

Anacortes High School Replacement

Anacortes, Washington

Stormwater Detention

Owner:
Anacortes School District

Engineer:
AHBL Seattle

Contractor:
Faber Construction Company

Technical Description:

- 3,112 LF of 84" and 96" Aluminized Steel Type 2

Installation:
July 2017



In 2014, the City of Anacortes, Washington, established a plan to replace the aging Anacortes High School, part of which dates back to 1931. The City sought to build a state-of-the-art facility to provide a quality education to the city's students, who graduate at a rate of 95%, one of the highest in the State of Washington.

Site conditions required a detention system to contain large volumes of stormwater within restricted footprints. After considering multiple options, the engineer selected corrugated metal pipe (CMP) for the underground storage of stormwater, for its strength, design flexibility, durability, and cost competitiveness.

To minimize the footprints, the engineer took advantage of the available depth and used large diameter CMP for its efficient use of space. In addition, Aluminized Type 2 CMP was used for its environmental soundness and long service life. Three separate detention systems were constructed on the site:

- System One has 1,627 LF of 84" perforated ALT2, providing 62,422 CF of storage. This system uses a single manifold with a series of stubs connecting six barrels. An impermeable liner was added to maximize the detention volume in the given footprint, as the stone backfill can also be used as storage.
- System Two has 596 LF of 84" of solid wall ALT2, providing 22,937 CF of storage. This system uses a single manifold with five barrels.
- System Three has 892 LF of 96" of solid wall ALT2, providing 44,837 CF of storage. This system uses a single manifold with five barrels.

Contech assisted the contractor with expertise during the preconstruction meeting and support as needed on site to ensure a smooth and timely installation.

