

SUPPLEMENTAL INFORMATION DRIVEWAY DRAINAGE CROSSING

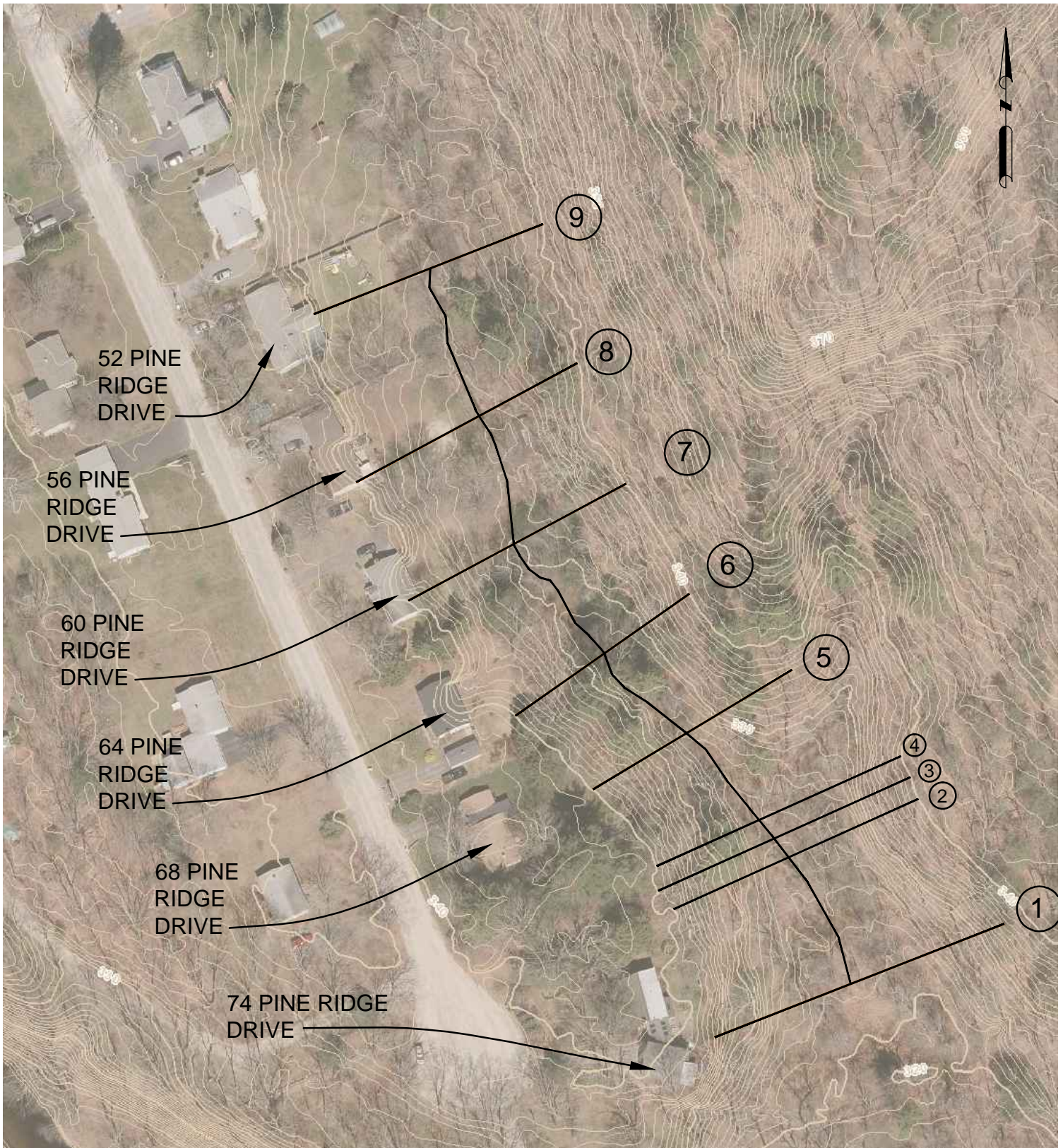
Attached is additional analysis information for the driveway crossing between properties at 68 and 74 Pine Ridge Drive at the cul-de-sac end of the road. This includes a plan view and cross sections of the intermittent flow channel along the east side of the houses noted.

The following tables lists and summarizes the findings for the channel sections evaluated adjacent to the houses numbered in an upstream direction, starting at #74 at the downstream end of the computations.

PINE RIDGE DRIVE / CORREIA DRIVEWAY CROSSING / CHANNEL ANALYSIS					
CROSS SECTION	HOUSE NUMBER PINE RIDGE DRIVE	GROUND ELEV. AT HOUSE (FT.)	WATER SURFACE 25-YEAR FLOW (FT.)	WATER SURFACE 100-YEAR FLOW (FT.)	VELOCITY AT SECTION (FPS)
1	74	338	321.1	321.3	3.6
5	68	342	327.0	328.2	4.4
6	64	336	329.2	329.4	3.6
7	60	336	330.7	330.9	3.7
8	56	336	332.2	332.3	3.5
9	52	338	334.5	334.6	3.4

Profiles included as attachments are for the 25-year storm (Profile 1) and 100-year storm (Profile 2) event. Sections 2, 3 and 4 represent, respectively, the section downstream of the culverts, the culvert section and the section directly upstream of the crossing. Exit velocity at the downstream discharge (Section 2) is 4.8 feet / second. As noted in the table above, water surface elevations for both the 25-year and 100-year events are well below the lowest ground surface elevations taken directly adjacent to the easterly side of each of the houses noted. Flows used for analysis include 58.5 cfs for the 25-year and 91.7 cfs for the 100-year, based on the hydrologic analysis previously submitted.





CHANNEL & SECTIONS
CORREIA DRIVEWAY CROSSING
PINE RIDGE DRIVE, ANDOVER

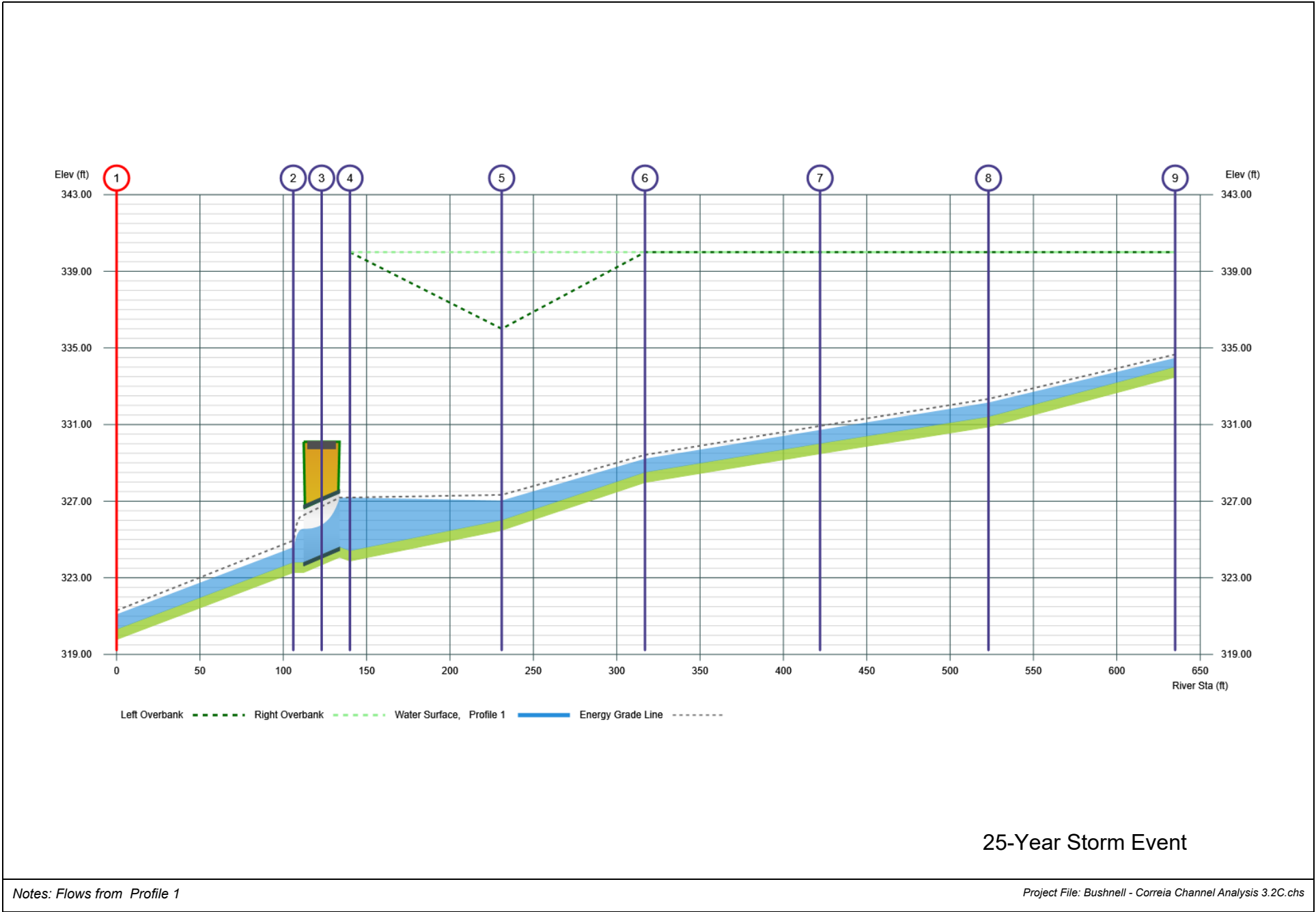
SCALE: 1" = 100'

Open Channel Profile

Channel Studio v 2.0.0.21

Project Name: Bushnell - Correia Driveway Crossing

05-25-2021



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