1		SS-1T
2		
3		
4		
5		
6		
7 8		NGTON UTILITIES AND ION COMMISSION
9	In Re the Petition of:	DOCKET NO. TR-180466
11 12	WHATCOM COUNTY, Petitioner v.	PREFILED TESTIMONY OF STEPHEN SEMENICK
13 14	BNSF Railway Company, Respondent.	
15	Q: Please state your full name and job title	e.
16	A: My name is Stephen Semenick. I am cur	rently the BNSF Manager of Public Projects for
17	BNSF for Washington and British Columbia.	
18		
19	Q: Please describe your professional back	ground and position with BNSF Railway
20	Company (BNSF).	
21	A: I have a degree in Civil Engineering from	n the University of Delaware. I have been
22	employed by BNSF Railway Company (BNSF)	for five years. I began my career with BNSF
23	working for the track department, then became a	Project Engineer for the engineering services
24	department. Since June of 2017 I have been the	Manager of Public Projects for BNSF for

Washington and British Columbia. In general, my duties as Manager Public Projects include	
negotiating all construction and maintenance agreements relating to grade separations to eliminate	
at-grade crossings, new at-grade crossings, at-grade crossing safety enhancement projects,	
complete closures of at-grade crossings which are unnecessary or redundant or impact expansion	
projects and quiet zone establishment, Federal Section 130 funded improvements, or any Agency	
project needing access on, over or under BNSF Property within Washington and British Columbia,	
Canada and all phases of those projects. I have led or attended safety evaluations and diagnostic	
evaluations with Transport Canada, the FRA, the WUTC, WSDOT, and road authorities of	
numerous grade crossings in Washington, and British Columbia as BNSF's grade crossing safety	
representative for the Northwest Division. These safety evaluations included quiet zone	
diagnostics, closure petitions, construct/reconstruct petitions as well as grade crossing safety	
improvement petitions.	
Q: Do you have any involvement with Washington State municipalities and/or	
government agencies on behalf of BNSF?	
A: Yes, many of my responsibilities involve working with state and federal agencies,	
including Transport Canada, the Federal Railroad Administration, the Washington State	
Department of Transportation, the Washington Utilities and Transportation Commission, and	
Amtrak, along with other municipalities, and road authorities in Washington State and Canada. We	
have the mutual goal of providing and supporting safe, reliable, and efficient rail transportation	
options for passengers and businesses, and work together to implement those goals.	
O: Are you familiar with the process for municipalities to petition the Federal Railroad	

Administration (FRA) to establish Railroad Crossing Quiet Zones?

1	A: I am.
2	
3	Q: Are you familiar with Whatcom County's "Petition for Installation of Median
4	Barriers at a Highway-Rail Grade Crossing" involving Cliffside Drive? What does it
5	involve?
6	A: This project is within my territory and involves the modification of existing crossing
7	devices to address the increased risk posed by the creation of a quiet zone at the Cliffside Drive at-
8	grade crossing. It is a general requirement that trains blow their whistle four times while
9	approaching a public crossing, day or night. With a quiet zone, trains will no longer need to blow
10	their horn while approaching Cliffside Drive; this should increase the peace and quiet for nearby
11	residents. According to the FRA, "A corridor will not be designated a Quiet Zone unless specific
12	requirements are met to reduce the risk index to a level that is equal to or less than the national
13	average risk at gated crossings with horns, or the risk is reduced enough to compensate for the loss
14	of the safety benefit afforded by a train sounding its horn."
15	https://safetydata.fra.dot.gov/quiet/quietzonehelp.htm#1. To reduce the risk index presented by
16	making the crossing a quiet zone, the County filed a petition to install mountable medians with
17	channelization devices on either side of the crossing. I attended the diagnostic meeting at the
18	Cliffside Drive crossing with Mr. Swan, along with representatives from the FRA and WUTC. Our
19	mutual goal is to try to best reduce the risk index of creating a quiet zone at this location.
20	
21	Q: What is BNSF's position regarding mountable/traversable channelization devices?
22	A: Safety is BNSF's highest priority. BNSF strongly prefers the mitigation alternative of a
23	non-mountable, or non-traversable, concrete median. A non-traversable median means a curb
24	designed to discourage a motor vehicle from leaving the roadway. They are generally at least six

inches high. Additional design specifications are determined by the standard traffic design
specifications used by the governmental entity constructing the curb. I was surprised that the
County proposed mountable medians, because the WUTC and Whatcom County had agreed that
non-mountable medians were the safest measure at the last crossing converted to a quiet zone
(Yacht Club Road), and I saw no significant difference at the Cliffside Drive crossing and the
Yacht Club Road crossing (or their respective roads) to merit lesser protection. See Exhibit SS-2
(photos of Yacht Club Road). Mountable medians allow drivers to actually drive over them and
around crossing gates as compared to non-mountable medians, which provide a greater deterrent
simply because they can damage the undercarriage of an ordinary vehicle unlawfully attempting to
cross them. The FRA recognizes that non-mountable medians (called non-traversable curbs in the
regulations) provide a greater reduction in risk of a collision with a train in a quiet zone. In fact,
even non-traversable curbs without channelization devices are more effective than traversable
channelization devices. Whatcom County says in its various documents that it is installing
supplemental measures in the interest of public safety, BNSF prefers that the County install the
more effective option. Especially because I understand that Mr. Swan testified that the installation
costs between the two (mountable and non-mountable) are approximately the same, and that the
County intends to widen the shoulder of part of Cliffside Drive to facilitate the travel of emergency
vehicles regardless of which type of median/curb is selected.

Q: Are there any other practical problems with mountable medians/traversable channelization?

22 A: The vert

A: The vertical channelization paddles, while in theory are designed to bend if driven over and return to their original position, in my experience they are often bent or broken. See Exhibit SS-3, a photo of an existing Kent median for reference (Google street view, Sept 2018). The median

1	shown, which is located at the Willis Street grade crossing, is unfortunately fairly representative of
2	the condition of medians/delineators throughout Kent.
3	
4	Q: How is that a problem?
5	A: Well, in at least two ways. Bent or especially broken channelization devices make it easier,
6	and probably more tempting, to go over the mountable median. Additionally, if one or more
7	channelization device is bent or broken, then under the federal regulations the safety measure is
8	deemed to be not working as intended, which permits all trains to return to blowing their horns at
9	the crossing, which defeats the purpose of establishing a quiet zone.
10	
11	Q: Whatcom County's petition represents that it would repair damaged channelization
12	devices "immediately." Does that sufficiently address your concern?
13	A: No. In my experience it would be a difficult standard for municipalities to meet, and in any
14	event with 19 trains per day, I am concerned that the County will be unable to prevent some time
15	lag between a channelization device being damaged, its discovery, and its repair. Moreover, I do
16	not know how the County plans to "encourage" motorists to notify the County if and when they
17	damage the channelization paddles. If a driver is going to choose to drive over and thus damage
18	them in the first place (illegally), we cannot assume that the driver would then "do the right thing"
19	to call the County and then confess to their behavior and resulting damage.
20	
21	Q: Did you on behalf of BNSF express its opposition to Whatcom County's notice of
22	intent to install mountable medians at Cliffside Drive?
23	
24	

PREFILED TESTIMONY OF STEPHEN SEMENICK - 5

1	A: I did. I said in part that BNSF does "not support the use of traversable medians and
2	strongly encourage the County to use non-mountable concrete center medians with a minimum
3	height of 7" instead." See Exhibit SS-4.
4	
5	Q: Did Whatcom County agree to install non-mountable medians as it did at Yacht Clul
6	Road?
7	A: No. It filed its petition proposing mountable medians.
8	
9	Q: Do you have any other concerns with the County's petition?
10	A: Yes. It appears that the County's Average Daily Traffic Count ("ADT") of 300, which wa
11	input into the FRA Quiet Zone Risk Indicator calculation per Cody Swan, is only based off of two
12	days' worth of data collection—not even a full week. See Exhibit SS-5 (traffic count information
13	provided in County's responses to BNSF's data requests). I question whether we can be confident
14	that that number is accurate with such a small data pool. Moreover, the FRA's Quiet Zone Risk
15	Index Calculator has a preset count of 450 ADT for this crossing. I ran the Calculator with an
16	AADT of 450. The QZRI would be 15,707, which is approximately 1000 points above the
17	Nationwide Significant Risk Threshold. With those numbers Whatcom County would have to
18	install some type of SSM/ASM to reduce the risk index prior to establishing a quiet zone, which
19	further supports choosing the supplemental safety measures that would provide the highest
20	disincentive for motorists to drive over them (i.e., non-mountable medians).
21	
22	Q: You have mentioned Yacht Club Road several times, which is also located in
23	Whatcom County. Did the WUTC staff also weigh in in response to Whatcom County's
24	Notice of Intent regarding the Yacht Club Road proceeding? What was staff's response?

1	A: It did. The WUTC staff responded by letter dated May 17, 2016, which said in part:
2	The [diagnostic] team at the February 3, crossing review agreed that the preferred treatment would be adding an exit gate for eastbound traffic and installing non-
3 4	traversable medians on both approaches. It is commission's staff opinion that non- traversable medians provide a much higher disincentive for motorists to drive over them because of the potential damage to vehicles.
5	See Exhibit SS-6. Thus, the WUTC staff agreed that non-traversable medians are preferable to
6	traversable medians.
7	
8	Q: Did the WUTC ultimately approve the installation of mountable medians at Yacht
9	Club Road?
10	A: Whatcom County ultimately amended its petition to seek approval of non-mountable
11	medians at the Yacht Club Road crossing. See Exhibit SS-7. BNSF and the WUTC then consente
12	to the amended petition, and the WUTC granted the petition provided that non-mountable median
13	were installed. See Exhibits SS-8.
14	
15	Q: Has the County indicated significant maintenance required for the Yacht Club Rd
16	median?
17	A: The County indicated (via phone call) that they have not been required to perform any
18	repairs on the non-mountable concrete median itself at Yacht Club Rd. Moreover, you can clearly
19	see tire marks along the non-mountable median in some of the attached photos. See Exhibit SS-2.
20	Had the median been mountable, vehicles would have most likely run right into/over the
21	delineators. A concrete curb is much more durable than channelization paddles.
22	
23	
24	

PREFILED TESTIMONY OF STEPHEN SEMENICK - 7

1	Q: What about emergency response? Mr. Swan's direct testimony states that non-
2	mountable medians restrict the ingress/egress of emergency vehicles and increase the risk of
3	damaging their vehicle while responding to emergencies.
4	A: My understanding is that Mr. Swan testified at deposition that emergency vehicles will still
5	be able to access all properties on Cliffside Drive without having to cross the median with or
6	without a non-traversable curb, have sufficient space to turn around at multiple locations on
7	Cliffside Drive if necessary, and that the County plans to widen the shoulder on the west side of
8	the crossing regardless of which supplemental safety measure is selected. Moreover, BNSF was
9	not provided with any data suggesting that emergency responders would be unable to meet their
10	applicable standardized emergency response time goals if a non-traversable median is installed.
11	Finally, the crossing has a sign posted with a BNSF telephone number that the County could use to
12	call BNSF if an emergency at the adjacent homeowner's property (just southwest of the crossing)
13	might affect the crossing itself.
14	
15	Q: With non-mountable medians, does BNSF have a preference whether channelization
16	devices are (also) installed?
17	A: BNSF does not have a preference as to whether channelization devices also be installed on
18	top of non-mountable medians, as the FRA's Quiet Zone Risk reduction is the same with or
19	without channelization. The non-traversable median itself should prevent motorists from damaging
20	corresponding channelization devices, at least to the extent that such devices could be damaged
21	with a mountable median. BNSF would defer to the WUTC and/or County to make that decision.
22	
23	Q: To summarize, what is BNSF's position in this proceeding?

24

1	A: BNSF's respectfully requests that the WUTC order that non-mountable medians be
2	installed on both approaches to the Cliffside Drive crossing prior to its conversion to a quiet zone,
3	similar to Yacht Club Road. Mountable medians provide a lower deterrent to illegal motorist
4	behavior, and are damaged more easily than non-mountable median curbs.
5	
6	
7	<u>DECLARATION</u>
8	I, Stephen Semenick, declare under penalty of perjury under the laws of the State of
9	Washington that the foregoing PREFILED TESTIMONY OF STEPHEN SEMENICK is true and
10	correct to the best of my knowledge and belief.
11	DATED this 20th day of December, 2018, at Scattle, WA
12	DATED this day of December, 2018, at
13	So Sud
14	STEPHEN SEMENICK
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

1	DATED this 21st day of December, 2018.
2	
3	Montgomery Scarp & Chait PLLC
4	
5	s/Kelsey Endres
6	Tom Montgomery, WSBA #19998
7	Kelsey Endres, WSBA #39409 Attorneys for BNSF Railway Company
	1218 Third Ave., Suite 2500
8	Seattle, WA 98101
9	Tel. (206) 625-1801
	Fax (206) 625-1807
10	tom@montgomeryscarp.com
11	<u>kelsey@montgomeryscarp.com</u>
12	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
	MONTGOMERY SCARP & CHAIT PLLC