

KOPACHUCK RIDGE ESTATES STORM DRAIN SYSTEM OVERVIEW

11/10/2012

Kopachuck Ridge Estates Homeowners Association is responsible for maintaining the storm drain system. The system is periodically inspected by Pierce County to ensure compliance with local and State regulations and the Federal Clean Water Act of 1972. There are six separate drain subsystems within the KRE drain system consisting of type 1 (shallow sumps) and type 2 (deep dumps) street drains with grates, and many off street features such as type 1 and type 2 catch basins, infiltration features such as drywells and swales, culverts and retention ponds. Each of the six subsystems are described below.

Subsystem	Description
Div 1 & 2	This the largest subsystem starts at the top of 51st at an elevation of 329 feet and drains directly to the sound through interconnecting pipes and 34 catch basins. There is a total of 19 type 1 street drains, 3 type 2 street drains, 8 off street type 1 catch basins and 4 off street type 2 catch basins. This subsystem includes a 15" pipe under Artondale between a catch basin on lot 4 and a street drain on 105thAv. The last two catch basins are not within the boundary of KRE. The flow from the last catch basin empties into a ditch that flows into the sound.
101st-Div 2	This subsystem starts at the end of this cul-de-sac and consists of one type 1 street drain and 3 off street type 1 basins, 2 type 2 basins, an infiltration trench and a drywell. One type 1 and one type 2 and the trench and drywell are down the slope accessible from Artondale.
103rd-Div 1	This small cul-de-sac has one type 1 basin that flows into a type 2 basin that is under a fence between lots 14 and 15. The outlet from the type 2 flows into a infiltration trench and drywell located in the backyard of lot 15.
100th-Div 3	There are 7 type 1 street drains in this subsystem. The last street drain flows down the slope towards Ray Nash through 3 off street type 1 basins into a retention pond on lots 7 and 8. There is also a culvert that runs under a common driveway from lot 13 to lot 7 that flows to Ray Nash. The outlet from the retention pond flows through a type 2 catch basin to Ray Nash valley and out to the sound.
98th-Div 3	This street has two type 1 street drains that flow into an infiltration swale that flows down to Ray Nash
99th-Div 3	This subsystem consists of 7 type 1 street drains, 5 off street type 1 basins that are buried in the backyards of lots 17, 19 and 20. All of the street drains flow into the off street type 1 basins that flow to a type 2 basin located adjacent to a retention pond on lot 21. The overflow from the pond flows to the ditch along Artondale and down through Ray Nash valley to the sound. There is also a culvert that runs under the road down through an easement on lot 18 that flows to the Artondale drainage ditch.