceptor MAX, its ability to provide spill protection.

Based on the annual runoff volume expected, this Stormceptor MAX has been designed to capture 43 m³ (over 100 tons) of sediment and pollutants. This equates to over 4 dump trucks of sediment being captured and retained annually, preventing this pollutant load from entering the downstream Elbow and Bow Rivers. To ensure this sediment captured by this unit is monitored and properly maintained, Lafarge includes a 5-year inspection program with every Stormceptor.

